

Attachment 1: Agreement for Services of Independent Contractor

ATTACHMENT 1

AGREEMENT FOR SERVICES OF INDEPENDENT CONTRACTOR

THIS AGREEMENT (hereafter Agreement) is made by and between the County of Santa Barbara, a political subdivision of the State of California (hereafter COUNTY) and Ecology and Environment, Inc. with an address at 368 Pleasant View Drive, Lancaster, NY 14086 (hereafter CONTRACTOR) wherein CONTRACTOR agrees to provide and COUNTY agrees to accept the services specified herein.

WHEREAS, CONTRACTOR represents that it is specially trained, skilled, experienced, and competent to perform the special services required by COUNTY and COUNTY desires to retain the services of CONTRACTOR pursuant to the terms, covenants, and conditions herein set forth;

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, the parties agree as follows:

1. DESIGNATED REPRESENTATIVE

Kathryn Lehr at phone number (805) 568-3560 is the representative of COUNTY and will administer this Agreement for and on behalf of COUNTY. James Frolich at phone number (415) 398-5326 is the authorized representative for CONTRACTOR. Changes in designated representatives shall be made only after advance written notice to the other party.

2. NOTICES

Any notice or consent required or permitted to be given under this Agreement shall be given to the respective parties in writing, by personal delivery or facsimile, or with postage prepaid by first class mail, registered or certified mail, or express courier service, as follows:

To COUNTY:	Kathryn Lehr, County of Santa Barbara, Planning & Development Department, 123 E. Anapamu Street, Santa Barbara, CA 93101, Fax (805) 568-2030
To CONTRACTOR:	Colleen Mullaney-Westfall, Vice President, Assistant Secretary, Ecology and Environment, Inc., 368 Pleasant View Drive, Lancaster, NY 14086 (716) 684-8060

or at such other address or to such other person that the parties may from time to time designate in accordance with this Notices section. If sent by first class mail, notices and consents under this section shall be deemed to be received five (5) days following their deposit in the U.S. mail. This Notices section shall not be construed as meaning that either party agrees to service of process except as required by applicable law.

3. SCOPE OF SERVICES

CONTRACTOR agrees to provide services to COUNTY in accordance with EXHIBIT A attached hereto and incorporated herein by reference.

4. TERM

CONTRACTOR shall commence performance on February 12, 2019 and end performance upon completion, but no later than June 30, 2021 unless otherwise directed by COUNTY or unless earlier terminated.

5. COMPENSATION OF CONTRACTOR

In full consideration for CONTRACTOR's services, CONTRACTOR shall be paid for performance under this Agreement in accordance with the terms of EXHIBIT B attached hereto and incorporated herein by reference. Billing shall be made by invoice, which shall include the contract number assigned by COUNTY and which is delivered to the address given in Section 2 NOTICES above following completion of the increments identified on EXHIBIT B. Unless otherwise specified on EXHIBIT B, payment shall be net thirty (30) days from presentation of invoice.

6. INDEPENDENT CONTRACTOR

It is mutually understood and agreed that CONTRACTOR (including any and all of its officers, agents, and employees), shall perform all of its services under this Agreement as an independent contractor as to COUNTY and not as an officer, agent, servant, employee, joint venturer, partner, or associate of COUNTY. Furthermore, COUNTY shall have no right to control, supervise, or direct the manner or method by which CONTRACTOR shall perform its work and function. However, COUNTY shall retain the right to administer this Agreement so as to verify that CONTRACTOR is performing its obligations in accordance with the terms and conditions hereof. CONTRACTOR understands and acknowledges that it shall not be entitled to any of the benefits of a COUNTY employee, including but not limited to vacation, sick leave, administrative leave, health insurance, disability insurance, retirement, unemployment insurance, workers' compensation and protection of tenure. CONTRACTOR shall be solely liable and responsible for providing to, or on behalf of, its employees all legally-required employee benefits. In addition, CONTRACTOR shall be solely responsible and save COUNTY harmless from all matters relating to payment of CONTRACTOR's employees, including compliance with Social Security withholding and all other regulations governing such matters. It is acknowledged that during the term of this Agreement, CONTRACTOR may be providing services to others unrelated to the COUNTY or to this Agreement.

7. STANDARD OF PERFORMANCE

CONTRACTOR represents that it has the skills, expertise, and licenses/permits necessary to perform the services required under this Agreement. Accordingly, CONTRACTOR shall perform all such services in the manner and according to the standards observed by a competent practitioner of the same profession in which CONTRACTOR is engaged. All products of whatsoever nature, which CONTRACTOR delivers to COUNTY pursuant to this Agreement, shall be prepared in a first class and workmanlike manner and shall conform to the standards of quality normally observed by a person practicing in CONTRACTOR's profession. CONTRACTOR shall correct or revise any errors or omissions, at COUNTY'S request without additional compensation. Permits and/or licenses shall be obtained and maintained by CONTRACTOR without additional compensation.

8. DEBARMENT AND SUSPENSION

CONTRACTOR certifies to COUNTY that it and its employees and principals are not debarred, suspended, or otherwise excluded from or ineligible for, participation in federal, state, or county government contracts. CONTRACTOR certifies that it shall not contract with a subcontractor that is so debarred or suspended.

9. TAXES

CONTRACTOR shall pay all taxes, levies, duties, and assessments of every nature due in connection with any work under this Agreement and shall make any and all payroll deductions required by law. COUNTY shall not be responsible for paying any taxes on CONTRACTOR's behalf, and should COUNTY be required to do so by state, federal, or local taxing agencies, CONTRACTOR agrees to promptly reimburse COUNTY for the full value of such paid taxes plus interest and penalty, if any. These taxes shall include, but not be limited to, the following: FICA (Social Security), unemployment insurance contributions, income tax, disability insurance, and workers' compensation insurance.

10. CONFLICT OF INTEREST

CONTRACTOR covenants that CONTRACTOR presently has no employment or interest and shall not acquire any employment or interest, direct or indirect, including any interest in any business, property, or source of income, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement. CONTRACTOR further covenants that in the performance of this Agreement, no person having any such interest shall be employed by CONTRACTOR. CONTRACTOR must promptly disclose to COUNTY, in writing, any potential conflict of interest. COUNTY retains the right to waive a conflict of interest disclosed by CONTRACTOR if COUNTY determines it to be immaterial, and such waiver is only effective if provided by COUNTY to CONTRACTOR in writing.

11. OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

COUNTY shall be the owner of the following items incidental to this Agreement upon production, whether or not completed: all data collected, all documents of any type whatsoever, all photos, designs, sound or audiovisual recordings, software code, inventions, technologies, and other materials, and any material necessary for the practical use of such items, from the time of collection and/or production whether or not performance under this Agreement is completed or terminated prior to completion. CONTRACTOR shall not release any of such items to other parties except after prior written approval of COUNTY.

Unless otherwise specified in Exhibit A, CONTRACTOR hereby assigns to COUNTY all copyright, patent, and other intellectual property and proprietary rights to all data, documents, reports, photos, designs, sound or audiovisual recordings, software code, inventions, technologies, and other materials prepared or provided by CONTRACTOR pursuant to this Agreement (collectively referred to as "Copyrightable Works and Inventions"). COUNTY shall have the unrestricted authority to copy, adapt, perform, display, publish, disclose, distribute, create derivative works from, and otherwise use in whole or in part, any Copyrightable Works and Inventions. CONTRACTOR agrees to take such actions and execute and deliver such documents as may be needed to validate, protect and confirm the rights and assignments provided hereunder. CONTRACTOR warrants that any Copyrightable Works and Inventions and other items provided under this Agreement will not infringe upon any intellectual property or proprietary rights of any third party. CONTRACTOR at its own expense shall defend, indemnify, and hold harmless COUNTY against any claim that any Copyrightable Works or Inventions or other items provided by CONTRACTOR hereunder infringe upon intellectual or other proprietary rights of a third party, and CONTRACTOR shall pay any damages, costs, settlement amounts, and fees (including attorneys' fees) that may be incurred by COUNTY in connection with any such claims. This Ownership of Documents and Intellectual Property provision shall survive expiration or termination of this Agreement.

12. NO PUBLICITY OR ENDORSEMENT

CONTRACTOR shall not use COUNTY's name or logo or any variation of such name or logo in any publicity, advertising or promotional materials. CONTRACTOR shall not use COUNTY's name or logo in any manner that would give the appearance that the COUNTY is endorsing CONTRACTOR. CONTRACTOR shall not in any way contract on behalf of or in the name of COUNTY. CONTRACTOR shall not release any informational pamphlets, notices, press releases, research reports, or similar public notices concerning the COUNTY or its projects, without obtaining the prior written approval of COUNTY.

Notwithstanding, Consultant shall be permitted to include references to (1) the existence of this Agreement, and (2) the general services performed thereunder in its targeted responses to request for proposals or conflict of interest disclosures; *provided that* no reference or disclosure shall be made concerning confidential data, analysis, business strategies, or other confidential business information.

13. COUNTY PROPERTY AND INFORMATION

All of COUNTY's property, documents, and information provided for CONTRACTOR's use in connection with the services shall remain COUNTY's property, and CONTRACTOR shall return any such items whenever requested by

COUNTY and whenever required according to the Termination section of this Agreement. CONTRACTOR may use such items only in connection with providing the services. CONTRACTOR shall not disseminate any COUNTY property, documents, or information without COUNTY's prior written consent.

14. RECORDS, AUDIT, AND REVIEW

CONTRACTOR shall keep such business records pursuant to this Agreement as would be kept by a reasonably prudent practitioner of CONTRACTOR's profession and shall maintain such records for at least four (4) years following the termination of this Agreement. All accounting records shall be kept in accordance with generally accepted accounting principles. COUNTY shall have the right to audit and review all such documents and records at any time during CONTRACTOR's regular business hours or upon reasonable notice. In addition, if this Agreement exceeds ten thousand dollars (\$10,000.00), CONTRACTOR shall be subject to the examination and audit of the California State Auditor, at the request of the COUNTY or as part of any audit of the COUNTY, for a period of three (3) years after final payment under the Agreement (Cal. Govt. Code Section 8546.7). CONTRACTOR shall participate in any audits and reviews, whether by COUNTY or the State, at no charge to COUNTY.

If federal, state or COUNTY audit exceptions are made relating to this Agreement, CONTRACTOR shall reimburse all costs incurred by federal, state, and/or COUNTY governments associated with defending against the audit exceptions or performing any audits or follow-up audits, including but not limited to: audit fees, court costs, attorneys' fees based upon a reasonable hourly amount for attorneys in the community, travel costs, penalty assessments and all other costs of whatever nature. Immediately upon notification from COUNTY, CONTRACTOR shall reimburse the amount of the audit exceptions and any other related costs directly to COUNTY as specified by COUNTY in the notification.

15. INDEMNIFICATION AND INSURANCE

CONTRACTOR agrees to the indemnification and insurance provisions as set forth in EXHIBIT C attached hereto and incorporated herein by reference.

16. NONDISCRIMINATION

COUNTY hereby notifies CONTRACTOR that COUNTY's Unlawful Discrimination Ordinance (Article XIII of Chapter 2 of the Santa Barbara County Code) applies to this Agreement and is incorporated herein by this reference with the same force and effect as if the ordinance were specifically set out herein and CONTRACTOR agrees to comply with said ordinance.

17. NONEXCLUSIVE AGREEMENT

CONTRACTOR understands that this is not an exclusive Agreement and that COUNTY shall have the right to negotiate with and enter into contracts with others providing the same or similar services as those provided by CONTRACTOR as the COUNTY desires.

18. NON-ASSIGNMENT

CONTRACTOR shall not assign, transfer or subcontract this Agreement or any of its rights or obligations under this Agreement without the prior written consent of COUNTY and any attempt to so assign, subcontract or transfer without such consent shall be void and without legal effect and shall constitute grounds for termination.

19. TERMINATION

- A. By COUNTY. COUNTY may, by written notice to CONTRACTOR, terminate this Agreement in whole or in part at any time, whether for COUNTY's convenience, for nonappropriation of funds, or because of the failure of CONTRACTOR to fulfill the obligations herein.

1. **For Convenience.** COUNTY may terminate this Agreement in whole or in part upon thirty (30) days written notice. During the thirty (30) day period, CONTRACTOR shall, as directed by COUNTY, wind down and cease its services as quickly and efficiently as reasonably possible, without performing unnecessary services or activities and by minimizing negative effects on COUNTY from such winding down and cessation of services.
 2. **For Nonappropriation of Funds.** Notwithstanding any other provision of this Agreement, in the event that no funds or insufficient funds are appropriated or budgeted by federal, state or COUNTY governments, or funds are not otherwise available for payments in the fiscal year(s) covered by the term of this Agreement, then COUNTY will notify CONTRACTOR of such occurrence and COUNTY may terminate or suspend this Agreement in whole or in part, with or without a prior notice period. Subsequent to termination of this Agreement under this provision, COUNTY shall have no obligation to make payments with regard to the remainder of the term.
 3. **For Cause.** Should CONTRACTOR default in the performance of this Agreement or materially breach any of its provisions, COUNTY shall provide CONTRACTOR with written notice of such default or breach. In the event CONTRACTOR does not cure such default or breach within a mutually agreed upon time, COUNTY may, at COUNTY's sole option, terminate or suspend this Agreement in whole or in part by written notice. Upon receipt of notice, CONTRACTOR shall immediately discontinue all services affected (unless the notice directs otherwise) and notify COUNTY as to the status of its performance. The date of termination shall be the date the notice is received by CONTRACTOR, unless the notice directs otherwise.
- B. By CONTRACTOR. Should COUNTY fail to pay CONTRACTOR all or any part of the payment set forth in EXHIBIT B, CONTRACTOR may, at CONTRACTOR's option terminate this Agreement if such failure is not remedied by COUNTY within thirty (30) days of written notice to COUNTY of such late payment.
- C. Upon termination, CONTRACTOR shall deliver to COUNTY all data, estimates, graphs, summaries, reports, and all other property, records, documents or papers as may have been accumulated or produced by CONTRACTOR in performing this Agreement, whether completed or in process, except such items as COUNTY may, by written permission, permit CONTRACTOR to retain. Notwithstanding any other payment provision of this Agreement, COUNTY shall pay CONTRACTOR for satisfactory services performed to the date of termination to include a prorated amount of compensation due hereunder less payments, if any, previously made. In no event shall CONTRACTOR be paid an amount in excess of the full price under this Agreement nor for profit on unperformed portions of service. CONTRACTOR shall furnish to COUNTY such financial information as in the judgment of COUNTY is necessary to determine the reasonable value of the services rendered by CONTRACTOR. In the event of a dispute as to the reasonable value of the services rendered by CONTRACTOR, the decision of COUNTY shall be final. The foregoing is cumulative and shall not affect any right or remedy which COUNTY may have in law or equity.

20. **SECTION HEADINGS**

The headings of the several sections, and any Table of Contents appended hereto, shall be solely for convenience of reference and shall not affect the meaning, construction or effect hereof.

21. **SEVERABILITY**

If any one or more of the provisions contained herein shall for any reason be held to be invalid, illegal or unenforceable in any respect, then such provision or provisions shall be deemed severable from the remaining provisions hereof, and such invalidity, illegality or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

22. REMEDIES NOT EXCLUSIVE

No remedy herein conferred upon or reserved to COUNTY is intended to be exclusive of any other remedy or remedies, and each and every such remedy, to the extent permitted by law, shall be cumulative and in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or otherwise.

23. TIME IS OF THE ESSENCE

Time is of the essence in this Agreement and each covenant and term is a condition herein.

24. NO WAIVER OF DEFAULT

No delay or omission of COUNTY to exercise any right or power arising upon the occurrence of any event of default shall impair any such right or power or shall be construed to be a waiver of any such default or an acquiescence therein; and every power and remedy given by this Agreement to COUNTY shall be exercised from time to time and as often as may be deemed expedient in the sole discretion of COUNTY.

25. ENTIRE AGREEMENT AND AMENDMENT

In conjunction with the matters considered herein, this Agreement contains the entire understanding and agreement of the parties and there have been no promises, representations, agreements, warranties or undertakings by any of the parties, either oral or written, of any character or nature hereafter binding except as set forth herein. This Agreement may be altered, amended or modified only by an instrument in writing, executed by the parties to this Agreement and by no other means. Each party waives their future right to claim, contest or assert that this Agreement was modified, canceled, superseded, or changed by any oral agreements, course of conduct, waiver or estoppel.

26. SUCCESSORS AND ASSIGNS

All representations, covenants and warranties set forth in this Agreement, by or on behalf of, or for the benefit of any or all of the parties hereto, shall be binding upon and inure to the benefit of such party, its successors and assigns.

27. COMPLIANCE WITH LAW

CONTRACTOR shall, at its sole cost and expense, comply with all County, State and Federal ordinances and statutes now in force or which may hereafter be in force with regard to this Agreement. The judgment of any court of competent jurisdiction, or the admission of CONTRACTOR in any action or proceeding against CONTRACTOR, whether COUNTY is a party thereto or not, that CONTRACTOR has violated any such ordinance or statute, shall be conclusive of that fact as between CONTRACTOR and COUNTY.

28. CALIFORNIA LAW AND JURISDICTION

This Agreement shall be governed by the laws of the State of California. Any litigation regarding this Agreement or its contents shall be filed in the County of Santa Barbara, if in state court, or in the federal district court nearest to Santa Barbara County, if in federal court.

29. EXECUTION OF COUNTERPARTS

This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the parties shall preserve undestroyed, shall together constitute one and the same instrument.

30. **AUTHORITY**

All signatories and parties to this Agreement warrant and represent that they have the power and authority to enter into this Agreement in the names, titles and capacities herein stated and on behalf of any entities, persons, or firms represented or purported to be represented by such entity(ies), person(s), or firm(s) and that all formal requirements necessary or required by any state and/or federal law in order to enter into this Agreement have been fully complied with. Furthermore, by entering into this Agreement, CONTRACTOR hereby warrants that it shall not have breached the terms or conditions of any other contract or agreement to which CONTRACTOR is obligated, which breach would have a material effect hereon.

31. **SURVIVAL**

All provisions of this Agreement which by their nature are intended to survive the termination or expiration of this Agreement shall survive such termination or expiration.

32. **PRECEDENCE**

In the event of conflict between the provisions contained in the numbered sections of this Agreement and the provisions contained in the Exhibits, the provisions of the Exhibits shall prevail over those in the numbered sections.

33. **SUBCONTRACTORS**

CONTRACTOR is authorized to subcontract with subcontractors identified in Contractor's Proposal. CONTRACTOR shall be fully responsible for all services performed by its subcontractor. CONTRACTOR shall secure from its subcontractor all rights for COUNTY in this Agreement, including audit rights.

34. **HANDLING OF PROPRIETARY INFORMATION**

CONTRACTOR understands and agrees that certain materials which may be provided by COUNTY may be classified and conspicuously labeled as proprietary confidential information. That material is to be subject to the following special provisions:

- A. All reasonable steps will be taken to prevent disclosure of the material to any person except those personnel of CONTRACTOR working on the project who have a need to use the material.
- B. Upon conclusion of CONTRACTOR'S work, CONTRACTOR shall return all copies of the material direct to party providing such material. CONTRACTOR shall contact COUNTY to obtain the name of the specific party authorized to receive the material.

35. **IMMATERIAL CHANGES**

CONTRACTOR and COUNTY agree that immaterial changes to the Statement of Work (time frame and mutually agreeable Statement of Work changes which will not result in a change to the total contract amount) may be authorized by Planning and Development Director, or designee in writing, and will not constitute an amendment to the Agreement.

36. **NEWS RELEASES/INTERVIEWS**

CONTRACTOR agrees for itself, its agents, employees and subcontractors, it will not communicate with representatives of the communications media concerning the subject matter of this Agreement without prior written approval of the COUNTY Project Coordinator. CONTRACTOR further agrees that all media requests for communication will be referred to COUNTY'S responsible personnel.

Agreement for Services of Independent Contractor between the **County of Santa Barbara and Ecology and Environment, Inc.**

IN WITNESS WHEREOF, the parties have executed this Agreement to be effective on the date executed by COUNTY.

ATTEST:

Mona Miyasato
County Executive Officer
Clerk of the Board

COUNTY OF SANTA BARBARA:

By: _____
Deputy Clerk

By: _____
Chair, Board of Supervisors

Date: _____

RECOMMENDED FOR APPROVAL:

Dianne M. Black, Director
Planning & Development

CONTRACTOR:

Ecology and Environment, Inc.

By: 
Department Head

By: 
Authorized Representative

Name: Timothy J. Grady

Title: Senior Vice President


APPROVED AS TO FORM:

Michael C. Ghizzoni
County Counsel

APPROVED AS TO ACCOUNTING FORM:

Betsy Schaffer, CPA, CPFO
Auditor-Controller

By: 
Deputy County Counsel

By: 
Deputy

APPROVED AS TO FORM:

Risk Management

By: 
Risk Management

**ATTACHMENT 1
EXHIBIT A**

STATEMENT OF WORK

CONTRACTOR shall render services in accordance with the Proposal for Preparation of the Plains Replacement Pipeline Project EIR and EIS, excluding Appendix B Comments to Standard Contract Provisions, as shown in Appendix 1 as attached hereto and incorporated herein by reference. The Proposal describes the EIR and EIS scope of work which includes the following: consultant qualifications and experience, key personnel and project management program, study methodology, document preparation, project schedule, and cost estimate.

James Frolich, Luis Perez, Jaclyn Antonio, Kevin Magner, Melisa Mahoney, Rachel James, Jennifer Jackson, Caitlin Chase, Aileen Cole, Iija Nieuwenhuizen, John Peirson, Greg Chittick, Silvia Yanez, Lauren Brown, Noreen Roster, Angela Keller, Ted Hoefler, Faye Walsted, Carl Sdoawski, Paul Jones, Susan Serreze, Erin Lynch shall be the individual(s) personally responsible for providing all services hereunder. CONTRACTOR may not substitute other persons without the prior written approval of COUNTY's designated representative.

Suspension for Convenience. COUNTY may, without cause, order CONTRACTOR in writing to suspend, delay, or interrupt the services under this Agreement in whole or in part for up to 30 days. COUNTY shall incur no liability for suspension under this provision and suspension shall not constitute a breach of this Agreement.

//

//

//

//

//

**ATTACHMENT 1
EXHIBIT B**

**PAYMENT ARRANGEMENTS
Periodic Compensation at Selected Milestones**

- A. For CONTRACTOR services to be rendered under this Agreement, CONTRACTOR shall be paid a total contract amount, including cost reimbursements, on a fixed price basis not to exceed \$999,927.00 with a contingency amount of \$149,989.00 for a total contract amount up to \$1,149,916.00. Contingency expenditures shall be approved in advance by the County.
- B. Payment for services and/or reimbursement of costs shall be made upon CONTRACTOR’s satisfactory performance, based the completion of milestones contained in Appendix 1 (Ecology and Environment, Inc. Technical Proposal) as determined by COUNTY.
- C. Upon completion of the work for each milestone and/or delivery to COUNTY of item(s) specified below, CONTRACTOR shall submit to the COUNTY DESIGNATED REPRESENTATIVE an invoice or certified claim on the County Treasury for the service performed in accomplishing each milestone. These invoices or certified claims must cite the assigned Board Contract Number. COUNTY DESIGNATED REPRESENTATIVE shall evaluate the quality of the service performed and/or item(s) delivered and if found to be satisfactory shall initiate payment processing. COUNTY shall pay invoices or claims for satisfactory work within 30 days of receipt of correct and complete invoices or claims from CONTRACTOR.

Milestone	% of Contract Amount	Amount Released per Milestone	% of Total Contract Amount	Total Contract Amount Released
Submittal – NEPA Project Management Plan	10%	\$99,993	10%	\$99,993
Submittal – Request for Additional Information Memo	10%	\$99,993	20%	\$199,986
Submittal – Public Scoping Meeting Comment Summary Report	10%	\$99,993	30%	\$299,979
Submittal – Admin Draft Project Description, Environmental Setting & Technical Resource Sections	20%	\$199,985	50%	\$499,964
Submittal – Public Draft EIS/EIR	20%	\$199,985	70%	\$699,949
Submittal – Comment Summaries for EIS and EIR	10%	\$99,993	80%	\$799,941
Submittal – Administrative Draft Final EIS and EIR	5%	\$49,996	85%	\$849,937
Submittal – Final EIS and EIR	5%	\$49,996	90%	\$899,933
Submittal – Administrative Record	10%	\$99,993	100%	\$999,927

*Table does not include contingency

The final milestone payment above shall not be made until all services have been completed and item(s) as specified in EXHIBIT A and in Appendix 1 have been delivered and found to be satisfactory.

D. COUNTY's failure to discover or object to any unsatisfactory work or billings prior to payment will not constitute a waiver of COUNTY's right to require CONTRACTOR to correct such work or billings or seek any other legal remedy.

**ATTACHMENT 1
EXHIBIT C**

**Indemnification and Insurance Requirements (For
Professional Contracts)**

INDEMNIFICATION

CONTRACTOR agrees to indemnify, defend (with counsel reasonably approved by COUNTY) and hold harmless COUNTY and its officers, officials, employees, agents and volunteers from and against any and all claims, actions, losses, damages, judgments and/or liabilities arising out of this Agreement from any cause whatsoever, including the acts, errors or omissions of any person or entity and for any costs or expenses (including but not limited to attorneys' fees) incurred by COUNTY on account of any claim except where such indemnification is prohibited by law. CONTRACTOR's indemnification obligation applies to COUNTY's active as well as passive negligence but does not apply to COUNTY's sole negligence or willful misconduct.

Notwithstanding the obligations set forth above, CONTRACTOR shall owe no such indemnity and defense obligation for those claims, actions, losses, damages, judgments, and/or liabilities directly related to challenges to the CEQA process, deliverables, and/or COUNTY's actions and/or role and responsibilities under CEQA.

NOTIFICATION OF ACCIDENTS AND SURVIVAL OF INDEMNIFICATION PROVISIONS

CONTRACTOR shall notify COUNTY immediately in the event of any accident or injury arising out of or in connection with this Agreement. The indemnification provisions in this Agreement shall survive any expiration or termination of this Agreement.

INSURANCE

CONTRACTOR shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the CONTRACTOR, his agents, representatives, employees or subcontractors.

A. Minimum Scope of Insurance Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office (ISO) Form CG 00 01 covering CGL on an "occurrence" basis, including products-completed operations, personal & advertising injury, with limits no less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate.
2. **Automobile Liability:** ISO Form Number CA 00 01 covering any auto (Code 1), or if CONTRACTOR has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limit no less than \$1,000,000 per accident for bodily injury and property damage.
3. **Workers' Compensation:** as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
4. **Professional Liability** (Errors and Omissions) Insurance appropriate to the CONTRACTOR'S

profession, with limit of no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate.

If the CONTRACTOR maintains higher limits than the minimums shown above, the COUNTY requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the COUNTY.

B. Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions:

1. **Additional Insured** – COUNTY, its officers, officials, employees, agents and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the CONTRACTOR including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the CONTRACTOR's insurance at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is used).
2. **Primary Coverage** – For any claims related to this Agreement, the CONTRACTOR's insurance coverage shall be primary insurance as respects the COUNTY, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the COUNTY, its officers, officials, employees, agents or volunteers shall be excess of the CONTRACTOR's insurance and shall not contribute with it.
3. **Notice of Cancellation** – Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the COUNTY.
4. **Waiver of Subrogation Rights** – CONTRACTOR hereby grants to COUNTY a waiver of any right to subrogation which any insurer of said CONTRACTOR may acquire against the COUNTY by virtue of the payment of any loss under such insurance. CONTRACTOR agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not the COUNTY has received a waiver of subrogation endorsement from the insurer.
5. **Deductibles and Self-Insured Retention** – Any deductibles or self-insured retentions must be declared to and approved by the COUNTY. The COUNTY may require the CONTRACTOR to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.
6. **Acceptability of Insurers** – Unless otherwise approved by Risk Management, insurance shall be written by insurers authorized to do business in the State of California and with a minimum A.M. Best's Insurance Guide rating of "A- VII".
7. **Verification of Coverage** – CONTRACTOR shall furnish the COUNTY with proof of insurance, original certificates and amendatory endorsements as required by this Agreement. The proof of insurance, certificates and endorsements are to be received and approved by the COUNTY before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the CONTRACTOR's obligation to provide them. The CONTRACTOR shall furnish evidence of renewal of coverage throughout the term of the Agreement. The COUNTY reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.
8. **Failure to Procure Coverage** – In the event that any policy of insurance required under this Agreement does not comply with the requirements, is not procured, or is canceled and not replaced, COUNTY has the right but not the obligation or duty to terminate the Agreement. Maintenance of required insurance coverage is a material element of the Agreement and failure to maintain or

renew such coverage or to provide evidence of renewal may be treated by COUNTY as a material breach of contract.

9. **Subcontractors** – CONTRACTOR shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and CONTRACTOR shall ensure that COUNTY is an additional insured on insurance required from subcontractors.
10. **Claims Made Policies** – If any of the required policies provide coverage on a claims-made basis:
 - i. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
 - ii. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of contract work.
 - iii. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the CONTRACTOR must purchase “extended reporting” coverage for a minimum of five (5) years after completion of contract work.
11. **Special Risks or Circumstances** – COUNTY reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Any change requiring additional types of insurance coverage or higher coverage limits must be made by amendment to this Agreement. CONTRACTOR agrees to execute any such amendment within thirty (30) days of receipt.

Any failure, actual or alleged, on the part of COUNTY to monitor or enforce compliance with any of the insurance and indemnification requirements will not be deemed as a waiver of any rights on the part of COUNTY.



ADDITIONAL REMARKS SCHEDULE

AGENCY Willis of New York, Inc.	NAMED INSURED Ecology and Environment, Inc. 368 Pleasant View Drive Lancaster, NY 14086
POLICY NUMBER See Page 1	NAIC CODE See Page 1
CARRIER See Page 1	EFFECTIVE DATE: See Page 1

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
 FORM NUMBER: 25 FORM TITLE: Certificate of Liability Insurance

employees, agents and volunteers are included as Additional Insureds on a Primary and Non-Contributory basis on the General Liability policy as required by written contract.
 A waiver of subrogation applies in favor of County of Santa Barbara and County of Santa Barbara, Planning & Development Department for General Liability as required by written contract.

ENDORSEMENT

This endorsement forms a part of the policy to which it is attached. Please read it carefully.

NOTICE OF CANCELLATION TO CERTIFICATE HOLDERS

This endorsement modifies insurance provided under the following:

Contractors and Consultants Liability
General Liability
Business Automobile Liability

In consideration of the premium charged and notwithstanding anything contained in this policy to the contrary, it is hereby agreed and understood that the following provisions shall apply:

If this policy is cancelled by the Company, other than for non-payment of premium, notice of such cancellation will be provided at least thirty (30) days in advance of the cancellation effective date to those certificate holder(s) who are Additional Insureds and require notice of cancellation through a written contract or agreement and are on file with the producer of record.

In the event this policy is to be cancelled, the agent of record will provide the Company with a list of certificate holders who are Additional Insureds and require notice of cancellation through a written contract or agreement within five (5) business days. This list will also include mailing addresses.

Any notification rights provided by this endorsement apply only to active certificate holder(s) who are Additional Insureds and issued a certificate of insurance applicable to this policy period.

If notice is mailed, proof of mailing to the last known mailing address of the certificate holder(s) who are Additional Insureds on file with the producer of record will be sufficient proof of notice.

This endorsement shall not apply for the following reasons:

- a. non-payment of premium or;
- b. the policy is non-renewed for any reason.

ALL OTHER TERMS AND CONDITIONS OF THE POLICY SHALL APPLY AND REMAIN UNCHANGED.

ENDORSEMENT

This endorsement forms a part of the policy to which it is attached. Please read it carefully.

NOTICE OF CANCELLATION TO CERTIFICATE HOLDERS

This endorsement modifies insurance provided under the following:

Contractors and Consultants Liability
General Liability
Business Automobile Liability

In consideration of the premium charged and notwithstanding anything contained in this policy to the contrary, it is hereby agreed and understood that the following provisions shall apply:

If this policy is cancelled by the Company, other than for non-payment of premium, notice of such cancellation will be provided at least thirty (30) days in advance of the cancellation effective date to those certificate holder(s) who are Additional Insureds and require notice of cancellation through a written contract or agreement and are on file with the producer of record.

In the event this policy is to be cancelled, the agent of record will provide the Company with a list of certificate holders who are Additional Insureds and require notice of cancellation through a written contract or agreement within five (5) business days. This list will also include mailing addresses.

Any notification rights provided by this endorsement apply only to active certificate holder(s) who are Additional Insureds and issued a certificate of insurance applicable to this policy period.

If notice is mailed, proof of mailing to the last known mailing address of the certificate holder(s) who are Additional Insureds on file with the producer of record will be sufficient proof of notice.

This endorsement shall not apply for the following reasons:

- a. non-payment of premium or;
- b. the policy is non-renewed for any reason.

ALL OTHER TERMS AND CONDITIONS OF THE POLICY SHALL APPLY AND REMAIN UNCHANGED.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY AND NONCONTRIBUTORY –
OTHER INSURANCE CONDITION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

The following is added to the **Other Insurance** Condition and supersedes any provision to the contrary:

Primary And Noncontributory Insurance

This insurance is primary to and will not seek contribution from any other insurance available to an additional insured under your policy provided that:

(1) The additional insured is a Named Insured under such other insurance; and

(2) You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Person Or Organization:
Where required by written contract
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph **8. Transfer Of Rights Of Recovery Against Others To Us** of **Section IV – Conditions:**

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.

ENDORSEMENT

This endorsement forms a part of the policy to which it is attached. Please read it carefully.

ADDITIONAL INSURED – BLANKET – OWNERS, LESSEES OR CONTRACTORS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

Who is An Insured (Section II) is amended to include as an insured any person (s) or organization (s) for whom you are performing operations when you and such person (s) or organization (s) have agreed in writing in a contract or written agreement that such person (s) or organization (s) be added as an additional insured on your policy, but

Only with respect to liability for **bodily injury, property damage** or **personal and advertising injury** caused, in whole or in part, by:

1. Your acts or omissions, or the acts or omissions of those acting on your behalf, in the performance of your ongoing operations for the additional insured; or
2. **Your work** performed for such person(s) or organizations(s) and included in the **products-completed operations hazard**, only when required by the written contract or written agreement.

With respect to damages caused by **your work**, as described above, the coverage provided hereunder shall be primary and not contributing with any other insurance available to those designated above, but only when required by written contract or agreement.

ENDORSEMENT

This endorsement forms a part of the policy to which it is attached. Please read it carefully.

NOTICE OF CANCELLATION TO CERTIFICATE HOLDERS

This endorsement modifies insurance provided under the following:

Contractors and Consultants Liability
General Liability
Business Automobile Liability

In consideration of the premium charged and notwithstanding anything contained in this policy to the contrary, it is hereby agreed and understood that the following provisions shall apply:

If this policy is cancelled by the Company, other than for non-payment of premium, notice of such cancellation will be provided at least thirty (30) days in advance of the cancellation effective date to those certificate holder(s) who are Additional Insureds and require notice of cancellation through a written contract or agreement and are on file with the producer of record.

In the event this policy is to be cancelled, the agent of record will provide the Company with a list of certificate holders who are Additional Insureds and require notice of cancellation through a written contract or agreement within five (5) business days. This list will also include mailing addresses.

Any notification rights provided by this endorsement apply only to active certificate holder(s) who are Additional Insureds and issued a certificate of insurance applicable to this policy period.

If notice is mailed, proof of mailing to the last known mailing address of the certificate holder(s) who are Additional Insureds on file with the producer of record will be sufficient proof of notice.

This endorsement shall not apply for the following reasons:

- a. non-payment of premium or;
- b. the policy is non-renewed for any reason.

ALL OTHER TERMS AND CONDITIONS OF THE POLICY SHALL APPLY AND REMAIN UNCHANGED.

Attachment 1
Appendix 1: Ecology and Environment, Inc.'s
Technical Proposal for the Plains Replacement
Pipeline Project



Technical Proposal to Prepare an Environmental Impact Report and Environmental Impact Statement for the Plains Replacement Pipeline Project

December 6, 2018

Prepared for:

County of Santa Barbara Planning & Development Department
Bureau of Land Management,
Bakersfield Office

Prepared by:



and



**Proposal to Prepare an
Environmental Impact Report and
Environmental Impact Statement**

Plains Replacement Pipeline Project

Case Nos. 17DVP-00000-00010, 17CUP-00000-00027,
17DVP00000-00002 and 17DCP-00000-00060

APNs: VARIOUS

December 06, 2018

Prepared for:

**Energy, Minerals & Compliance Division
County of Santa Barbara Planning &
Development Department**

123 East Anapamu Street
Santa Barbara, CA 93101

The contents provided herein, including not-to-exceed cost, remain effective for a period of not less than forty-five (45) days from the proposal due date. E & E respectfully submits its comments and proposed alterations to the contract terms for your review and later negotiation. Please see Appendix B of the technical volume.

ECOLOGY AND ENVIRONMENT, INC.



Timothy J. Grady, P.E.
Senior Vice President



ecology and environment, inc.

Global Environmental Specialists

505 Sansome Street, Suite 300
San Francisco, California 94111
Tel: (415) 398-5326, Fax: (415) 398-5326

December 06, 2018

Kathryn Lehr, Planner
Energy, Minerals & Compliance Division
County of Santa Barbara Planning & Development Department
123 East Anapamu Street
Santa Barbara, CA 93101

Re: Request for Proposals to Prepare an Environmental Impact Report and Environmental Impact Statement

Plains Replacement Pipeline Project

Case Nos. 17DVP-00000-00010, 17CUP-00000-00027, 17DVP00000-00002 and 17DCP-00000-00060

APNs: VARIOUS

Dear Ms. Lehr:

Plains Pipeline, L.P., has submitted an application to Santa Barbara County(SB County), San Luis Obispo County (SLO County), and the US Bureau of Land Management(BLM) for the construction and operation of a new pipeline system to replace the currently shutdown Line 901/903 system to transport oil from Exxon's offshore platforms. As the lead agencies, SB County and the BLM seek a consultant to work concurrently with them to prepare two documents: an Environmental Impact Report to meet the requirements of the California Environmental Quality Act (CEQA) and an Environmental Impact Statement under the National Environmental Policy Act (NEPA). The lead agencies desire a common schedule for both documents, to the extent possible under the respective review processes.

Although the construction and operation of a replacement pipeline that would be smaller, newer and safer than the formerly operated system should be straightforward and our recent field check of the line confirms this conclusion, any pipeline project to transport hydrocarbons in California is potentially a lightning rod for public concern. The state's policy direction goal of 100% renewable energy by 2045 and leadership in adapting to climate change combined with local issues related to oil spills could signal interest from organizations and private citizens alike.

Ecology and Environment, Inc., (E & E), and our local team can help the lead agencies to meet and overcome any challenge that may arise. E & E's historic and current expertise and knowledge of oil pipeline systems and experience working for and with all three of the key agencies will help the lead agencies successfully complete this project. Our local subcontractor, MRS Environmental Inc., which is well known to SB County and SLO in particular for its analytical capabilities in risk management and air quality, and Statistical Research Inc. will provide the local expertise regarding local plans, policies and agencies to assist us to expertly manage and prepare the EIR.

We offer:

1. Proven, current expertise in pipelines: because we know how oil pipelines are constructed and operated, we can quickly and efficiently review the applicant's technical studies and supplement them as needed, facilitate a timely date review with the applicant, and prepare the EIR and EIS. We know how to focus our resources on the key resource analyses, which will be essential to meeting the project schedule.
2. Experience with projects with litigation potential: our experience working with top-notch lawyers to prepare legally defensible documents will inform our strategies for preparing a legally sufficient document.
3. Our team's experience and knowledge of previous efforts and new emerging resources issues such as greenhouse gas emissions and life cycle analysis will greatly enhance the EIR: you can rely on E & E to propose worthy solutions to concerns regarding these issues.
4. Our proven CORES comment response solution developed for some of the most controversial projects undertaken in the state will allow us to effectively manage thousands of public comments.
5. Proven expertise in local plans and policies such as the local coastal program, and a management team that has both historic and current experience in SB County, SL County and Kern County and working back and forth across documents.
6. E & E also is a well-respected BLM contractor, having prepared several land management plans and EISs in California. We are currently are finishing the EIS for oil and gas fracking for the BLM Bakersfield Field Office. With both historic and current knowledge of key issues and how to successfully address them in environmental reviews, E & E can manage the efficiently manage the process and drive the project schedule.

E & E confirms that it can and will address the requirements and responsibilities as outlined in the RFP and is not aware of any actual or perceived conflicts of interest in performing the Scope of Services as also outlined in the RFP. However, we are aware of our ongoing obligation to discover and mitigate such conflicts. E & E also respectfully submits its comments and proposed alterations to the contract terms for your review and later negotiation (appended to our proposal as Appendix B). Also please note that E & E can comply with the insurance requirements, which are standard provisions of a Contract for Environmental Study (our evidence of insurance is appended to our proposal as Appendix C). I am authorized to negotiate a contract.

It is rare that we as consultants have the opportunity to work on truly historic projects. The Unocal oil spill in 1969 offshore Santa Barbara is widely considered to have kick-started the environmental movement and led to the passage of both the National Environmental Policy Act and the California Environmental Quality Act.

It would be an honor and privilege to work on a project that continues that legacy. Please contact Jim Frolich at 415-398-5326, Luis Perez, or me at for any further needs you may have with respect to our proposal.

Sincerely,

ECOLOGY AND ENVIRONMENT, INC.

A handwritten signature in black ink, reading "Cheryl A. Karpowicz". The signature is fluid and cursive, with a large, stylized loop at the end of the last name.

Cheryl A. Karpowicz, AICP
Senior Vice President

Attachments

© 2018 Ecology and Environment, Inc.

Table of Contents

<u>Section</u>	<u>Page</u>
1. INTRODUCTION.....	1
1.1 THE ECOLOGY AND ENVIRONMENT TEAM.....	1
1.2 THE PROPOSED PROJECT	2
1.3 UNIQUE UNDERSTANDING OF THE ISSUES.....	3
1.4 AN APPROACH THAT ANTICIPATES KEY ISSUES.....	6
2. QUALIFICATIONS.....	7
2.1 FIRM CAPABILITIES.....	7
2.2 HISTORY.....	11
2.3 RECENT EXPERIENCE	13
3. PERSONNEL.....	24
3.1 PROJECT TEAM	24
3.2 PROJECT MANAGEMENT	26
3.3 CORE EIR AND EIS TEAM.....	28
3.4 RESOURCE SPECIALISTS.....	30
3.5 COMMUNITY AND GOVERNMENT OUTREACH.....	31
3.6 RESUMES.....	31
3.7 PERSONNEL RESPONSIBILITIES AND ESTIMATED HOURS.....	31
3.8 STATEMENT OF COMMITMENT	32
4. TECHNICAL APPROACH.....	33
Task 1: Kick-off Meeting, Project Management, Biweekly Progress Meetings	33
Task 2: Technical Resources Peer Review	34
Task 3: Conduct Additional Studies & Site Visit	38
Task 4: Public Scoping and Notice of Intent	39

Task 5: Draft Project Description, Purpose and Need, and Alternatives	40
Task 6: Draft EIS and EIR Technical Resource Sections	41
Task 7: Public Draft EIR and EIS	49
Task 8: Public Comment Period	50
Task 9: Responses to Comments.....	51
Task 10: Administrative Final EIS and EIR	52
Task 11: Final EIS and EIR	52
Task 12: Administrative Record	53
5. SCHEDULE	54
6. REFERENCES.....	54
APPENDIXA: RESUMES OF KEY PERSONNEL	
APPENDIXB: COMMENTS TO STANDARD CONTRACT PROVISIONS	
APPENDIXC: EVIDENCE OF INSURANCE	

Resource and Regulatory Expertise to Meet Any Challenge

1 Introduction

1.1 The Ecology and Environment Team

From the iconic TransAlaska Pipeline System to the present-day Enbridge Line 3 (a 360-mile oil pipeline replacement project in Minnesota), and with historic experience both offshore and onshore Santa Barbara and San Luis Obispo counties, **Ecology and Environment, Inc.** (E & E) has a long history of providing third-party review of large, complicated and in some cases controversial oil pipelines.

Founded in 1970 to support major federal NEPA and contaminated site projects, E & E opened its first California office in 1980. We are CEQA experts, with four decades of experience analyzing impacts for some of the state’s largest and most controversial energy projects.

Through our ongoing work for the California Public Utilities Commission in performing third-party CEQA reviews for projects such as the North South Pipeline and the Rainbow Pipeline, we have leading edge understanding of current issues and requirements. We are also experts in preparing NEPA documents in California and are a well-respected BLM contractor, in the state having completed several land management plans and EISs, including a current assignment for the BLM Bakersfield Field Office to prepare a Supplemental EIS for Hydraulic Fracturing.

E & E organized 22 public meetings over the course of twenty-one days throughout the project area. In order to facilitate these meetings, E & E managed all venue and speaker logistics, prepared key messages and talking points, designed 12 poster displays, and prepared handouts within a three-week timeframe.



In acknowledgement of its strong performance record and community ties in Santa Barbara and San Luis Obispo counties, preeminent local knowledge, and proven expertise, E & E has selected **MRS Environmental Inc.** to serve as an integral member of our team on this project. MRS’s long local track record on the Central Coast will help our team to tap and

incorporate by reference historic precedents so that we don’t have to reinvent the wheel while also quickly delivering on current policies. MRS is already involved in the Line 901 and 903 system, preparing a Supplemental EIR for the ExxonMobil Interim Trucking for SYU Phased Restart Project, and has extensive knowledge of the issues and concerns for this project, including various alternatives that are relevant to the Plains Replacement Project EIR.



Our team also includes **Statistical Research Inc.** (SRI), which will provide cultural resources technical services and Native American outreach. SRI is a registered consultant with both the County and BLM and has extensive experience in the region and with the relevant Native American organizations.

Our combined core management team, which is discussed in Section 3 of this proposal, has both historic and current experience in the areas and jurisdictions relevant to the pipeline replacement. E & E Project Manager **Jim Frolich** combines his historical experience in Santa Barbara County with recent responsibilities managing very large environmental assessments for LNG terminals and

pipelines and policy development for the State Water Board. Well known for his risk work. **Luis Perez**, who worked for Santa Barbara County and monitored construction of the original All America pipeline, will serve as our Deputy Project Manager and provide local liaison with the County; he can be available at a moment's notice for in person discussions. **Rachel James**, an expert CEQA and NEPA practitioner, has successfully managed or worked on projects in all three affected counties, as well as oil pipelines and the Kern County oil and gas land use amendment EIR under which this project will be processed in Kern County. **Jennifer Jackson** is experienced with NEPA and particularly with BLM requirements and has strong ties to the Bakersfield Field Office. Our core team will use their expertise to guide the analysis that both documents will have in common, while respecting the differing frameworks for impact conclusions and mitigation. By focusing our work through a cohesive, small and responsive core team we can achieve the community, regulatory and schedule goals for the Replacement Pipeline EIR and EIS.

This core team and their colleagues identified in Section 3 are enthusiastic and ready to commence work on this exciting opportunity immediately.

1.2 The Proposed Project

All American Pipeline Lines 901 and 903 were subject to environmental review in the late 1980s and were put into service in 1991-94. Line 901 is 24" in diameter and runs approximately 11 miles from Las Flores Canyon to Gaviota; Line 903 is 30" in diameter and runs from Gaviota to Kern County, approximately 113 miles in length. They were seen at the time as an integral part of infrastructure for oil and gas development offshore Santa Barbara and could deliver 150,000 and 300,000 barrels per day of crude oil, respectively. Some 20 years later, the pipelines were only serving to transport oil from three Exxon platforms to the Pentland Delivery Point in Kern County or the Phillips 66 Santa Maria Refinery and were only delivering an average of about 43,000 barrels per day of crude oil.



Our team's experience and knowledge of previous efforts and new emerging resources issues such as greenhouse gas emissions and life cycle analysis will greatly enhance the EIR.



In May 2015, Line 901 ruptured near Refugio Beach and both pipelines were closed, as was production on Exxon platforms Hondo, Harmony and Heritage. The U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) investigated the spill and issued corrective action orders. Once the pipeline is repaired in compliance with the orders the pipeline can reopen. Excess oil in the system was sold and transported away by truck from Las Flores Canyon in 2017; Exxon is proposing to re-implement trucking as an intermediate transportation solution to allow the platforms to operate until the pipeline is reopened or replaced. (E & E Teammate MRS Environmental is preparing the EIR for this proposal.)

The project proposed by Plains Pipeline Company (Plains) is to construct and operate a 123.4-mile crude oil pipeline primarily within the existing rights-of-way of existing pipelines. Plains proposes that the existing pipeline be abandoned in place, but some portions may require removal if landowners specify. The project includes access, construction parking and staging, hydrostatic testing operations, valves, expansion of the Sisquoc pump station (and a related gas pipeline to fuel operations) and a new pump station in San Luis Obispo County. The new pipeline would be smaller, at 12-16" diameter, reflecting decreased oil production in the region.

The proposed pipeline would impact several jurisdictions including Santa Barbara, San Luis Obispo, and Kern Counties. The project would affect land managed by the U.S. Bureau of Land Management (BLM), U.S. Fish and Wildlife (USFWS), U.S. Forest Service (USFS), and California State Parks. It is thus subject to both CEQA and NEPA.

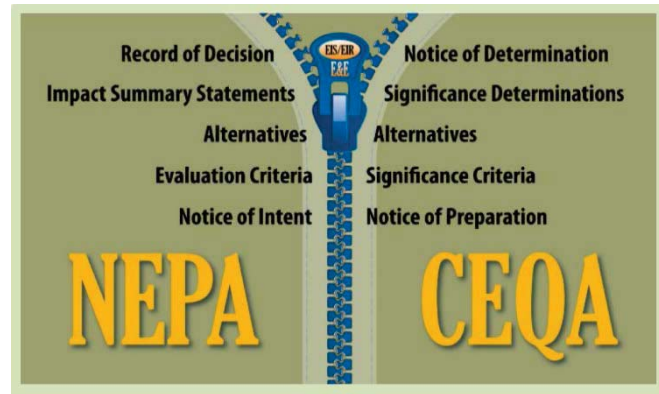
As the lead agencies, Santa Barbara County and the BLM seek a consultant to work concurrently with them to prepare two documents: an Environmental Impact Report (EIR) to meet the requirements of CEQA and an Environmental Impact Statement (EIS) under NEPA. Due to the long history of oil transportation and related issues in Santa Barbara and San Luis Obispo Counties, the importance of local knowledge as well as experience with state and federal agency processes is implicit in a successful environmental review. Separate documents are being prepared as a result of federal policies to reduce the size and schedule of NEPA review. However, the lead agencies seek to achieve a similar schedule for both documents to the extent possible under the respective review processes. Maintaining a level of consistency between the documents will be important to prevent public confusion and avoid litigation, as well as for clarity of mitigation measures applicable during construction and operation.

1.3 Unique Understanding of the Issues

Through work undertaken related to oil and gas production and transportation in the Central Coast going back over 30 years as well as more general roles in evaluating energy development throughout California and beyond, both E & E and MRS, and the key staff proposed for this project, have extensive historical and current understanding of issues important to a successful completion of this project. Some of these are summarized below.

- **NEPA Streamlining.** In recent years, the federal government and its agencies have sought ways to streamline the NEPA review schedule and minimize the volume of the documents produced. This included the implementation of the FAST-41 program created by the Federal Permitting Improvement Steering Council which guides interagency cooperation and sets limits on EIS

schedule extensions and specifically requires this EIS to be done within a one year window after Notice of Intent; Department of Interior Secretarial Order 3355 which is intended to “establish discipline and accountability” to the DOI process and includes a 150 page limit for EISs; and County clarification that the BLM EIS will address direct impacts only on federal lands. The BLM approvals for Plains’ project are subject to these requirements. As a recognized contractor to BLM and other federal agencies, E & E has experience in achieving these requirements. This, and the knowledge and relationships gleaned from our current and ongoing work with the BLM Bakersfield Field office which includes compliance with Fast 41 and Secretarial Order 3355, sets E & E apart from the competition.



Consistency is key when working on multiple complex documents that have the power to streamline or stall projects. Our combination of NEPA and CEQA experts will make sure your documents meet objectives and deadlines.

- **CEQA Schedule.** As a result of the federal requirements discussed above, and the difference in impact assessment scope (i.e., the EIS will address direct impacts for federal lands only), the NEPA process could be completed earlier than the CEQA process. However, Santa Barbara County energy division staff have indicated that they would like to see the EIR schedule track the EIS schedule to the extent possible. E & E has continuing experience in expediting EIR preparation and comment processing, including tight management of technical reviews and assessment, focus on a core project team to complete the documents and use of our proprietary CORES comment and response management system (all of which is discussed in Sections 3 and 4 of this proposal). For example, when the CPUC faced an influx of new electric transmission applications due to a flood of new solar and wind proposals, they retained E & E to help them to streamline the environmental process, which was codified in an order from the executive director. The approach we crafted was based on our experience with the Federal Energy Regulatory Commission’s NEPA expedited environmental review process. Our experience with a recent controversial oil pipeline replacement project means that we are already conversant with most if not all of the issues that will arise, from the GHG analyses to adequate consultation with Native Americans. MRS has also worked to expedite CEQA review in Santa Barbara County, including developing ways to address non-significant issues in an efficient manner and focus on the issues that are of importance.
- **Baseline Conditions and the No Project Alternative.** The RFP directs that baseline operational conditions for impact assessment are those in effect during the last period of existing pipeline operation. The No Project alternative would be for the existing pipeline to be repaired and put into operation. As we discussed with the County, these positions are appropriate and legally defensible. Review of recent projects and case law, such as *Association of Irrigated Residents v. Alon USA Energy Inc.*, which addresses the EIR baseline for a restart of a refinery in Bakersfield, supports this conclusion. However, project opponents have already made clear that they believe that the base case is no pipeline operations and, by extension, no offshore production from the Exxon platforms. This position would seek to tie larger issues of offshore oil activity, fossil fuel use and climate change, and land use related

to all oil development, to this project. They would seek to have the no pipeline alternative assessed, whether that is the No Project or another alternative. We will use our skills in developing and executing effective CEQA and NEPA strategy, which has allowed E & E's EIRs and EISs to never have been successfully challenged, to develop the appropriate set of alternatives for this project.

- **Other Alternatives.** The EIR and EIS will address other alternatives to the project, including size, routing and possibly construction methods, to be determined during scoping. Another set of alternatives may be alternative delivery methods. Using a risk-based approach, pipelines were historically determined to be the safest means of transportation and incorporated in permit requirements for offshore developments, including Exxon's in 1987 permit to develop the Santa Ynez unit. However, there may be pipeline alternatives to Lines 901 and 903 that could warrant consideration. MRS, in preparing the Exxon Interim Trucking EIR, is identifying and evaluating these alternatives already. This knowledge will not be readily reproducible by other consultants and will be available for the E & E team to utilize, thereby potentially shortening the schedule and reducing costs.
- **Technical Analyses.** In addition to the historic concerns revolving around risk of oil spills, California has established public policy goals related to climate change that are designed to reduce dependence on fossil fuels. Numerous environmental organizations throughout the state from the Sierra Club to the Center for Biological Diversity are dedicated to achieving this purpose, actively participate in the environmental review process, and are frequent litigators. Recent court decisions on the appropriate level of analysis for lifecycle greenhouse gas emissions have introduced further complexity. With our extensive current experience in assessing energy projects in California and beyond, we will be able to prepare analyses that address these kinds of concerns in a way that responds to scoping commenters yet is appropriate to the project and the specific review process. We have assigned seasoned scientists to provide important expertise to the critical issues of air quality and GHG, biology (including oak tree mitigation), cultural resources, Native American consultation, traffic, geology, land use, paleontology and water resources as identified in the RFP and during our conversations with the County.
- **Community Involvement and Consultation.** As stated, this project is potentially very controversial and could become a focus for opposition to offshore oil production, hydrocarbon usage, climate change concerns, as well as concerns specific to the project. To ensure a successful CEQA and NEPA process and provide the information required to assist decision makers, we will need to conduct or support a robust outreach program that is focused on providing the public with appropriate information on the proposed project, the environmental review process and schedule, and specifically, how and when they can participate. To achieve this, we have established a specific public involvement team (see the organization chart in Section 3). This team will support, manage and lead outreach activities as determined by our scope, prepare and provide graphic and web-based materials, manage scoping and provide the resulting input to the core project team and technical specialists, and manage comments on the Draft documents via our CORES system. We have included Luis Perez in a lead liaison and community role for Santa Barbara and San Luis Obispo Counties, reflecting his long-standing participation in the community. Jennifer Jackson will provide similar support to the BLM where she is already working with the Bakersfield Field Office on the Hydraulic Fracturing SEIS. In this way, we will work to provide the public with accurate and timely information to facilitate their participation and surface issues and concerns early in the process so that they can be adequately and transparently addressed.

1.4 An Approach that Anticipates Key Issues

Based on this understanding, E & E, along with MRS, has developed the scope of work discussed in Section 4. Highlights include:

- Inclusion of firms and individuals that have worked previously on the pipeline and related facilities and are known, trusted experts on energy projects. Because we are pipeline experts, with a practical experience-based knowledge of pipeline systems, construction best practices, and their environmental effects, we can be a valuable resource to the lead agencies in providing the appropriate analysis and level of detail.
- Implementation of an organization that revolves around a key core group that will implement our CEQA and NEPA requirements; this core team has strong CEQA and NEPA experience and current working relationships with both County and BLM staffs that will smooth the day to day experience of working with us: you can expect a smooth working relationship.
- An approach to managing technical studies utilizing CEQA and NEPA coordinators working closely together as part of the core team to maximize synergies and efficiency while ensuring that the distinct regulatory requirements of each law are met. We are currently working within the strictures of Fast 41 and Secretarial Order 3355 and have hands on experience with implementing the streamlining requirements.
- An outreach and consultation group dedicated to this project, using up-to-date tools and media, and reporting directly to the project management team. Our approach to consultation and information management, as discussed in Section 4, will facilitate the integration of stakeholder concerns into the environmental impact assessment process.
- Scoping of critical issues and allowing the non-significant issues to be addressed adequately but concisely in a separate chapter.
- Expert technical staff on our team to address potentially significant issues such as cultural and paleontological resources; biota (especially oak tree mitigation and compensation management planning and sensitive issues related to work near the Santa Ynez River crossing); hazard evaluation and risk assessment; and land use.
- A successful environmental process that provides the decision makers with complete, accurate information on which to base their decisions, including appropriate mitigation and information needed to support any considerations of overriding conditions that may be necessary.

E & E earned the APA Environmental Planning Award for work that led to a streamlined EIR/EIS document—facilitated by bringing agencies in early, an approach we will apply to this project:

“Originality: The streamlining process brought agencies, the applicant, and third-party consultants together before the application was filed to ensure application completeness. The innovative ‘Whole of the Action/Cumulative Action’ approach disclosed impacts of a related project that was further along in its environmental review process, which avoided duplication of effort to meet tight scheduling timelines.”

Eldorado-Ivanpah Transmission Project APA Award

- Our proven CORES comment response solution that has allowed us to effectively manage thousands of public comments for some of the most controversial projects undertaken in the state. This will save time and cost as we address the potentially significant volume of comments for both the CEQA and NEPA processes. It will also house the administrative record and is also a resource planning tool that can be used to provide answers to specific queries.

E & E and MRS have put together the “A-Team” for this challenging project – and we are ready to start immediately.

2. Qualifications

2.1 Firm Capabilities

E & E is a leading provider of CEQA, NEPA, environmental planning, environmental science and other environmental services in California. We have completed CEQA and/or NEPA documentation for over 100 projects, ranging from very complex EIR/EISs for controversial projects to relatively simple Mitigated Negative Declarations (MNDs) for straightforward decisions. E & E combines environmental planning, community resilience, emergency planning, and infrastructure development experience in California to help communities build more resilient and sustainable futures. We specialize in pipelines and other linear projects, a number of which have been located in Central California where we have worked with Santa Barbara County, San Luis Obispo County, and Kern County. Because the BLM handles rights-of-way applications on behalf of other agencies and is a major landowner in California, it has been the lead federal agency for many of these projects.

Our Approach. E & E brings a proactive, collaborative approach and a comprehensive understanding of natural, regulatory, and human environment to every project we work on. We apply insights from thousands of projects across the state, including separate and joint CEQA/NEPA documents and development of plans within the California regulatory environment, to anticipate and resolve project risks up front, and keep plans and projects on schedule.

CORE SERVICES

- CEQA/NEPA compliance – EIR, MND, EIS, EA
- Response to Comments
- Federal, state, and local agency consultation and permit applications
- Community outreach, stakeholder engagement, and tribal consultation
- Environmental services and monitoring during construction
- Mitigation planning, design and implementation
- Climate and sea level rises adaptation planning
- Marine Benthic & Fishery Surveys
- Coastal Zone Consistency Evaluations
- GIS-based data management and mapping
- Environmental monitoring and compliance during construction and mitigation
- Vulnerability and risk assessments
- Emergency response, preparedness, and recovery plans
- Environmental restoration
- Due diligence, feasibility studies, and critical flaw analysis
- Cost-benefit analysis and metrics development
- Innovative web-based tools and applications



As an Envision Qualified Company—with numerous Envision Sustainability Professionals on staff—E & E utilizes this framework to make sure the work products we share with our clients reflect best practices for long-term project viability and infrastructure resiliency.

We serve a broad range of community needs and have both Institute for Sustainable Infrastructure Envision-certified and LEED-certified experts on our California staff. We also apply our experience working on community planning issues across the state to help local governments plan for the future, evaluate development proposals, and manage their assets in a changing environment.

We are experts in preparing third party CEQA and NEPA documents that incorporate information from and are based on applications that include technical studies prepared by or on behalf of the project proponent. For example, we have completed 15 EIR projects for the California Public Utilities Commission, including several pipeline and transmission lines. Because we know how the information will be used in the analysis of impacts and identification of mitigation measures and what participating agencies will expect, we know what to look for in reviewing the application and materials. We use well-honed checklists to make sure we cover every important topic and check appropriate references and databases. We test every mitigation measure against established guidelines and legal precedents.

We will ensure that the project description has sufficient detail for an accurate assessment of environmental impacts. For example, applicants often underestimate their water use during construction, especially during drought conditions when even more dust suppression can be required. Water purveyors have been known to revoke “will serve” letters by the time of construction; a water efficiency plan, such as was used for the Santa Barbara Reliability Project discussed below can head off this problem.

E & E is a publically traded corporation registered in New York. Senior Vice President Cheryl Karpowicz, AICP, an officer of the company, will serve as client sponsor for this project to ensure that the county and BLM receive the services you require. Per the RFP, please be advised that E & E is classified as a **large corporation**; our tax identification number is **16-0971022**.

“E & E is extremely knowledgeable about NEPA and California-specific regulations... Our DOE General Counsel’s office commented that the CVSR EA was one of the best they’d reviewed.” —U.S. Department of Energy (DOE), California Valley Solar (CVSR) Project



MRS Environmental

MRS Environmental (MRS) will work collaboratively with E & E to provide the County with a group of highly qualified technical experts who understand complex oil and gas development projects. This knowledge is coupled with a strong understanding of environmental policy. Together these skill sets enable MRS to produce high-quality environmental reports for oil and gas projects.

MRS staff has prepared more than 100 environmental reviews for oil and gas projects. MRS is well known for expertise in atmospheric sciences, engineering, land use, system safety, risk of upset, air quality, health risk assessment, noise, aesthetics and fire protection. Well known and respected by many decision makers, MRS staff specializes in preparing CEQA/NEPA documents for complex,

controversial oil and gas industrial projects. No such document prepared by MRS staff members has ever been found inadequate by a court of law. MRS staff has logged more than 2,000 hours in public hearings in support of local and State agencies in California.

Since 1984, MRS staff has worked with agencies to support industry and the regulatory community with major permitting projects. Since that time, the major focus of our work has been assessing environmental impacts for industrial projects. MRS has been able to combine the very broad range of MRS’s Land Use, Environmental, Health, and Safety (EHS) and technological expertise with a strong presence to address the complex issues often associated with these types of projects. MRS consistently works for both industry and regulators, making us uniquely qualified to assist with complex permitting projects.

MRS staff has a long history of providing specialized services to local, State, Federal, and international government agencies for development projects including the County of Santa Barbara – including numerous oil and gas projects in the immediate vicinity of the proposed project. This experience has provided us with valuable insight as to the feasibility and implementation of potential mitigation measures that have been routinely used on EIRs in the past. MRS is currently providing environmental review services for the City of Los Angeles, City of Carson, County of Los Angeles, County of San Luis Obispo, and Santa Barbara County.

MRS is a corporation located in Santa Barbara. MRS qualifies as both a small business and a local business. MRS is certified as a small (micro) business enterprise through the State of California. Its tax identification is 81-5463132.



Statistical Research, Inc.

For 35 years, Statistical Research, Inc. (SRI), has been at the forefront of Cultural Resource Management (CRM) in California and the southwestern United States. They integrate exciting research with timely and cost-effective compliance work in CRM, historic heritage management, and paleontology. Having produced over 100 major publications in archaeology, history, and ethnography and more than 1,000 technical reports, SRI has a track record of not only meeting the letter of the law but enlightening the public about our common history and shared past. SRI specializes in applied research, and we focus on practical solutions to CRM issues, balancing economic development with mandates to preserve the past.

SRI has a large and experienced CRM team with a strong record of conducting multidisciplinary projects incorporating archaeology, history, ethnography, paleontology, historic architecture, and historic preservation. SRI typically employs between 80 and 100 archaeologists, historians, architectural historians, ethnographers, paleontologists, and support personnel at any given time. More than 20 of SRI’s senior staff hold doctorates in anthropology, paleontology, or related fields, and more than 30 individuals hold Master’s degrees in anthropology, history, architectural history, or a related field.

SRI has extensive experience preparing (CEQA and NEPA documentation subject to Section 106 of the National Historic Preservation Act (NHPA) in consultation with the California State Historic Preservation Officer (SHPO). In addition, SRI has close working relationships with the California Department of Transportation (Caltrans), the BLM, USFS, the Federal Highway Administration (FHWA), the U.S. Army Corps of Engineers (USACE), and California Native American tribes throughout the state.

SRI is a qualified woman-owned small business under the California Utilities Commission's Supplier Diversity Program, pursuant to Commission General Order 156, VON# 13110063. SRI is an S Corporation, TIN 86-0670179. Janet Grenda, CEO and Donn Grenda, President of this corporation with provide oversight to the team activities.

SRI's California experience began in 1984 with its first project, a cultural resource overview and sample survey of the San Bernardino Valley. Since then, SRI has performed more than 300 cultural resource projects in California in a variety of settings from the coast to the deserts, and the valleys to the mountains. In recent years, SRI has conducted numerous linear projects in California, including the following:

- Cultural resource survey of the proposed Southern California Gas Company (SoCal Gas) Line 119 Pipeline Project in Santa Clarita;
- Cultural resource survey of the 65-mile-long Reliability Pipeline Project (also known as the North-South Project) in San Bernardino and Riverside counties for SoCal Gas;
- Cultural resource survey of 978 miles of right-of-way along rural conventional highways in San Bernardino and Riverside counties for Caltrans District 8;
- Extended Phase I buried-site testing and monitoring program to support construction of the Centennial Corridor Project, a 29-mile-long realignment of State Route 58 along the Kern River in Kern County for Caltrans District 6; and
- Extended Phase I buried-site testing and Phase II investigations for the Willits Bypass Project in Mendocino County for Caltrans District 1.

These projects all entailed the creation of cultural resource reports and documentation for compliance with CEQA, NEPA, and Section 106 of NHPA, as applicable. In addition, SRI has conducted numerous ethnographic projects working with tribal stakeholders, including a comprehensive ethnographic, ethnobotanical, and ethnohistoric review of 23 federally recognized tribes and 10 California Native American tribal organizations with ancestral affiliations in San Bernardino and Riverside Counties.



2.2 History

Founded in 1970, E & E is a fully integrated environmental and engineering company traded on the NASDAQ stock exchange (EEI). As a recognized global leader in environmental planning, impact assessment and permitting, the company’s goal is to deliver value-added skills and services to clients to ensure environmental protection while encouraging sustainable development.

E & E has completed over 4,600 projects in California, working in 55 of 58 counties over the past 40 years. We have successfully prepared complex CEQA and NEPA documents, consulted with agencies and the public, and incorporated their comments. In addition, we have managed extensive public comments, public meetings, and hearings for controversial permitting projects throughout California, including many first-in-class projects. We regularly provide environmental services during construction to ensure that

mitigation is undertaken to meet CEQA/NEPA commitments and permit conditions as well as industry best practices. Because we live and work here, our local team is immersed in California; we are project managers, planners, resources scientists, engineers, sustainability planners, GIS staff, and public involvement specialists.

Pipeline projects are our core business. We’ve helped our government and industry clients by providing the full range of environmental services for pipeline projects, from project scoping and stakeholder outreach to environmental impact analysis, facility and route planning, permitting and construction to post construction monitoring.

As a result of E & E’s historic experience in Santa Barbara County implementing the environmental quality assurance program (EQAP) for the Chevron Gaviota Point Arguello Project, we have a working knowledge of the historic precedents establishing pipeline transportation as the least risk option. Our work on oil pipeline projects, such as the San Joaquin Pipeline with the BLM, informs our understanding of the makeup of the existing pipeline network, a valuable asset in considering alternatives. Industry-standard pipeline construction techniques result in generalizable degrees of environmental impacts; our experience on over 75,000 miles of pipelines, including thousands of miles in California, will help us to quickly zero in on key resource issues such as rugged terrain, special status species, and sensitive lands uses such as the Carizzo Plains that require greater specificity to develop practical, workable approaches to mitigation.

2.3 Recent Experience

E & E combines recent successful CEQA/NEPA experience in Santa Barbara County, San Luis Obispo County, and Kern County with extensive experience working for and with the BLM Bakersfield Field Office. We have selected the following projects that demonstrate relevant experience with similarly complex projects.

- 1) The **Santa Barbara County Reliability Project** shows our ability to address projects with previous construction, as well our ability to resolve complex land use conflicts and successfully work with the Chumash, a significant local stakeholder.
- 2) The **Minnesota Department of Commerce - Line 3 Pipeline Project** shows our ability to manage an oil pipeline project that did not seem to merit the significant public controversy it engendered, as a replacement project originally. As a result, we are current on key lightning rod issues, such as oil spills to sensitive resources and climate change impacts. Furthermore, in responding to more than 3,000 comments, we have probably addressed many of the issues that will arise in public comment on the Plains replacement project.
- 3) The **Kern County Oil and Gas Zoning EIR** demonstrates our ability to systematically handle highly controversial projects that face litigation. In that case, our EIR was upheld in all areas, with the exception of a clarification of impacts on grazing, a result with which the Kern County Planning Director was very pleased. Working with a top notch law firm on the EIR has heightened our toolbox for withstanding litigation.
- 4) Although we have prepared numerous EISs for the BLM, including the RMP and EIS for the BLM Central Coast Field Office (formerly the Hollister Field Office), home of the Carrizo Plains monument that is crossed the project for 3.6 miles, we have chosen to highlight the **Bakersfield EIS/RMPA**, which was prepared in response to litigation, because it shows our very current experience with completing a EIS under new guidance and have met the aggressive schedule at every step.
- 5) The **California Valley Solar Ranch Project** demonstrates our ability to work with San Luis Obispo County, as well as to prepare a separate NEPA EA on an extremely aggressive schedule. Because we also provided compliance services throughout the construction period, we clearly saw the shortcomings of planned mitigation and were able to propose adaptive measures to better meet the intent of the conditions of approval.

Following those are brief descriptions of some other relevant E & E projects as well as descriptions of relevant MRS projects.

Santa Barbara County Reliability Project

Client: California Public Utilities Commission (CPUC)
Location: Santa Barbara and Ventura Counties, California
Years: 2012-2018
Cost: \$1.63 million

For the CPUC, E & E prepared a third-party EIR for this 36-mile, Southern California Edison (SCE) transmission upgrade project, involving the reconductoring of existing 66-kV transmission lines, telecommunications installation, and substation upgrades. E & E also oversaw environmental compliance monitoring during construction.

Key Elements:

- Applied innovative tools to streamline the California Environmental Quality Act (CEQA) schedule and exhibited ability to provide balance between flexibility in responding to unforeseen events and continuing to ensure compliance with permit conditions.
- Worked with the applicant—SCE—to identify water supply mitigation due to drought conditions in California.
- Engaged in public outreach with local tribes to gain feedback regarding archaeological resources and conducted site visits with state and federal agency representatives to address concerns regarding special status species, critical habitat, and jurisdictional stream crossings.
- Oversaw environmental compliance monitoring during construction.

Background

Prior to E & E's involvement, SCE constructed part of the project between 1999 and 2004 under the assumption that the project was exempt from CEQA review. The project subsequently received a Stop Work order from the California Coastal Commission. Nearly ten years later, the CPUC and E & E were tasked with preparing an EIR for the work necessary for the applicant to complete the original project. Due to this unique history, E & E prepared an appendix for Santa Barbara County's use summarizing the impacts of the past work in the area and developed several project options for Santa Barbara County's consideration. **This appendix helped streamline the County's decision-making process and fast-track the schedule.**

The Project

For the CPUC, E & E prepared a third-party EIR for this 36-mile transmission upgrade project, involving the reconductoring of existing 66-kV transmission lines, telecommunications installation, and substation upgrades to improve electrical and telecommunications reliability in the Santa Barbara Electrical Needs Area. The project is located partially within the California Coastal Zone in Santa Barbara County, which requires coordination with the Santa Barbara County Planning Department due to their management of an approved Local Coastal Plan in the area. In addition, several towers are positioned for construction within the Los Padres National Forest. The project also includes

Water Solutions

Because of concerns related to recent drought conditions in California, E & E worked with the CPUC to identify water supply mitigation. We recommended the applicant prepare a Water Efficiency Plan that will detail their attempts to secure reclaimed water for construction—as opposed to potable water—to the extent practicable.

decommissioning and removal of existing structures located on unstable slopes in Santa Barbara and Ventura counties and includes extensive access road improvements for nearly 120 miles of access roads, including the installation of retaining walls and other features due to hilly terrain.

Project Options. Due to this unique history, E & E prepared an appendix for Santa Barbara County's use summarizing the impacts of the past work in the area, using the best available information, and developed several project options for Santa Barbara County's consideration. These project options are intended to disclose impacts that would result from the county's possible decision to remove portions of the previously installed line in the Shepard Mesa area and place the line underground through agricultural land. The options provide the county with the opportunity to modify portions of the project in the coastal zone where the previously constructed line violates the county's Coastal Land Use Plan (particularly with respect to aesthetic impacts that resulted from the replacement of wood poles with lightweight steel poles). The county requested the analysis in order to comply with their Coastal Development Permit process.

Public Outreach. In addition to preparing the EIR and conducting a scoping meeting, E & E met with members of the Santa Ynez Band of Mission Chumash Indians and other Chumash tribes to gather their feedback due to concerns regarding archaeological resources. E & E also participated in four site visits, two of which involved representatives from the California Department of Fish and Wildlife, the USFWS, the National Oceanic and Atmospheric Administration's Fisheries Department, and the United States Army Corps of Engineers. The agency site visits were necessary to address concerns regarding steelhead designated critical habitat, jurisdictional stream crossings, and special status species, including the red-legged frog.

Next Steps. CPUC published the Final EIR in May 2015, the project was approved by the CPUC in November 2015, and construction began in 2017. With E & E's support, the CPUC developed a Mitigation Monitoring, Compliance, and Reporting Plan (MMCRP) in coordination with SCE to provide guidance and procedures for environmental monitoring during project construction. The MMCRP is a tool to ensure compliance with the applicant proposed measures (APMs) and mitigation measures approved in the Final EIR. E & E is working with our Disabled Veteran Business Enterprise (DBVE) subcontractor, Ecotech, to provide construction monitoring, as well as mitigation monitoring, compliance, and reporting program oversight through 2018.



Several months into construction, the largest wildfire in California history swept from one end of the project to the other, halting work for nearly three months in the fall of 2017 and winter of 2018. Subsequent rains led to massive mudslides throughout the project area, and construction personnel were repeatedly evacuated throughout the spring of 2018.

E & E worked diligently with SCE to reestablish the environmental baseline and review necessary project refinements. Currently, the project is slated to finish construction on schedule, despite the considerable delays.

Minnesota Department of Commerce – Line 3 Pipeline Project

***Please note this project description is proprietary/confidential. E & E does not claim, by the inclusion of this project description, that the State of Minnesota endorses its products or services.*

Client: Minnesota Department of Commerce, Energy Environmental Review and Analysis (EERA)
Location: Multiple Counties, Minnesota
Date: 2017
Cost: \$2.2 million

Our Role

The Minnesota Department of Commerce, EERA contracted E & E to assist in the state environmental review process for the Line 3 Crude Oil Pipeline Project proposed by Enbridge Energy, Limited Partnership (Enbridge). EERA contracted E & E at the Draft EIS stage of the process because of three primary challenges they were facing:

1. A growing controversy around the project and the need to manage a significant public meeting effort with a large volume of public comments anticipated,
2. The complexity of the analysis in the EIS and the certainty of litigation would need a firm capable of producing a defensible EIS and
3. An aggressive statutory timeline to produce the final EIS.

Key tasks included the planning and implementation of a series of public meetings to present the Draft EIS for the project; coordination and responding to comments on the Draft EIS; hearing support; preparation of the Final EIS; and development of supplemental information. Work was performed in accordance with Minnesota State Regulations addressing the potential impacts associated with the issuance of a Certificate of Need and a Route Permit, which would be issued by the Minnesota Public Utilities Commission (PUC). EERA requested an aggressive timeline for all deliverables in keeping with a regulatory timeline in which the determination of adequacy of the Final EIS would be made within 280 days after the preparation notice was published.

The Project

[REDACTED]

[REDACTED]

Public Meetings. E & E organized 22 public meetings over the course of twenty-one days throughout the project area. In order to facilitate these meetings, E & E managed all venue and speaker logistics, prepared key messages and talking points, designed 12 poster displays, and prepared handouts within a three-week timeframe. Some of the meeting venues included tribal facilities and thereby required coordination with tribal officials, as well.

For internal support to EERA, we actively managed and provided strong guidance in driving a public engagement process forward on an aggressive timeline. E & E developed consistent meeting messages, content, and displays, with the engagement of multiple state agencies, with divergent missions and authority, within a few short weeks.

With the intent of providing all members of the public an opportunity to comment, E & E designed the meetings with multiple means of providing comments (orally to a court reporter, orally to the entire audience, or privately in writing [via comment boxes or mail-in options]). We also worked successfully with EERA staff to allow advocacy groups both for and against the project to have the opportunity to engage attendees in a manner that did not disrupt the proceedings.

Response to Comments and Final EIS. Using our proprietary web-based comment response software (CORES), E & E managed over 3,000 public comments from a variety of stakeholders, including elected officials; American Indian tribes; and federal, state, and local agencies. E & E made significant revisions to the text of the Draft EIS document and conducted an updated geographic information system (GIS) analysis in order to respond to nearly 300 substantive comment letters, including over 1,500 marked comments. The Final EIS, thousands of pages in length, included substantial revisions that responded to substantive stakeholder concerns for this highly controversial project. We worked with EERA to provide appropriate public notice of availability of the documents and to carefully proof the document and organize it for ease of review and access. The Final EIS was published within the statutory 280 day timeline.

During the evidentiary hearing phase, E & E also supported EERA by providing expert witness testimony and preparation of supplement analysis and data to respond to questions from the PUC. Ultimately, the FEIS withstood the scrutiny and the PUC determined that the FEIS adequately addressed the regulatory requirements to provide the PUC with valuable information to guide ultimate decision-making regarding the project.

BLM HIGHLIGHTS

Bakersfield Supplemental EIS/RMPA

Client:	Bureau of Land Management, Bakersfield Field Office (BKFO)
Location:	Bakersfield, California
Date:	2018-2020 (anticipated)
Cost:	\$299,375

BLM is preparing supplemental NEPA documentation to address potential impacts of hydraulic fracturing on public lands and federal mineral estate in the BKFO in Bakersfield, California.

Meeting the Challenge of a Settlement Agreement

The 2014 Bakersfield RMP and Record of Decision (ROD) identified approximately 1,015,350 acres of Federal mineral estate as open to fluid mineral leasing, subject to major constraints, in the decision area. The Reasonably Foreseeable Development Scenario (RFDS), a projection of the exploration, drilling, and production activity likely to occur in the next 10 to 15 years, predicted approximately 100 to 400 federal wells would be drilled on federal mineral estate per year during the life of the RMP and that 25% of these wells were expected to be hydraulically fractured (fracked).

In 2015, the Center for Biological Diversity and Los Padres Forest Watch challenged BLM's ROD approving the Bakersfield RMP, arguing that BLM violated NEPA because the Final EIS failed to adequately analyze the impacts of hydraulic fracturing within the decision area.

In 2016, the U.S. District Court, Central District of California, issued summary judgment finding BLM failed to take a "hard look" at the environmental impact of hydraulic fracturing in the RMP, although the Range of Alternatives were upheld and the Reasonably Foreseeable Development Activities were permissible. The court stated that the BLM was obligated to analyze the environmental consequences resulting from the use of hydraulic fracturing.

In 2017, the Court approved a settlement agreement in which the parties agreed to partial remand without vacatur of the ROD for the RMP. The BLM also agreed to prepare appropriate NEPA documentation to address the deficiencies identified by the court and to issue a new decision document that will amend or supersede the existing RMP ROD if appropriate.

Our Role

As a result, E & E was retained to provide the expertise and capacity needed to successfully complete a court-ordered SEIS to address potential impacts of hydraulic fracturing on lands and mineral estate managed by the BKFO. By taking a hard look at the impact of hydraulic fracturing in the Resource Management Plan (RMP)—without redoing parts not found deficient by the Court—the SEIS will meet all BLM land use planning and NEPA guidance and direction to defensibly meet conditions of the Settlement Agreement.

The BKFO is located in southern-central California, and manages public lands and minerals across a 17 million acre planning area that stretches from the coastal islands in the Pacific Ocean across the Central Valley to the crest of the Sierra Nevada Range. The decision area of the Bakersfield RMP,

approved December 22, 2014, encompasses approximately 400,000 acres of public surface land and 1.2 million acres of Federal mineral estate in Kings, San Luis Obispo, Santa Barbara, Tulare, Ventura, Madera, eastern Fresno, and western Kern Counties.

Considerations in addressing the requirements of the SEIS include:

- Decision Area boundaries with BLM and non-federal surface ownership;
- Split estate oil and gas leasing;
- Understanding public perceptions and expectations with limitations of a planning-level impact analysis;
- Estimated proportion of hydraulic fracturing well completions compared to traditional completion methods;
- Substantial difference between hydraulically fractured well configurations (and water use) in California compared to other basins within the country;
- Presence of numerous sensitive ecological resources and extraordinary biodiversity in the Decision Area;
- High value of groundwater resources; and
- Public perception around hydraulic fracturing.

Key parts of our strategy for this project are:

- Open lines of communication across the BLM and E & E project teams;
- Careful, collaborative crafting of an Analysis Plan so that all authors and ID Team members know the path forward;
- Maintaining focus on the issues identified by the settlement agreement; and
- Limiting consideration of resources to air and atmospheric values, water, and biological resources.

Communication and clear assumption testing are the guiding principles for E & E's support to the BKFO for this SEIS process. Time spent developing the team, collaborating on project guidance such as the Project Management and Analysis Plans, and regular opportunities for communication, have put the project on a firm path forward.

E & E has designed a framework for providing precise analysis plans, and supporting data parameters, in order to address a focused supplementation and aggressive project timeline, under Secretarial Order 3355: Streamlining NEPA. To date we have finalized the project management plan following an internal team meeting and site visit, completed internal scoping and developed a draft analysis plan covering all relevant resource areas. In order to meet the shortened schedules required by S.O. 3355, the team is addressing as many tasks as possible prior to publishing of the Notice of Intent. By organizing the data collection and analysis requirements and developing an annotated outline for the SEIS, a more streamlined schedule can be met. Developing these materials early have helped to engage the technical resource specialists on their specific areas of responsibility. Keeping the document focused on only those areas required to be addressed in the court order, and by use of referencing back to prior documents rather than repeating text, will help keep within the page limit requirements of S.O. 3355.

California Valley Solar Ranch (CVSR)

Client: SunPower Corporation and NRG Energy

Location: San Luis Obispo County, California

Date: 2010-2014

E & E worked with the US Department of Energy to prepare an EA for SunPower Corporation's CVSR project, a 4,700-acre, 250-MW solar photovoltaic energy farm located just north of Carrizo Plain National Monument in eastern San Luis Obispo County. SunPower decided to apply for a loan guarantee after the SFO County had already initiated preparation of an EIR was in progress. The challenge was to comply with NEPA in 10 months. E & E recommended that SunPower accept the mitigation identified in the EIR but to keep the EA and EIR processes and documents separate.

This turned out to be a good recommendation, as E & E was able to complete the EA leading to a Finding of No Significant Impact, whereas a similar project nearby decided to prepare a combined EIR/EIS and did not meet the deadline, whereas the CVSR project secured the loan guarantee, which greatly benefited the financial feasibility of the project. To prepare the EA, E & E reviewed the EIR and developed a NEPA crosswalk to identify and reconcile the main differences in the findings of the EIR (a requirement under CEQA and EA (a NEPA requirement)).

As a result of SunPower's willingness to adopt all recommended mitigation into its project design, DOE and USFWS determined that the CVSR project would result in no significant impacts on the environment and would benefit numerous local species.

The Project

In addition to 10 solar arrays covering approximately 1,900 acres, the CVSR permanent facilities include a 3.6-mile-long, 230-kV overhead generation tie-line with the proposed Caliente Substation of Pacific Gas and Electric, which would connect the project to the Morro Bay-Midway transmission line; underground and overhead electrical collector lines; a substation; a switchyard; an operations and maintenance building; an on-site septic system and wastewater treatment facility; an outdoor viewing summit with interpretive information and connecting trail for area visitors; access roads; fencing a water supply system, including supply wells, storage facilities, brine evaporation ponds, and a reverse osmosis treatment facility; and extensive habitat restoration and enhancement features. Temporary

E & E completed an EA on behalf of SunPower for a loan guarantee from the DOE. With 10 solar arrays over 1,900 acres, the project is located on agricultural land in an area with several species of large game and threatened and endangered species.

E & E developed 30+ project-specific plans to help SunPower secure construction permits from San Luis Obispo County and helped DOE and SunPower coordinate with federally recognized tribes. We conducted the environmental inspection and provided monitoring for compliance with multiple permits.

"I would like to commend the efforts of Ecology and Environment's environmental team on the project. The E & E Team has maintained a high standard of environmental compliance for the project as required by the regulatory agencies. The E & E Team has also played a key part in working with the construction contractors, other consultants and regulators to have a safe and environmentally compliant construction site. Finally, your team has successfully negotiated with the County to reduce the level of effort and/or provide schedule flexibility for many of the project environmental requirements.

Ray Kelly, NRG Energy

facilities during construction include a portable batch plant, a switching station, and on-site accommodations for construction workers. Numerous sensitive resources were affected by the project, in part due to its proximity to the Carrizo Plains National Monument.

NEPA EA

The EA team analyzed potential environmental impacts on special-status wildlife (including giant kangaroo rat and San Joaquin kit fox), hydrology, and cultural resources; as well as project-related greenhouse gas reductions.

The visual analyses encompassed views from Painted Rock and the Carrizo Plain National Monument, views from nearby residences, views of the transmission line, potential glare, project effects on darkness of the night sky, and the accuracy of the visual simulations. As part of the EA preparation process, E & E also assisted the DOE with its coordination with local Native American tribes by providing a presentation and hosting a site visit for members of the federally recognized Mission Band of Chumash Indians. As a result of this and a minor project redesign, the Chumash did not require a formal consultation process.

Construction COA Support and Monitoring

In the County-prepared EIR, San Luis Obispo County approved the project with nearly 200 conditions of approval (COAs) for project construction and operation. The COAs incorporate environmental mitigation measures, but also included items such as funding for improvements to a community center and restrictions on construction hours. SunPower also was required by both San Luis Obispo County and USFWS to secure over 9,000 acres of compensation lands to be managed in perpetuity for special-status species.

E & E conducted environmental inspections and provided construction monitoring to ensure compliance with COA and permit requirements on behalf of SunPower. SunPower sold the project to NRG. In addition, a separate team of E & E environmental inspectors provided compliance monitoring—including biological, cultural resource, paleontological, air, surface water, and groundwater monitoring—for the project owner (NRG Energy). Under very tight time constraints, E & E's team completed six operation plans that were approved by the County for four site arrays E & E also developed—and the County approved—a strategy to reduce the required environmental monitoring by 50%.

Additional EIS/EIR Experience

Lozem Concord Naval Weapons Station EIS. E & E prepared a NEPA EIS for the US Navy addressing alternatives for the disposal of 4,972 acres of surplus property at the former Concord NWS in the City of Concord, and the subsequent transfer and redevelopment of the property by the local community for residential and mixed-use development. We coordinated closely with the City of Concord to incorporate key planning concepts, describe planned development districts, and define development programs.

Mesa Substation EIR, Los Angeles County. E & E prepared a CEQA-compliant EIR on behalf of the CPUC for a nearly \$600 million SCE substation project. The project's main component is demolition of an existing substation and construction of a larger substation, nearly tripling the substation's footprint to 70 acres. Recognizing that sensitive habitat could cause delays, E & E prioritized obtaining input from USFWS on mitigation for coastal California gnatcatcher to inform the environmental analysis. The client also requested an expedited schedule for preparation of the final EIR. As a result, E & E responded to more than 540 discrete comments, and prepared and released the final EIR in just over three months from the close of the draft EIR public comment period. E & E also developed a Mitigation Monitoring, Compliance, and Reporting Program in coordination with SCE to provide guidance and procedures for environmental monitoring during project construction.

California Public Utilities Commission, Numerous Projects in CA. Since 2007, E & E has provided the CPUC with streamlined review of investor owned utilities' transmission, substation, and gas storage projects. To date, E & E has provided support on fifteen CPUC projects, including the successful completion of a fast track, award winning transmission EIR/EIS. All of our projects for the CPUC include scoping, comprehensive environmental impact assessment, usually across multiple jurisdictions, detailed alternatives and cumulative analyses, public meeting support, response to comments, and in many cases, biological monitoring.

SunPower Highlights. Since 2009, E & E has supported SunPower with solar development across the U.S. and internationally, from due diligence to operational compliance, from 5-MW projects to the third-largest solar farm in the world: Solar Star I and II.

Currently the world's third largest solar power plant, the two-part, 579-MW **Solar Star** project is located on 4,800 acres of agricultural, fallow agricultural, and desert scrub habitat in Kern and Los Angeles Counties. E & E managed project environmental support from initial development and permitting to construction monitoring and operations. We provided consolidation of Conditions of Approval (COAs) and mitigation measures from two counties; identification/resolution of issues and project compliance questions to ensure construction start-up on schedule; assistance to client in responding to due diligence questions from prospective buyers; full-time biological monitoring and on-site COA/mitigation compliance support; and training for spill prevention and hazardous materials.

Eldorado-Ivanpah Transmission Line EIR/EIS. For CPUC and the BLM, E & E prepared a joint third-party EIR/EIS for a large-scale transmission upgrade project spanning the California/Nevada border in the Mojave Desert. E & E helped CPUC develop an innovative process that streamlined permitting and accelerated the project schedule by six months. In pioneering the CPUC streamlining process, E & E set the standard for efficient and thorough environmental review accomplished through a combination of teamwork, innovation, and initiative.

Cabrillo Offshore LNG Import Terminal EIR/EIS. The California State Lands Commission, the U.S. Coast Guard and the Maritime Administration retained E & E to prepare a multi-million-dollar EIR/EIS for this high-profile deep-water port project in Ventura County. The Cabrillo project was perhaps the most controversial project proposed in California in the last decade. To evaluate impacts, the team developed a community-based risk evaluation process and worked with the Coastal Commission and scientific research organizations to develop valid data. E & E completed, translated into Spanish, and distributed the draft EIS/EIR within 10 months of contract award, ahead of the project schedule. The public consultation and scoping plan prepared for this project has become the USCG’s standard.

ERG Operating Company Foxen Petroleum Pipeline Project (MRS)

Client: County of Santa Barbara Energy Division

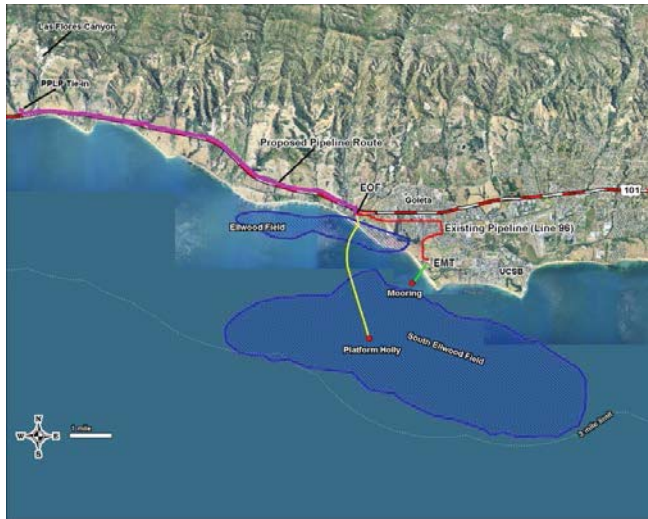
MRS assisted the Santa Barbara County Energy Division in the preparation of the ERG Operating Company Foxen Pipeline Petroleum Project EIR including air quality, biological assessments, hazardous materials, cultural, water, transportation and alternatives analysis. Assistance included support at hearings and scoping and workshop meetings, as well as the development of the detailed analysis and EIR sections. The pipeline would connect the Cantin Lease to the Sisquoc Pipeline system to transport crude oil from the Cat Canyon area to the Santa Maria Pump Station and the Santa Maria Refinery.



Ellwood Pipeline Company Line 96 Modification Project EIR (MRS)

Client: County of Santa Barbara

For the County of Santa Barbara, MRS prepared an EIR to examine the environmental effects of redirecting the transportation of processed crude oil from the Ellwood Onshore Facility (EOF) to an existing coastal pipeline west of Las Flores Canyon owned by Plains Pipeline, L.P. Installation of the new pipeline would eliminate the need for continued operations at Venoco’s Ellwood Marine Terminal



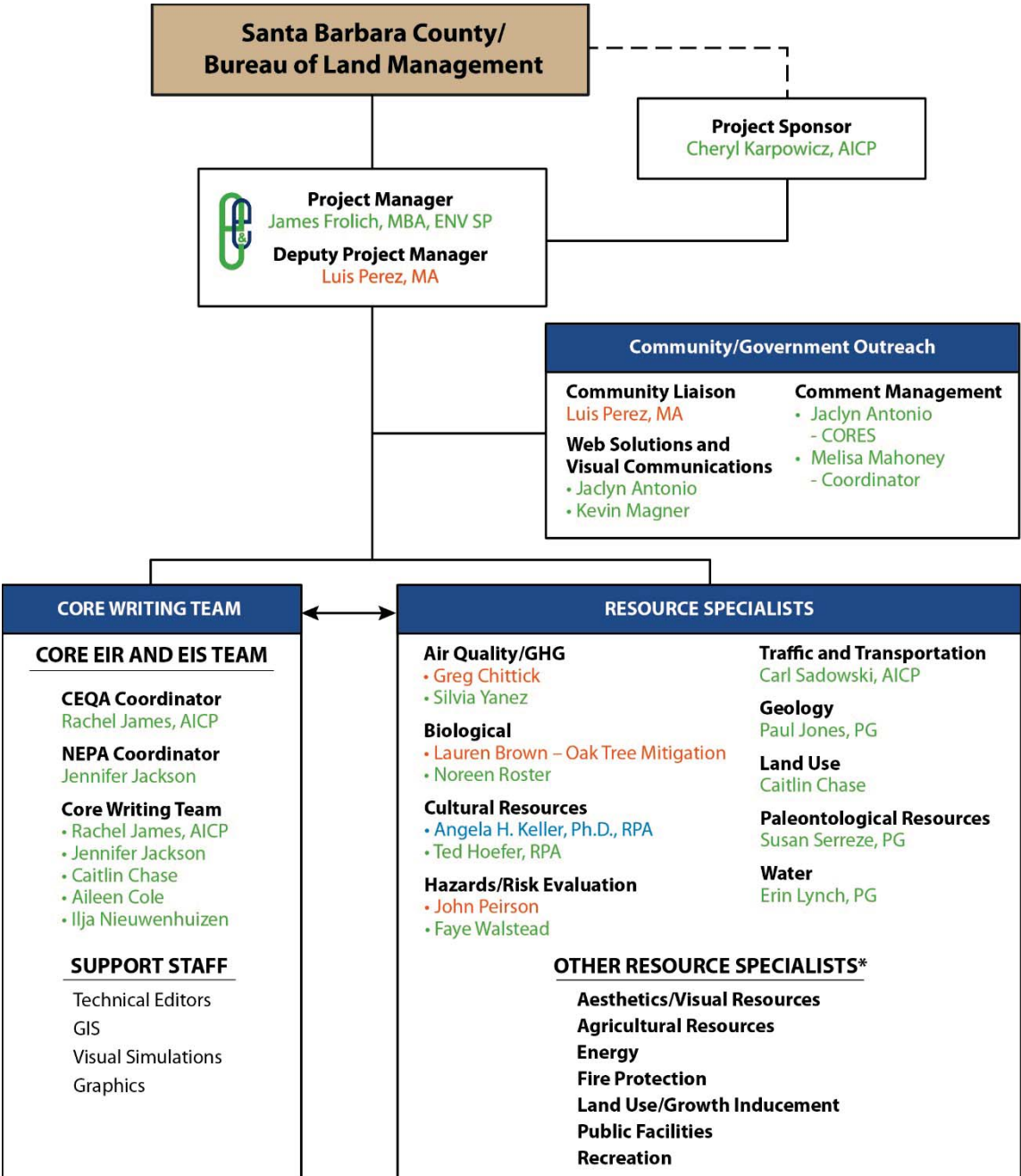
(EMT). The project also proposed the decommissioning and abandonment of a pipeline between the EOF and the EMT and the cessation of operations at Venoco’s EMT, including the associated barge operations once the new pipeline became operational. Under the proposed project, oil production on Platform Holly and oil and gas processing activities at the EOF would remain unchanged. The proposed project would only change how crude oil and some natural gas liquids, following processing at the EOF, would be transported to regional refineries.

MRS considered several alternatives to the proposed project, and none of the alternatives, including the no project alternative, that were evaluated offered any substantial benefit over the proposed project; therefore, the proposed project was deemed the environmentally superior alternative. Still, MRS found several potentially significant and unavoidable impacts that were not mitigable to a level of insignificance, all of which would be the result of accidental oil release in the terrestrial and marine environments.

3. Personnel

3.1 Project Team

As discussed in Section 2, E & E has formed a team with MRS Environmental in order to provide the Counties and BLM with the most effective combination of CEQA and NEPA expertise, knowledge of the environment in which the project is located and understanding of the issues important to the community and the regulatory agencies. In addition, we have included Statistical Research, Inc. (SRI) to fill important roles regarding cultural resource assessment and consultation.



KEY:
■ Ecology and Environment, Inc.
■ MRS Environmental
■ Strategic Research, Inc.

* For EIR and EIS issue areas expected to be less than significant.

Figure 3-1: Project Team Organization

We have developed an integrated team comprised of staff from both E & E and MRS in order to provide the Counties and BLM with seamless execution of our assignment which is described in our scope of work in Section 4; Figure 3-1, Organization Chart, shows how our team is arranged. Below we talk about the responsibilities of our team members and how they will interact to accomplish our shared objectives of preparing legally defensible documents, including the affected communities in the process, and conducting all of our work on as efficient and expedited a schedule as possible. We also summarize their backgrounds as relevant to this assignment then address our levels of commitment.

Although typical EIS and EIR projects include periods of routine work combined with intense bursts of activity as documents are reviewed and finalized, all of the professionals listed are available up to full time to work as needed by the project, from initial ramp up through final production.

As mentioned, by assigning personnel who are already knowledgeable of the specifics of pipeline projects, we will jumpstart the process. For example, our staff is already familiar with how pump stations are operated and the best practices that are used during pipeline construction, which allows them to be very specific in their review of the technical studies and to focus on the key issues relevant to impact analysis and the development of mitigation measures.

3.2 Project Management

Jim Frolich, MBA, ENV SP, will serve as Project Manager and **Luis Perez, MA** as Deputy Project Manager. They will work closely together day-to-day to attain the objectives discussed above and execute the scope of work outlined in Section 4 of this proposal. They will be responsible for project initiation, public outreach and consultation, lead and responsible agency interaction, document preparation and overall conduct of the E & E team work assignments. Mr. Frolich will focus on maintaining project schedule and forward progress as well as definition and execution of technical activities and report preparation. Mr. Perez will support these activities, serve as our local, day-to-day liaison with Santa Barbara County and be responsible for quality control of our CEQA documents. **Cheryl Karpowicz, AICP**, is a Senior Vice President at E & E and will be your project sponsor for this project, ensuring that The County and BLM receive the priority attention you require.

The management team will evaluate the regulatory requirements under CEQA and NEPA in the context of County and BLM implementation requirements (such as the Santa Barbara County *Environmental Thresholds and Guidelines Manual* and BLM *Appendix F of the Land Use Planning Handbook (H-160-1)*) and expedited NEPA measures under FAST-41 and Secretarial Order 3355. We will work with the County and BLM to determine the overall context and scope of the CEQA and NEPA documents to ensure that they are defensible should they be challenged and record background notes to describe how those determinations were made. This could include development and definition of project alternatives, documentation of the No Project Alternative, baseline conditions and the consultation process.

Jim and Luis will serve as the face of the E & E team and participate in consultation and outreach events as described in our scope.

Summaries of Jim and Luis' relevant background follow.

James Frolich, MBA, ENV SP – Project Manager

MBA, University of California, Berkeley, Haas School of Business; BA, Economics and Environmental Planning, University of California, Davis

Jim has decades of experience preparing CEQA and NEPA documents for complex projects and is particularly successful in providing clear direction and technical guidance to our staff working on complex projects. His experience includes management of CEQA and NEPA documents assessing oil and gas exploration, production and transportation, renewable power, and linear projects throughout California, the West and internationally. Mr. Frolich is experienced in presenting projects to public officials and the public and has worked with affected communities, including indigenous peoples, here and around the world. He has:

- Led environmental impact assessments of oil and gas facilities, including marine terminals and pipelines with environmental assessment budgets of up to \$15 million and speaks globally on the subject and conferences and in the media. He has also managed the evaluation and mitigation of contamination from petroleum pipelines so can provide insights into that aspect of the proposed project.
- Served as an integral part of the environmental consulting community in Santa Barbara County evaluating offshore energy development in the 1980s and 1990s, and worked on both the Las Flores Canyon and Gaviota Interim marine terminals.
- Recently assisted the State Water Resources Control Board managing rule making and CEQA assessment for major changes to California water policy; directed programmatic CEQA processes in Kern County for agricultural and other projects, and developed environmental mitigation and management programs for LNG terminals and associated pipelines. He has prepared CEQA documents under the requirements of the State Water Board, Caltrans, State Lands Commission and over two dozen counties and cities.
- Managed and directed NEPA documentation under requirements of the BLM, MMS (now BOEM), DOD, Federal Highway Administration and the EPA for projects such as offshore oil and gas platforms, highways and bridges, geothermal development and waste water treatment.
- Been a Charter Member of the American Planning Association and is a Sustaining Member of the International Association for Impact Assessment; he is a certified Envision Sustainability Professional (ENV SP) with the Institute for Sustainable Infrastructure. He is available to dedicate his full time to this project.

Luis Perez

MA, Organizational Management, Fielding Graduate University; BA, Environmental Science and Public Relations, Northern Arizona University

Mr. Perez is a Senior Project Manager with MRS Environmental. Before joining MRS, Mr. Perez acquired extensive public agency experience working for Santa Barbara County, which included interpretation of land use and environmental policies and regulations for large development projects, recommendations to decision-makers and public presentations. He was an Energy Specialist with the Santa Barbara County Energy Division for 16 years, working on permitting and

environmental review for onshore and offshore oil and gas projects. Mr. Perez is involved with the management and preparation of environmental studies, primarily focusing on the implementation of CEQA for oil and gas development projects in California. His major areas of expertise are in land use issues of major oil and gas development and transportation projects. Mr. Perez has extensive experience in the preparation of environmental documents, staff reports for decision-makers, presentations for decision-makers, public workshops and hearings. Mr. Perez has:

- Served as Project Manager for multiple oil and gas development projects for the County of Santa Barbara.
- Worked on the preparation of the Hermosa Beach Oil Development Project EIR, the Whittier Main Oil Field EIR, Paredon EIR, the Baldwin Hills Community Standards District EIR, the Conoco-Phillips Santa Maria Refinery Expansion EIR, the Chevron El Segundo Marine Terminal Lease Extension EIR, the Guadalupe Oil Field Fencing Plan, and the preparation of the Venoco Full Field Development Project EIR.
- Served as Project Manager for multiple oil and gas development projects for the County of Santa Barbara.

3.3 Core EIR and EIS Team

Jim and Luis will lead a small, compact group of professional experts to prepare the EIR and EIS documents and manage the CEQA and NEPA processes. This team will work together, but is organized in a way that recognizes that the two processes for this project are separate, but related; utilize the same technical work; and converge at some points in the schedule. This integrated team is comprised of **Rachel James, AICP**, our CEQA lead, and **Jennifer Jackson, MBA**, our NEPA lead. Rachel has current and recent experience, including the Santa Barbara Reliability Project transmission line EIR for the CPUC as well as linear and other projects in surrounding counties including San Luis Obispo and Kern. Jennifer is a NEPA lead with expert experience in BLM's processes and relationships with the Bakersfield Field Office specifically. Rachel and Jen will act essentially as project leaders for the EIR and EIS but work closely to ensure that efficiencies are realized, technical studies are applicable to both documents and that our efforts on the two processes are synchronized.

Given that the applicant has submitted technical studies with its application that we will be reviewing (see discussion below), the E & E team focus will be on rapidly, efficiently and adequately preparing the CEQA and NEPA documents. To facilitate that we have included Rachel and Jen in a Core Writing team that also includes **Caitlin Chase, Aileen Cole**, and **Ilja Newenhuizen**. They will be dedicated to preparing all versions of the EIR and EIS, scoping and procedural documents and related other materials. All of them have experience with preparing CEQA and NEPA projects. Because biology is always a key issue that requires careful attention to agency consultation and emerging requirements, biologists Aileen and Ilja's experience in the habitats and issues relevant to the Plains Pipeline replacement project, will be especially helpful. By empowering this team, we can work closely and rapidly, focusing on production and not on complicated internal structures. This approach has been utilized successfully on current assignments for the CPUC and County governments to meet strict deadline and budget requirements and the need for clear, easy to understand documentation.

Rachel James, AICP

BA, English Literature, San Francisco State University

Ms. James' 20-year professional background spans both planning and technical writing. She manages CEQA and National Environmental Policy Act (NEPA) documents related to industrial-scale energy development and participates in environmental regulatory compliance evaluations and permitting programs. Rachel has direct experience working with Santa Barbara County, and is known as a dynamic project manager and participant who is able to work under unique project constraints to make forward progress. Rachel has managed a complicated third-party EIR on behalf of the CPUC for a 36-mile Southern California Edison transmission upgrade project, which involves reconductoring existing 66-kV transmission lines, telecommunications installation, and substation upgrades to improve reliability in the Santa Barbara Electrical Needs Area. She played a key role on our project team for the Kern County oil and gas land use amendment EIR, and managed an EA regarding linear rights away around the crowded Las Vegas area, for which she was commended by the BLM. She also worked on the California Valley Solar Ranch project in San Luis Obispo County, where she helped to organize and effectively track progress on compliance with conditions of approval. She managed the comment response process for the Enbridge oil replacement projects. She also managed the technical and editorial review process for the award-winning, joint third-party EIR/EIS that E & E prepared under CEQA and NEPA for this 35-mile transmission line and substation project of Southern California Edison.

Jennifer Jackson

MBA, Global Environmental Sustainability & International Business, Colorado State University;
BS, Environmental Science/Biology, The Ohio State University

Ms. Jackson is an ecologist, project manager, and regional permit coordinator with more than 16 years of experience conducting a range of environmental services to a diverse client base. She has conducted biological assessments and assisted in the preparation of NEPA EAs and EISs, Land Management Plans, Stewardship Plans, and other technical environmental and ecological related reports. Jen has direct experience with the BLM Bakersfield Field Office, where she currently serves as deputy project manager for its supplemental EIS in response to a judicial decision to reanalyze impacts from oil and gas development as part of its Resource Management Plan.

Caitlin Chase

MS, Environmental Management, University of San Francisco; BA, Environmental Studies, University of Vermont Honors College

Ms. Chase's background includes experience in managing and preparing all levels of CEQA/NEPA documentation and managing environmental reviews for development and infrastructure projects. Ms. Chase understands the types of challenges that agencies may encounter during the course of a project, and is adept at developing mitigation strategies to overcome them. Accordingly, Ms. Chase coordinates with agencies, technical specialists, and project engineers to efficiently navigate the environmental clearance processes with the best available information. She can quickly solve problems and respond to client, agency, and stakeholder perspectives throughout the environmental review process.

Aileen Cole

BA Zoology/Spanish/Latin American Studies (focus in Latin American Ecology & Conservation), University of Wisconsin

Ms. Cole is skilled in the preparation of CEQA documents for large-scale utility projects within the State of California, including linear transmission infrastructure projects. Additionally, she has conducted due diligence permit reviews and prepared technical reports for solar facilities, assisted in the review of the DEIS for a proposed invasive species eradication project within protected federal lands, and helped prepare conservation easement baseline reports. She recently helped prepare the Master Environmental Assessment (MEA) for the Pipeline Safety and Reliability Project in San Diego County on behalf of CPUC. She also assisted with preparation of the Kern County Planning and Natural Resource Department Biosolids Ordinance Amendment EIR, among other CA-specific CEQA/NEPA documents.

Ilja Nieuwenhuizen

BS Ecology, Behavior and Evolution, University of California at San Diego

Ilja uses nearly two decades of experience as a wildlife biologist, permittings specialist, and project manager to help energy industry clients successfully permit and construct responsible energy infrastructure projects. He recently prepared the biological resources section of an EIR for a solar project on BLM jurisdiction in Nevada. He also has extensive experience in California and with CA-specific regulation through work on the Inland California Express Pipeline and Lucerne Valley Solar Project, among others.

3.4 Resource Specialists

The heart of any EIR or EIS is a robust, clearly understood, technical analysis. In this case, the applicant has submitted technical studies prepared by consultants with strong local understanding. Based on our initial review of these documents, we have assembled a team of resource specialists to review these studies for technical accuracy and completeness, make recommendations for needed additional study, execute any additional work, and prepare technical sections of the EIR and EIS. We have selected specialists that have experience in preparing third party EIRs and EISs that can rapidly evaluate existing studies and focus on key issues. A critical part of our documents will be specification of specific mitigation measures that will be effective, realistic and able to be implemented.

The RFP lists primary issue areas and we are focusing on those areas of potential impact. It also lists areas expected to be less than significant. We will work with the County and BLM to determine how these are addressed and presented; for the EIR we will seek to use an approach that teammate MRS is using for Santa Barbara County now, to address potentially significant issues in one section and summarize the less than significant areas and our conclusions on significance in a separate chapter. This will help to speed the project by allowing our team to focus on the critical issues will still adequately addressing all required topics. The key technical experts for important issues on our team as shown on the organization chart; resumes are appended. In addition, we have budgeted and internally identified additional professionals who will screen and then write about other issues – these staff have not been shown on the organizational chart.

3.5 Community and Government Outreach

Energy development is controversial around the world today, and no less so in California and the central coastal counties. This project is specifically important to the community due to the 2015 spill from the existing pipeline, cultural and natural resource concerns along the right-of-way, competing land uses and continuing concerns about coastal oil development. To ensure success we must therefore have a robust community outreach and consultation program that advises the public about the project, the environmental review process, and specifically how they can participate in the process. We will provide the public with accurate and timely information to ensure a transparent process and ensure that our documents provide responses to public comments and concerns.

Our Deputy Project Manager, Luis Perez, will play a significant role in this outreach, utilizing his extensive history in the community, past experience with the County, and in-depth knowledge of the existing facilities and proposed project as well as oil transportation options (now being studied by MRS in another EIR for the County) to effectively communicate. Other core team members Jim Frolich, Jen Jackson and Rachel James will play major roles as will our established outreach team to prepare and facilitate consultation. For example, they will direct our technical specialists to engage with all relevant local, state, and federal agencies that should be consulted on the proposed project. We have included **Jaclyn Antonio** and **Kevin Magner** to assist with web-based communications and graphic materials as they have for many other projects currently and in the past. The clarity of their public involvement materials has been a key to giving our project professional stature; graphics that help the public to better understand the project and process can be a significant asset in maintaining the schedule.

A key part of consultation will be the management of potentially numerous comments on the Notice of Preparation and Notice of Intent and on the Draft EIR and EIS. As discussed in Section 4 of this proposal we will utilize E & E's CORES program to do this. **Jaclyn Antonio** will also manage this, supported by **Melisa Mahoney**. Each comment will be categorized according to content and tracked so that individuals can find the specific answers to their concerns in the documents. Our CORES system allows us to quickly prepare the scoping summary so that the technical professionals can rapidly determine how to address the comments in the technical analysis, and whether any additional information or study is warranted to adequately respond to comments. Then, because CORES is a relational database, common responses can be prepared and updated at any point in the process.

3.6 Resumes

Please find our resumes highlighting relevant qualifications attached as Appendix A.

3.7 Personnel Responsibilities and Estimated Hours

Table 3-1, below, summarizes the responsibilities and commitments of time for the individuals discussed above.

Table 3-1 Key Staff Responsibilities

Name/Role	Responsibilities	Estimated Hours	Percentage of Total Hours
James Frolich, ENV SP Project Manager	Overall project management, client interaction, CEQA/NEPA strategy and conformance, quality and performance	308	6%
Luis Perez Deputy Project Manager	Support of project manager, County and local liaison, CEQA strategy, quality control	358	7%
Cheryl Karpowicz	Project Sponsor (No Charge)	0	0%
Jaclyn Antonio	Web Solutions and Visual Communications/ Comment Management	44	>1%
Kevin Magner	Web Solutions and Visual Communications	32	>1%
Melisa Mahoney	Comment Management	450	9%
Rachel James, AICP	CEQA Coordinator/Core Writing Team	444	8%
Jennifer Jackson	NEPA Coordinator/Core Writing Team	376	7%
Caitlin Chase	Core Writing Team/Land Use	990	19%
Aileen Cole	Core Writing Team	544	11%
Ilja Nieuwenhuizen	Core Writing Team	208	4%
Silvia Yanez	Air Quality/GHG	22	>1%
Greg Chittick	Hazard / Risk Evaluation, Air Quality/GHG	320	6%
Lauren Brown	Biological Resources/Oak Tree Mitigation	86	2%
Noreen Roster	Biological Resources	208	4%
Angela H. Keller, PhD, RPA	Cultural Resources	160	3%
Ted Hoefer, RPA	Cultural Resources	16	>1%
John Peirson	Hazards/Risk Evaluation, Quality Control	112	2%
Faye Walstead	Hazards/Risk Evaluation	60	1%
Carl Sadowski, AICP	Traffic and Transportation	104	2%
Paul Jones, PG	Geology	104	2%
Susan Serreze, PG	Paleontological Resources	68	1%
Erin Lynch, PG	Water	160	3%

4. Technical Methodology

We have organized our technical approach around three time-saving strategies, to:

1. Conduct the data gap process, define purpose and need, and develop preliminary alternatives prior to issuing the Federal Notice of Intent (NOI) and state Notice of Preparation (NOP). This approach helps to inform the public through the scoping process and allows preparation of the EIS and EIR to commence immediately after scoping.
2. Use a core writing team managed by a lead CEQA writer and lead NEPA writer. These lead writers would coordinate with the County and BLM to define the purpose and need and develop alternatives, and draft a template for each EIS and EIR resource area to provide clear direction to the technical writers. Given the different processes, resource topics, schedules, public involvement processes, impacts, mitigation, and study area for each document, this strategy ensures that the two documents remain separate but coordinates throughout production.
3. Focus our efforts on the primary issues identified in the Request for Proposal (RFP), such as air quality, biological resources, and cultural resources, since these topic areas will likely require in-depth analyses. In response, as described in Section 3, our team includes experts specializing in air quality, quantitative risk assessments, cultural resources, and other primary impact areas. The remaining topics (“EIR and EIS Issue Areas Expected to be Less than Significant” in the RFP) will be analyzed thoroughly but in less detail.

Coordinated but Separate EIS and EIR Processes

The EIS will follow the requirements of NEPA and BLM guidance including *Appendix F* of the Land Use Planning Handbook (H-160-1) and adhere to Secretarial Order 3355. The EIR will be prepared in accordance with the CEQA guidelines and the Santa Barbara County Environmental Thresholds and Guidelines Manual (March 2018).

The E & E team proposes that Tasks 1 through 4 (kickoff through public scoping) be conducted concurrently for the EIR and EIS. The EIR and EIS documents themselves would be prepared separately, but using a core writing team to ensure consistency. The public comment periods for the Draft EIR and Draft EIS would also be conducted separately. As part of the separate process we would propose to actually have separate draft EIS and EIR public hearings.

The E & E team has taken the scopes for preparing the EIR and the EIS as outlined in the RFP and combined them into a set of tasks. These tasks will guide our work program discussed above, are reflected in our schedule and are tied to the cost estimate and milestones in subsequent sections of this proposal. They are listed below.

Task 1: Kick-off Meeting, Project Management, Biweekly Progress Meetings

Task 1.1: Attend Kick-off Meeting

Upon notice to proceed, E & E’s project manager and deputy project manager will attend an in-person project kick-off meeting. E & E will work closely with the County project manager at the start of the

project to identify primary project concerns, data requests, and project schedule. E & E will work with the County to clarify project objectives, define the scope/intent of the EIR and EIS, and confirm the proposed technical methodology. We will also conduct a site visit to familiarize the team with the project area.

Task 1.2: Bi-weekly Progress Meetings

E & E will work closely with the County Project Manager throughout the CEQA and NEPA processes. E & E will initiate a bi-weekly conference call with the County to maintain ongoing communication regarding progress, schedule, and any questions that may arise. In addition, E & E's will prepare a project management plan that establishes the critical success factors, objectives, and quality control plan (described in detail in Section 5). E & E's management team will meet regularly with the EIS and EIR authors, technical leads, and subconsultants to ensure the group progress is advancing on schedule and on budget.

Task 1.3: Project Management Plan

A carefully planned and detailed PMP is the foundation for success in the EIS process. The PMP will detail a work breakdown structure and critical path schedule. The schedule will include work period timeframes for identified critical path items, public participation opportunities, and administrative reviews, as well as scoped deliverable due dates and internal due dates for BLM-provided materials, data, and information.

The PMP will also include a combined E & E/BLM staffing matrix, risk management strategy, cost estimate breakdown, and project Communications Plan. The PMP will address management processes to track project costs and schedule, as well as quality control and change management. In addition, we will develop project-specific author guidelines, as we do for each NEPA project. These guidelines provide direction for project content and format and result in documents that are both easy to read and understand, and that are written in an active, single voice that includes consistent use of terms and uniform analyses.

Task 2: Technical Resources Peer Review

The RFP identified resources that could potentially exceed the County's thresholds to be considered significant impacts. The following subtasks describe the E & E team's approach to conducting the peer review of the technical resource reports and identifying issues and mitigation to be addressed in the EIS and EIR.

The E & E team will review the technical documents provided by the applicant and other information to determine potentially significant adverse environmental impacts. The County's thresholds will be used as guidelines to determine the level of significance for impact to each resource. The environmental thresholds and guidelines supplement the provisions in the California State Guidelines for determination of significant environmental effect including Sections 15064, 15065, 15382 and Appendix G. Below is a discussion of each of the primary issues identified in the RFP.

Task 2.1: Air Quality

The general approach to the air quality assessment will involve addressing baseline conditions and impacts associated with the Project and alternatives in accordance with requirements and guidelines established by the County and the applicable Air Pollution Control Districts as well as BLM requirements. Although the air quality thresholds established by the County will be utilized as the County will be the lead agency, guidelines and requirements of the APCDs will be incorporated as required.

MRS's analysis will consist of reviewing the Project and alternative development scenarios, peer reviewing and developing emissions inventories for these scenarios where necessary, modeling the impacts where appropriate, and developing mitigation measures for the significant impacts. MRS will then develop a mitigation monitoring plan for the mitigation measures. Analysis of cumulative impacts will consider future activities at the affected facilities and other projects in the area. Additional information may be compiled from existing regulatory requirements (related to air quality and GHG, such as recent changes to mandatory reporting requirements), other recent studies, such as the ExxonMobil Interim Trucking EIR, and technical analysis utilizing accepted models and calculations.

Peer Review

The Applicant has prepared studies (Air Quality Technical Report - SCS Engineers, March 28, 2018) addressing the criteria and GHG emissions and these will be peer reviewed for the inclusion of all emissions sources, the use of the correct equations and emission factors and the appropriate approach. Emission equations and emission factors for construction will be accessed to ensure compliance associated with the CalEEMod program, version 2016.3.2, the most recent version, and EMFAC2014 or EMFAC2017 (for mobile sources) will be assessed to ensure that correct factors are utilized. Operational emissions will be reviewed to ensure the correct use of emission factors and use factors, as well as ensuring that toxic emissions have been addressed appropriately, if applicable.

GHG emissions will be reviewed and supplemented as needed, ensuring that the appropriate factors and calculations are incorporated.

Task 2.2: Biological Resources

E & E will conduct a critical, peer reviews of the applicant's Biological Resources Assessment (BRA) and MRS will assist in the Conceptual Oak Tree Mitigation Analysis. E & E reviewed the County's third-party peer review of the BRA by John Storrer (2018) to garner a general understanding of the completeness of the BRA as well as to determine potential additional data and/or survey gaps. E & E will consider Mr. Storrer's comments while conducting our own independent and unbiased peer review of the documents. After our review, we will provide detailed written comments and recommend requests for additional information for submittal to the applicant. In addition, we will make recommendations for additional desktop or field resource studies to inform the EIS and the EIR, if the applicant cannot accommodate any additional information requests.

After conducting our review of the BRA, we will first provide a list of additional information requests, and the level of effort in conducting the additional desktop review will depend, in large part, on the completeness of the information returned by the applicant in response to these requests. The desktop review will also include a spot check of the information included in the BRA and provided by the applicant through additional information requests.

Task 2.3: Cultural Resources

SRI will provide cultural resource management services to support the preparation of separate EIR and EIS documents for the Plains Replacement Pipeline Project. This includes independent peer-review of the Phase I Archaeological Survey Report and Cultural Resources Extended Phase I Scope of Work.

Beyond the previously completed cultural resource Phase I Archaeological Survey report, no additional data is expected to be required to prepare relevant cultural resource sections in support of the EIR and EIS. Any additional fieldwork or desktop research that may be required as a result of ongoing BLM-SHPO consultation is not scoped in this proposal.

Task 2.4: Hazardous Materials

The applicant has produced a Quantitative Risk Assessment (QRA) (SCS Engineers, dated October 8, 2018) to address the risk of upset impacts associated with crude oil and natural gas pipeline operations. The QRA technical study will be peer reviewed to assure it includes a reasonable range of release scenarios, adequately documents the basis for release probabilities, meet regulatory protocols for consequence modeling, and complies with the County's guidelines on conducting QRAs. The applicant also prepared Emergency Flow Restrictive Device and Surge Study assessments which will also be peer reviewed to determine that appropriate measures have been included to minimize spill sizes and ensure responsiveness.

Task 2.5: Traffic

E & E would conduct a thorough independent peer review of the applicant's Traffic Impact Analysis, paying close attention to the data, assumptions, and methodology used to ensure the analysis is appropriate and accurate for the project. E & E's transportation subject matter experts are experienced at working with traffic engineers in the planning and development of traffic impact analysis, and are adept at translating the findings for use in NEPA and CEQA documents. Where appropriate, E & E would use the data (i.e. traffic counts, existing roadway level-of-service, etc.) and findings (i.e. trip generation, projected level-of-service, and volume to capacity ratio, etc.) from the applicant's traffic impact analysis in the EIS and EIR analyses. E & E may gather additional information to supplement the Traffic Impact Analysis, including existing traffic counts from Caltrans and Santa Barbara County. In addition, E & E would reference the Roadway Classification System in the county's Circulation Element of the County General Plan to verify quantitative traffic impacts or identify additional roadways not included in the applicant's Traffic Impact Analysis if needed.

Task 2.6: Geology

E & E would conduct a peer review of the applicant's Geologic Hazard Evaluation technical report. This would include a comparison with the CEQA guidelines using the significance criteria described in the Santa Barbara County Environmental Thresholds and Guidance Manual. To determine adequacy of the technical report E & E would conduct independent research and obtain publicly available data pertaining to the evaluation of geologic hazards. Potential data sources include state, federal, and local agencies such as the California Geological Survey, U.S. Geological Survey, the U.S. Department of Agriculture's Natural Resources Conservation Service, and County Planning Departments.

Task 2.7: Land Use

E & E will conduct a peer review of information provided by the applicant on compliance with Santa Barbara and San Luis Obispo land use policies and regulations. This includes Inland and Coastal Zoning Ordinances, comprehensive plans and policies relative to crude oil transportation. For federal lands we would evaluate land use impacts based on the Federal Land Policy Management Act (FLPMA) and specific land use plans for the Carrizo Plains Ecological Preserve and National Monument, the Bitter Creek Wildlife Refuge, and Los Padres National Forest.

Task 2.8: Paleontology

E & E will conduct a peer review of the applicant's technical report on paleontological resources in the project area. Our assessment will address the extent and completeness of the studies conducted to document resources and potential impacts. We will also assess the degree that the study complies with federal and state guidance including FLPMA, NEPA, and the National Natural Landmarks Program (NNLP) (36 CFR 62), and Paleontological Resources Preservation Act (PRPA) of the Omnibus Public Lands Act of 2009 (43 CFR). The USFS manages paleontological resources under FLPMA, NEPA, NNLP, and 36 CFR 291. The National Park Service (NPS) follows NEPA and Director's Order 77: Natural Resource Protection.

The CEQA Guidelines (Appendix G, Section V, Part c) refer to whether or not implementation of a project would "directly or indirectly destroy a unique paleontological resource." Additionally, the Public Resources Code, Section 31244, states that "where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required." The threshold of significance is based on Appendix G of the CEQA guidelines. Impacts would be significant if the Project would directly or indirectly destroy a unique paleontological resource or site.

Task 2.9 Water Resources

E & E and MRS will conduct critical, peer reviews of the applicant's Groundwater Protection Report. In addition, they will review the wetlands and waterbodies sections of the Biological Resources Assessment. After our review, we will provide detailed written comments and recommend requests for additional information for submittal to the applicant. In addition, we will make recommendations for additional desktop or field resource studies to inform the EIS and the EIR, if the applicant cannot accommodate any of the additional information requests.

E & E will ensure that the Applicant is in compliance with state water quality standards such as obtaining a State Water Quality Certification, under section 401 of the Clean Water Act (CWA) if the project results in discharge to a water body. E & E's team will investigate if any of the waters near the project are listed as impaired under section 303(d) of the CWA (CWA, 33 U.S. Code 1250 et seq., at 1313 (d)). If listed, the project may need to comply with additional water quality standards in order to meet the waterbodies total maximum daily load (TMDL) requirements. Additionally, due to the construction process, the Applicant will need to be in compliance with National Pollution Discharge Elimination System (NPDES) Construction General Stormwater Permit. This permit would require a Storm Water Pollution Prevention Plan (SWPPP) be implemented to ensure water quality in the surrounding region remains within safe limits.

Task 2.10: Issues Expected to be Less Than Significant

Aesthetics/Visual Resources

We recommend using the BLM's Visual Contrast Ratings system to evaluate visual impacts of the project. Although most of the project is not on Federally managed lands the BLM methodology is widely accepted for evaluating the direct visual impacts of linear projects.

Agricultural Resources

It is indicated that the project conforms County's uniform rules for parcels in agricultural preserve and that it is potentially located within a BLM grazing allotment. E & E will review agricultural resource impacts in subtask 2.7 above. We will also evaluate the potential impacts on grazing allotments because grazing could be impacted during construction.

Energy

Although the proposed project may not involve a substantial increase in energy demand or development of new energy resources E & E will look at whether the project could increase the development or increase production of crude oil.

Fire Protection

Construction of the project could present a hazard for wildfires. E & E would expect that the applicant has prepared a "Fire and Emergency Response Plan." E & E would review this plan to determine if it is adequate.

Land Use/Growth Inducement

Land use and growth inducement would be evaluated under subtask 2.7 Land Use.

Public Facilities

Although the project would not generate waste in excess of County thresholds and not require connection to public water or sanitary facilities E & E would evaluate the use of water for dust control and hydrostatic testing. In addition the discharge of hydrostatic test water will be addressed.

Recreation

E & E would evaluate the potential impacts on recreation areas during construction of the project which could affect recreational opportunities or degrade the recreational experience.

Task 3: Conduct Additional Studies & Site Visit

Our understanding from our review of the Applicant's technical studies and conversations with the County is that field studies beyond those conducted by the Applicant may be required, and that the CEQA/NEPA consultant would undertake those studies.

Based on our assessment of John Storrer's peer review and our preliminary examination of the BRA, there may be a need for additional field-verified data. Specifically, Mr. Storrer notes that the BRA does not provide sufficient information regarding the extent of valley needlegrass grassland habitat. In addition, the BRA does not provide a sufficient level of detail of rare plant occurrences. In both of these cases, Mr. Storrer expects that the applicant conducted the necessary survey work, but did not present the results in

the BRA. If the applicant is able to provide this information (e.g., as survey reports), and upon our review these prove to contain the necessary information, targeted or species-specific field surveys would not be necessary. However, upon completing the peer review of the BRA and Conceptual Oak Tree Mitigation Analysis, E & E may identify other biological resources that require additional field studies.

For the purposes of this proposal, we have assumed that the applicant has conducted the studies to a sufficient level of detail, and will provide these to the County. Should the applicant be unable to provide this information, or the information is incomplete, E & E will provide a scope and cost to complete additional field surveys to adequately inform the EIS and EIR.

E & E's biological team would conduct a general site visit and inspection of the proposed right-of-way, regardless of whether additional field surveys are required. The intent of the site visit would be to verify the findings of the applicant's fieldwork, as necessary, and to make other observations that may help inform the EIS and EIR.

Task 4: Public Scoping and Notice of Intent¹

Task 4.1: Prepare Notice of Intent

Based on our experience preparing NEPA documents under S.O. 3355, it is imperative to do as much as possible before the NOI is released and the start of the one-year time clock. We propose a 6-month pre-NOI filing period to conduct preliminary activities. During this time, we will (among other tasks) obtain the following concurrences:

- agreement on the purpose and need (NEPA) and project objectives (CEQA);
- an approved description of the proposed project;
- draft alternatives and level of analysis; and
- preliminary agreement on the Preferred Alternative (NEPA) and Environmentally Superior Alternative (CEQA) to ensure the EIS and EIR includes a proper level of detail.

In addition, due to requirements that federal permits be issued within 90 days of a ROD, we recommend conducting agency scoping immediately after project initiation, well prior to the NOI. This is similar to the front-loaded pre-filing process E & E developed for FERC on the Kern River Pipeline Project that saved 7-9 months, and the similar process we developed for the Eldorado-Ivanpah Transmission Line Project, which identified issues early and to reach consensus on EIS/EIR components.

An extended pre-NOI filing period will ensure that E & E can begin data collection and preparation for technical reports required by Santa Barbara County or the BLM. Any delays in development of these studies can be absorbed in this pre-NOI filing period without affecting our ability to meet the one-year timeline. Further, if a Biological Opinion (BO) from the USFWS within the timeframe, it is critical that a Biological Assessment (BA) be prepared immediately using applicant-provided surveys and that USFWS staff be engaged at the outset of the project.

¹ We understand that the County will prepare the Notice of Preparation and scoping documents and provide them to the CEQA and NEPA contractor.

Task 4.2: Create and Maintain Project Website

E & E has accounted for creating and maintaining a project website through BLM's ePlanning system. Our assumption is that the County will maintain project information and allow for public comment through their website. As an option, E & E can handle the dissemination of project milestones, make public draft documents available to the public, provide a mechanism for public comments to be submitted, and general project information to the public and other agencies, by developing and hosting a public facing website. This public website will directly tie the public comments submitted into the CORES system. This option is not included in our cost proposal.

Task 4.3: Attend/Conduct Scoping Meetings

The E & E team will support the BLM and the County to conduct a joint EIS and EIR scoping process that includes public scoping notices both through the Federal Register and local newspapers, individual mailings, agency websites and two public scoping meetings. E & E staff will work with the County and BLM to develop and present a slide show outlining potential environmental issues of the project. E & E proposes to conduct two scoping meetings, one in Santa Barbara County and one in San Luis Obispo County. E & E assumes that County and BLM staff will handle scoping meeting facility arrangements and logistics.



E & E staff will work with the County to develop a presentation for the public scoping meeting and assist County staff in presenting the potential environmental issues of the project.

Immediately prior to the formal scoping meetings, we recommend that an open house be held. The open house would include posters and experts available to provide information to and answer questions from the public. During the formal scoping meeting, speakers would be invited to identify issues and alternatives that should be addressed in the EIR and EIS within a defined time limit. Stations would also be set up to receive written comments.

Task 4.4: Prepare Scoping Comments Summary

E & E will prepare a scoping memorandum summarizing the scoping comments received, and will incorporate substantive issues raised from the scoping comments into the EIR and EIS accordingly. E & E will review the scoping summary with the County and BLM to identify specific issue statements that will be addressed in the impact assessment for each resource area. In addition, the scoping comments will be used to help inform potential alternatives.

Task 5: Draft Project Description, Purpose and Need, and Alternatives

Per Article 9. Contents of Environmental Impact Reports (Sections 15120 to 15132) of the CEQA Guidelines, and the Administrative Draft EIR will include the following:

- **Executive Summary.** This section will include a brief summary of the CEQA impact conclusions, significance determinations, and proposed mitigation measures.

- **Project Description.** This section will include the precise location of the project, a statement of project objectives, a description of the proposed components, and a statement of the intended uses of the EIR. In addition, it will include a list agencies involved, a table of proposed project approvals, and a description of environmental and consultation requirements.
- **Environmental Setting/Affected Environment.** This section will include a description of the physical environmental conditions near the project area at the time the NOP/NOI is published (baseline setting).
- **Alternatives.** This section will include an analysis of a range of reasonable alternatives to the project. Based on the types of environmental impacts that are identified, E & E will work with the County and BLM to select potential alternatives that would feasibly attain most of the project objectives, but would avoid or lessen significant effects. E & E will analyze the “no project” alternative, as required by CEQA, and up to three additional project alternatives. We will work with BLM to identify the Environmentally Superior Alternative for the EIS.
- **Cumulative Impacts and Statutory Requirements.** This section will discuss the cumulative impacts of a project when the project’s incremental effect is cumulative considerable when combined with past, present, and probably future projects. E & E will work with the County to identify other projects to consider as part of the cumulative analysis. NEPA has specific requirements that will be included in the EIS: the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented.

Task 6: Draft EIS and EIR Technical Resource Sections

This section will include an evaluation of all phases of project on the environment. The discussion will include analysis of physical changes, alterations to ecological systems, and changes from population and economic growth. If significant impacts are identified, the EIR will propose feasible mitigation measures to reduce potential impacts.

Issues Identified as Potentially Significant

Air Quality & Greenhouse Gases

The air quality assessment will include baseline conditions and an analysis of the impacts of the project and its alternatives in accordance with requirements and guidelines established by the County Air Pollution Control Districts (APCDs), and BLM. MRS will also coordinate early and often with the interagency Air Technical Work Group to ensure an appropriate and effective air quality analysis. Alternatives will be assessed based on the respective alternative’s changes from the project. Emissions associated with the alternatives will be calculated for all alternatives carried forward for full review. Cumulative air quality impacts associated with other projects in the area are of primary interest to County regulators and planners due to the stringent requirements for emissions controls required in non-attainment areas under the California Clean Air Act.

Air Quality. MRS will develop emissions inventories and model the impacts where appropriate, and develop mitigation measures for significant impacts. Analysis of cumulative impacts will consider future activities at the affected facilities and other projects in the area. The environmental setting will be based on the Applicant technical studies and information from APCDs and other regional EIR and EIS's. The baseline will also include an assessment of the potential for odor and an assessment of violations and complaints in the region.

Greenhouse Gases. The GHG analysis will be compiled into a separate section of the EIR and EIS. Much of the baseline information has already been compiled in the air quality technical report prepared for the project by the Applicant. Regulatory requirements will address recent GHG emission regulations, such as recent California Scoping Plan updates and revisions to long-term goals and developments at the respective Counties and APCDs.

Applicant calculations indicate the annual GHG emissions would exceed the thresholds adopted by Santa Barbara County; mitigation measures would be required to reduce or offset these emissions. Other County thresholds will also be reviewed as part of the analysis. The analysis will consider Cap-and-Trade allowances and applicability of fuel sources.

Biological Resources

According to John Storrer's review, the applicant relied almost exclusively on the California Natural Diversity Database as its source for plant and wildlife species occurrence information. Mr. Storrer concluded that additional sources of information would help to provide a more detailed, comprehensive, and accurate assessment of biological resources in the project area. In response, E & E will conduct a desktop review of publicly available biological data sources and consult local experts to inform the EIS and EIR. The goal of the desktop effort would be to fill existing data gaps and verify the quality and accuracy of the information provided by the applicant.

Based on the desktop review and Applicant's reports and responses to data requests, E & E's technical staff will prepare separate biological resources sections for the EIR and the EIS. As directed by the County in its clarification of the RFP, the direct area of potential impact for the EIS will be only the federal lands on which the proposed project would encroach. The technical staff will develop significance criteria, full environmental settings for all criteria, methods for assessing impacts, and a discussion of impacts and mitigation measures. E & E's staff will make determinations of levels of significance of impacts on biological resources by (1) gathering and evaluating information obtained from the applicant and other sources; and (2) assessing the potential spatial and temporal impacts on habitats and organisms in the project area and region.

The affected environment sections will evaluate the occurrence and use of the project area by fish, wildlife, and vegetation, with particular emphasis on special status species and lands designated for the value to the conserve, research, and management of biological resources. The technical staff will also analyze the potential impacts on biological resources which may be caused by construction and operation of the proposed project, and develop mitigation measures to avoid or minimize potential impacts. E & E's staff will also evaluate the potential cumulative biological impacts from other nearby projects. In addition, E & E will review and refine alternatives proposed by the applicant and develop new alternatives for inclusion in the alternatives screening report.

Cultural Resources

Analysis for EIR and EIS documents will rely on existing cultural resource reports, tribal consultation data from the County and BLM (as appropriate), and relevant information from ongoing BLM-SHPO consultation. SRI will present cultural resource baseline data; possible proposed project and project alternatives impacts to cultural resources; and mitigation measures to avoid or reduce impacts to less-than-significant levels under CEQA, and to remove or reduce adverse effects under NEPA and Section 106 of NHPA.

Using the cultural resource, tribal cultural resource, and built environment APEs (these may differ) established by BLM in consultation with SHPO, SRI will assess the potential for significant impacts or adverse effects to resources within the APE(s). SRI will assess possible direct, indirect, and cumulative effects. As stated in the RFP, the proposed project design involves horizontal-directional drilling, which should result in the avoidance of a majority of recorded archaeological sites, identified tribal cultural resources, and built-environment resources. Possible effects to resources that may be impacted by project activities will be assessed relative to the significance of the resource and the nature of the impact. The EIR and EIS sections will summarize potential project impacts to cultural resources and provide a discussion of proposed mitigation measures for project activities and alternatives. Resources that do not meet the state and/or federal criteria of significance, would be excluded from impact analysis.

Hazardous Materials/Risk of Upset

Construction and operation of the project has the potential to expose sensitive receptors and the environment to hazardous materials. The EIR and EIS analyses will include a comparison of factors that influence the risk scenarios inherent to the existing and proposed pipelines (i.e., pipeline pressure, diameter, material thickness, depth of burial, use of insulation, etc.). The analyses will include a detailed baseline of the historical ongoing oil transportation. The baseline will allow for a determination of the change in risk levels associated with the introduction of the Project activities.

The risk of upset impact section will address the risks associated with (1) the proposed facility and transportation routes and the impact of upset scenarios on nearby sensitive receptors (e.g., residences, schools and hospitals); (2) changes in risks due to oil spills associated with crude use, storage and transportation; and (3) increased use of other hazardous materials and potential impacts on sensitive receptors.

The impact sections will summarize the results of the peer reviewed applicant studies, focusing on the types of hazards and potential consequences. Impact significance will be based on the increase in the volume or frequency of material releases per County guidelines and past environmental assessments. MRS will propose mitigation measures for risk levels that exceed the thresholds or for spills that increase the volume or frequency of crude oil releases. Lessons learned from the 2015 spill will be incorporated as appropriate. Additional risks, such as the potential for soil contamination and handling, wildfire, and public safety (per requirements in the BLM Land Use Planning Handbook) will also be analyzed.

Alternatives will be addressed in terms of the changes to risk levels from the project, utilizing a similar methodology as the Applicant peer-reviewed QRA. The cumulative impact analysis will consider future oil and gas development projects, as well as the expansion of existing oil and gas facilities in the region, based upon the County approved cumulative project list, which may increase the potential for spill or risk impacts to the same receptors as the Project.

Geologic Processes/Geologic Hazards

The EIS would discuss potential impacts related to geologic processes and avoidance and minimization measures for project activities and alternatives. The EIS would be prepared in accordance with the National Environmental Policy Act and the Federal Land Policy and Management Act following the BLM Land Use Planning Handbook. E & E would review the applicant's geologic hazards evaluation and supplement it with publicly available data, as appropriate, as part of the preparation of the EIR and EIS.

The EIR would identify the locations of active and potentially active faults near the project area, locations and magnitudes of historical earthquakes near the project area, and anticipated intensity of potential ground shaking to evaluate impacts from strong seismic ground shaking. The EIR would identify the locations of known earthquake faults to evaluate impacts from surface rupture during an earthquake. The EIR would identify soil types underlying the project area that are susceptible to erosion to evaluate impacts from erosion. The EIR would identify rock types underlying the project area that are associated with compressible/collapsible soils and identify soil types that have a high shrink/swell potential to evaluate impacts from compressible/collapsible and expansive soils. The EIR would identify known landslides and areas susceptible to landslides to evaluate impacts from landslides. The EIR would map ground surface slopes that exceed 20 percent in the project area to evaluate potential impacts from steep slopes. The EIR would identify areas of liquefaction potential and known land subsidence to evaluate potential impacts from those processes.

E & E would evaluate potential impacts in the EIR according to the significance criteria established by the Santa Barbara County Environmental Thresholds and Guidelines Manual. E & E would determine whether the project area is located on land having substantial geologic constraints, which include areas near active and potentially active faults and property underlain by rock types associated with compressible/collapsible soil or susceptible to landslides or severe erosion. E & E would determine whether the project results in potentially hazardous geologic conditions, whether the project proposes construction of a cut slope over 15 feet in height, and whether the project would be located on slopes exceeding 20 percent. If the project or project alternatives meets any of these significance criteria, E & E would develop mitigation measures and determine the significance of those impacts after mitigation.

Land Use

To assist County decision makers, E & E will prepare a Land Use Consistency Table for use in the Land Use section of the EIR. The table will identify the relevant policies and ordinances from the County's Inland and Coastal Zoning Ordinance standards, as well as Santa Barbara County and San Luis Obispo County's Comprehensive Plans. In addition, E & E will include policies from the Santa Barbara County Coastal Land Use Plan for portions of the project in the Santa Barbara County Coastal Zone. Note that preliminary GIS data indicates that part of the pipeline corridor might be within the Gaviota Coastal

Plan Area; if the pipeline might fall within this planning area, then the Gaviota Coastal Plan would also be reviewed. The EIR will also determine whether there are any other special planning areas that warrant inclusion in the preliminary land use consistency analysis. Note that while the EIR will not itself make consistency determinations, E & E will identify whether the project is potentially consistent or inconsistent in order to streamline the counties' review processes. For the Santa Barbara County Reliability Project, prepared on behalf of the California Public Utilities Commission, E & E included a land use consistency table for Santa Barbara County's use. The intent was to streamline the County staff and decision makers' review process by giving preliminary determinations for consideration. The table was created with input from County planning staff.

Paleontological Resources

Impacts to paleontological resources are the degree of loss of characteristics that make fossils or fossil localities important for scientific and educational use or public enjoyment. Damage or destruction of the fossils, themselves, impacts to the natural setting of the fossils, and disassociation of related fossils all can contribute to a loss of scientific information or public use of the resource. Projects that can result in surface disturbance can impact fossil resources. Because this project crosses multiple federal and state jurisdictions, both the federal government and the State of California have requirements and guidance to protect fossils during project development.

To address these concerns, E & E will evaluate the potential for paleontological resources within one mile of the pipeline route using the appropriate jurisdictional guidance and desktop data and information.

E & E will use the BLM Potential Fossil Yield Classification (PFYC) system, which is based on the likelihood of geologic formations to contain significant paleontological resources using a scale of 1 (very low potential) to 5 (very high potential) to determine fossil resource potential. This is very similar to the USFS system. On State lands we will evaluate potential fossil localities in accordance with Appendix G of CEQA. At and near the Carrizo Plains National Monument, which is known for its world-class fossil resources we will use Monument studies to the extent possible and the BLM PFYC system.

Areas of high fossil potential would be visited by an E & E geologist to determine on the ground conditions and potential fossils. Mitigation measures, consistent with the appropriate jurisdiction would be considered during impact analysis.

Transportation and Traffic

CEQA requires analysis of a number of transportation related impacts not included in the applicant's Traffic Impact Analysis, which focuses on changes in level of service and volume to capacity. For transportation impacts where specific local thresholds or quantitative guidance is not available, E & E would perform a desktop analysis using an appropriate qualitative discussion to address impacts to traffic safety, pavement condition, and existing public transit services, bicycle and pedestrian infrastructure. E & E would gather data from county and other local agencies to address impacts on existing public transit services, and bicycle and pedestrian infrastructure. The county's general plan and other regional planning documents would also be reviewed to address impacts to transit, bicycle, and pedestrian infrastructure, in addition to emergency services access. Data from the Federal

Aviation Administration would be used to identify airports in vicinity of the project that could experience impacts from the proposed project.

For NEPA our review and analysis would focus on the part of the project that crosses federal, however, the review and analysis would cover the entirety of the pipeline route.

Water Resources

E & E will conduct additional desktop review of available data sources related to wetlands, waterbodies, ground water, aquifers, or other water quality issues, as necessary, to inform the EIS and EIR. Our review will include data sources for resources such as:

- Groundwater basins, including areas that are in overdraft
- Aquifers, particularly shallow aquifers and sole source aquifers
- Groundwater banking programs
- Water wells, particularly municipal wells
- Source Water Assessment Areas (related to municipal wells)
- Basin plans for groundwater quality concerns
- FEMA maps for 100-year floods including flood areas from dam failure
- USGS's National Hydrography Dataset
- USFWS's National Wetlands Inventory

E & E's technical staff will prepare the hydrology sections separately for the EIR and EIS. We will develop significance criteria, full environmental settings for all criteria, methods for assessing impacts, and a discussion of impacts and mitigation measures. E & E's staff will make determinations of levels of significance of impacts on water resources by (1) gathering and evaluating information obtained from the applicant and other sources; (2) assessing the potential spatial and temporal impacts on water resources in the project area and region.

These affected environment sections will evaluate the water resources which occur within the project area. The technical staff will also analyze the potential impacts on water resources which may be caused by construction and operation of the proposed project, and for the EIR sections, review these against thresholds of significance. They will also develop mitigation measures to avoid or minimize potential impacts on water resources. E & E's staff will evaluate the potential cumulative impacts from other nearby projects (i.e., from a cumulative projects list) on water resources. In addition, E & E will review and refine alternatives proposed by the applicant and develop new alternatives for inclusion in the alternatives screening report.

EIS Issue Areas Expected to be Less than Significant

Per the RFP, the following issues have been identified as expected to be less than significant. Nonetheless the E & E team will conduct an independent review based on the County's and BLM's guidance to evaluate potential impacts.

Aesthetics/Visual Resources

We recommend using the BLM Visual procedures for evaluating visual impacts. If the applicant prepared Contrast Rating Worksheets (BLM Form 8400-4) for federal lands we would use them to determine visual impacts. Although much of the project is not on Federal managed lands their methodology is widely accepted for evaluating the direct visual impacts of a proposed projects.

Agricultural Resources

We propose to address agricultural resources as part of our land use impact assessment. Although construction impacts would likely be temporary they could also disrupt grazing in existing BLM grazing allotments and would be addressed. The effects of construction would also be reviewed with regard to other agricultural activities such as vineyards adjacent to the Sisquoc pump station.

Energy

Although the RFP **indicates the proposed project would not create a substantial impact or increase in energy demand or development of new energy resources** the E & E team would provide data and information to show the impact is below the significance level. One issue that would have to be addressed is that the operation of the pipeline would or would not lead to an increase in offshore oil production.

Fire Protection

As indicated in the RFP the proposed facilities has been reviewed by the County Fire Department and will adhere to the all the required standards for fire protection. However, we would expect that the applicant prepare a construction fire and emergency response plan. **With heavy equipment and potential welding or cutting of pipe there is always a potential for fires during construction. The E & E team would review a Fire and Emergency Response Plan and assess potential impacts and mitigation in the EIS and EIR.**

Land Use/Growth Inducement

Land use and growth inducement will also be addressed through our review of Land Use in Section 4.3.1 above. The E & E team will review data and information on the construction spreads including work force, construction related ancillary facilities such as construction parking, pipe laydown yards, and construction yards.

Public Facilities

The project is not likely to significantly impact public facilities during construction and operation. However, one area of concern is water required for dust control and hydrostatic testing. If municipal water is used for these purposes it will have to be evaluated for impacts while recognizing it is a temporary use. Another potential issue is the discharge of hydrostatic test water. These discharges may require a county or state permit and potential impacts and mitigation would have to be addressed in the EIS and EIR.

Recreation

The proposed project could have the potential for creating temporary impacts to recreational opportunities and timing of construction could lessen or increase the impacts. The E & E team would evaluate the location, timing and duration of the impacts on recreational areas and determine the significance of the temporary displacement of recreational opportunities. In addition, we would evaluate if the construction and long term impacts would potentially degrade recreational experiences.

Environmental Justice

Federal agencies must consider environmental justice in their activities under NEPA. E & E would follow the Federal Guidance on Environmental Justice including Executive Order 12898 (February, 1994) (PDF)(5 pp, 19 K), "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." We would also ensure that EO 12898 which directs each Federal Agency to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its activities on minority populations and low-income populations," including tribal populations.

Socioeconomics

To establish baseline conditions E & E will gather the most recent socioeconomic data from standard sources, such as the U.S. Census, state economic development agency, local government agency or chamber of commerce records, and private organizations that operate databases. E & E proposes to prepare a qualitative analysis of the socioeconomic impacts of the project.

Alternatives

Both NEPA and CEQA require that a range of reasonable alternatives be considered that have the potential to meet the purpose and need of the proposed project while eliminating or reducing potentially significant impacts. Because of different definitions of reasonable and purpose and need the alternatives may differ in the EIS and the EIR. However, as indicated in the RFP the alternatives to be considered in the EIS include a No Project Alternative and other alternatives as appropriate. For the EIR alternatives would include a No Project Alternative, a Reduced Project Alternative, and other alternatives as appropriate.

Cumulative Impacts

The E & E team would take the following steps in conducting a cumulative impact analysis.

The first step in assessing cumulative impacts is to identify which resources to consider in the analysis. If the project will not cause direct or indirect impacts on a resource, it will not contribute to a cumulative impact on that resource. The cumulative impact analysis should focus only on: 1) those resources significantly impacted by the project; or 2) resources currently in poor or declining health or at risk even if project impacts are relatively small (less than significant).

The second step is to define a study area to conduct the cumulative impact analysis, for example for water resources identify the drainage basin (watershed) or sub-basins in which the project would be located.

The third step is to describe the current health and the historical context of each resource. This step provides a reasonable explanation of how the resource got to its current state. E & E would not attempt to describe all the actions that led to the current qualitative or quantitative state of the resource.

The fourth step is identifying other current and reasonably foreseeable future actions or projects and their associated environmental impacts. When a list of reasonably foreseeable actions is identified, E & E will evaluate each project or action on the list to determine whether it is probable enough to be evaluated or too speculative to warrant consideration.

When these four steps are complete an assessment of potential cumulative impacts on the resources directly or indirectly impacted will be completed.

Task 7: Public Draft EIR and EIS

EIR

E & E will incorporate County comments on the Administrative Draft EIR and produce the Screencheck Draft EIR for review by the County. We assume that the Screencheck copy will be consolidated and focus on critical elements and not involve new issues for previously reviewed sections. After the County has reviewed the Screencheck Draft EIR, we will revise the document as needed and produce the document for public review.

E & E will produce the Draft EIR for public distribution and prepare the NOC and Notice of Availability (NOA) for the Draft EIR for County review and approval. E & E will prepare the submittal package for the State Clearinghouse, which will include the NOC and 15 copies of the Draft EIR executive summary (with CDs of full Draft EIR and appendices). E & E will provide 30 hard copies to County staff to distribute accordingly.

E & E assumes the County will post the NOA in newspapers and file with the County Clerk pursuant to CEQA Guidelines Section 15087. E & E also assumes that the County will upload the EIR to the County website, as appropriate.

EIS

We are experienced in preparing EISs for pipeline projects that meet NEPA requirements—we do not anticipate the EIS content to vary from normal and will follow BLM’s Land Use Planning Handbook for Draft NEPA documents. We will essentially write the content for the EIR and revise impact discussions and summarize certain portions for the EIS, recognizing that the EIS will only address the approximately 12.5 miles that the pipeline will cross Federally managed lands. We will only write new content when necessary (such as NEPA-specific topics or topics that vary significantly under CEQA, such as Recreation and Land Use). We recognize that we cannot simply shunt all other content to the EIS appendices, but recommend front and end matter, large tables, resource-specific data, and lists (authors, tribes, stakeholders, etc.) be presented in appendices keyed to EIS chapters. We also recommend listing only or providing brief summaries for resource topics that would have few impacts or that were not directly identified during scoping.

We will work closely with BLM and ICPDS to identify the resource topics that truly have the potential to be affected and thus require analysis. By only analyzing these resources, the team can prepare a legally defensible EIR and EIS within the timeframe without getting mired in unnecessary analysis.

The EIS will meet the requirements implementing NEPA and BLM planning under FLPMA. In addition, the EIS will meet the requirements of Secretarial Order 3355 which requires EIS documents to be 150 pages or less. Our proposed schedule would also meet the timeline requirements for FAST 41 projects. Since the project impacts Federal lands managed by the BLM, U.S. Forest Service, and the U.S. Fish and Wildlife Service we will ensure coordination with these agencies to meet the requirements of EO 13807 which requires one Federal decision.

Task 8: Public Comment Period

We understand that the Plains Pipeline Replacement Project will be controversial and will require a robust public scoping and EIR/EIS review process. Because the public review process for the Draft EIR and Draft EIS would be separate, each process would include different mailing lists, public notifications, and public hearing locations. Public comments would also be kept separate for the two processes.

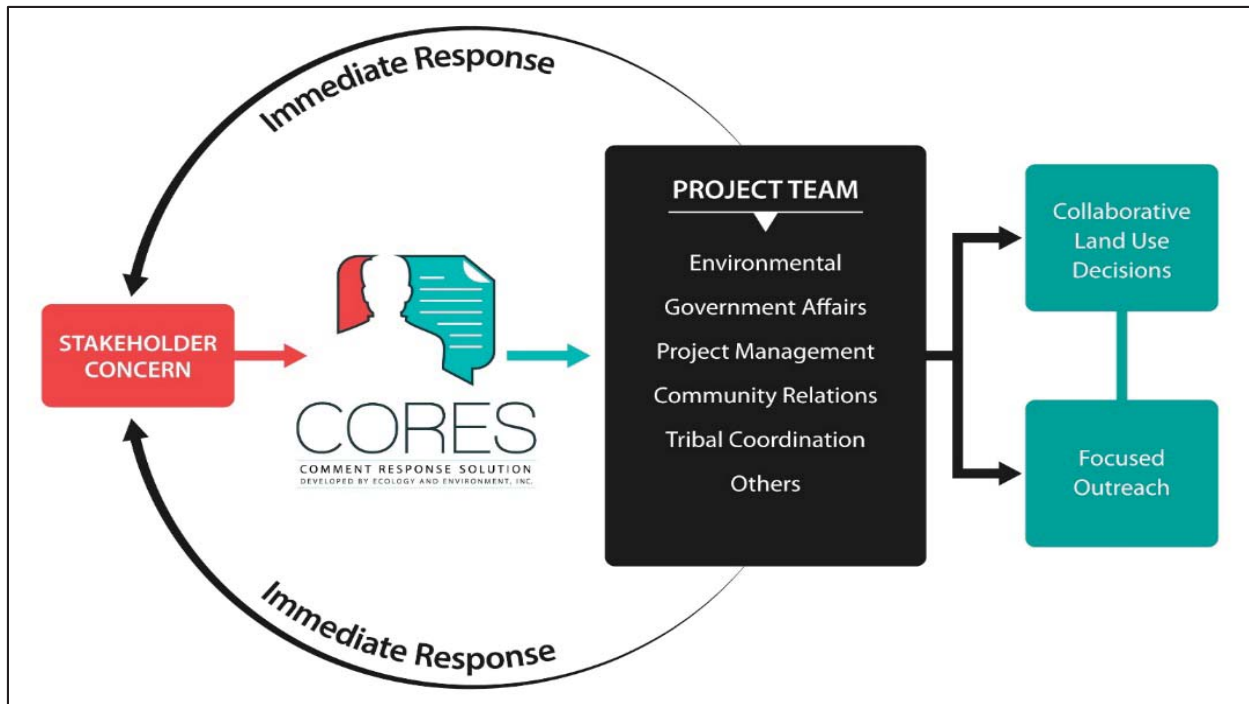
As requested in the RFP, this scope includes two hearings for the EIS and two for the EIR. Format and timing would be coordinated with the County and BLM. E & E would provide transcription services for each meeting and audio recording for the EIS hearings. We assume that the County would provide audio and video recordings of EIR hearings.

EIR

During the public comment period E & E anticipates that all comments will be submitted to Santa Barbara County via mail, email, posted on the County website, or verbal comments from the hearings. E & E will coordinate with the County to ensure that all the comments can be organized into a common format to expedite posting into E & E’s CORE database. See Task 9 below.

EIS

As with comments on the EIR, E & E anticipates that BLM will receive written, email, and verbal comments from the public. As part of this process E & E will work with the BLM in creating and



E & E's proprietary comment management software will facilitate communication among E & E's project team and the County, help maintain a detailed administrative record, and streamline the comment response process.

maintaining a project website through BLM's ePlanning system for receiving comments via the internet. To the degree possible we propose to link this with our CORE's database we can ensure consistency between comments and responses on the EIS and the EIR. We anticipate regular, iterative interaction with BLM during the comment response phases, to accurately reflect intended agency responses. A Public Comment Summary Report will be produced at the end of the comment period, in a format of BLM's choosing and is 508 compliant.

Task 9: Responses to Comments

In our experience, the recording and management of public and comments for a project this controversial is a significant undertaking. Therefore, E & E proposes using CORES (Comment Response System), our proprietary software program for file sharing, comment and Administrative Record management. We have used the CORES system to streamline collection and manage of public comments on numerous BLM NEPA projects, some of which received upwards of 70,000 comments.

All public comments, including those submitted in writing, posted on the website, emailed, or given at the public meetings will be entered into either CORES or the BLM ePlanning system. We will convert all comments into electronic format. We can query the CORES database to isolate specific comments or collect metrics such as status, grouping, or geographic details. E & E has developed a proprietary database management tool specifically to address public comments on NEPA projects. We will use this system to compile public comments, summarize their content, and track comment response. All comment submissions will be mined for specific comments, but preserved in their entirety as PDF documents attached to each database record. Each specific comment will be a record, assigned a date, author, subject, and document category. The database has filtering, sorting, and reporting capabilities.

CORES is sited on a secure server with an access page that includes modules for file sharing and digital mailing list maintenance that interact with all received comments to update the mailing list, as required. The CORES Administrative Record module will also be used for the project.

Task 10: Administrative Final EIS and EIR

E & E will prepare contents of the Final EIR, as required by CEQA Guidelines Section 15132, for the County's review. This will address substantive comments from the public comment period on the draft EIR. We will make any necessary revisions requested by the County, via consolidated County comments.

E & E will prepare the contents of the Administrative Final EIS in the same detail described in Task 7. Based on comments received during the draft EIS public review we will propose changes from the Draft EIS and in collaboration with BLM, responses to all relevant public comments will be integrated into the document. As indicated in the RFP we would anticipate two administrative reviews of the Final EIS.

Task 11: Final EIS and EIR

E & E will incorporate County comments on the Administrative Final EIR and submit 30 hard copies of the Screencheck ("proposed") Final EIR. We will then make any remaining revisions and produce 10 hard copies of the Final EIR for the County to distribute to commenting individuals/agencies at least 10 days prior to the Planning Commission Hearing.

E & E will incorporate BLM comments on the Administrative Final EIS and submit the Screencheck Final EIA. We will then make any remaining revisions and produce the Final EIS. E & E will also prepare a Final EIS document (Section 508-compliant) for public release.

EIR

Prepare Findings and Overriding Considerations (if needed)

While finalizing draft responses, we will prepare a draft CEQA Findings Statement and, if necessary, a Statement of Overriding Considerations per CEQA Guidelines 15091 and 15093. The documents will summarize all findings of significant unavoidable impacts identified in the EIR in language written clearly for public understanding. We will describe applicable mitigation measures for any significant impacts identified in the EIR analysis.

Mitigation, Monitoring, and Reporting Program (MMRP)

The MMRP is a compliance document by which the County implements its responsibility and authority under CEQA and provides important details for on-the-ground actions required to protect the environment. It is also important to the applicant because they will be required to implement it. We will work with the County to develop the specific outline and content of the MMRP, and assume it will include:

- **Impacts to be mitigated.** Each mitigation measure will be tied to a specific adverse impact defined in the EIR.
- **Mitigation measures.** The specific measure, including performance standards and success criteria.

- **Monitoring requirements and timeframe.** The type of monitoring program or activity necessary, and the appropriate timeframe for the monitoring activity.
- **Persons or agency responsible for implementing mitigation and/or monitoring measures.** Roles and responsibilities for implementing the project’s mitigation measures.
- **Compliance management.** Specific person or agency responsibilities for ensuring compliance with mitigation, monitoring, and reporting; and a specific review or inspection schedule for each measure. E & E can provide compliance management oversight during construction under a subsequent scope, if requested.

E & E will incorporate County comments on the Administrative Draft MMRP and submit the Final MMRP.

Notice of Determination

Within five working days of project approval, E & E will prepare and file the NOD pursuant to Section 15094 of the CEQA guidelines with the State Clearinghouse. E & E assumes the County will file the NOD with the County Clerk.

EIS

Once the final EIS is prepared it has to be filed with the EPA prior to distribution to the public. In addition a public notification of availability (NOA) of the final EIS, must be published in the Federal Register for actions with effects of national concern (40 CFR 1506.6(b)). The date the EPA notice appears in the Federal Register initiates the required minimal 30-day availability period.

E & E would assist BLM in preparing a Record of Decision (ROD) to document the selected alternative and any accompanying mitigation measures. No action concerning the proposed project may be taken until the ROD has been issued.

Task 12: Administrative Record

E & E will create and manage the project Administrative Record (AR) using CORES. We will create the AR structure to conform to Appendix 10 of the BLM Land Use Planning Handbook and IM No. 2006-225: Standardized Guidance on Compiling a Decision File and Administrative Record. The AR database is fronted by a simple item entry screen, with dropdown menus for all comment classification categories. This system allows us to site the AR on-line, for access by both E & E and BLM throughout the process. It provides a complete and defensible AR that can be easily queried during the EIS process, as well as afterwards, should any protests require information from this repository.

We suggest establishing an AR file plan, to be finalized at the project kickoff meeting and incorporated into PMP. This plan will provide a schedule for BLM-produced materials for the AR to be delivered to E & E (via the CORES interface) for compilation, preferably on a scheduled monthly basis.

We will provide BLM with quarterly AR updates in the form of an annotated updated index of contents. Per BLM guidance, the project geospatial data will be admitted to the electronic format AR twice in the process: (1) upon release of Draft EIS; and (2) upon release of the Final EIS. The hard copy version of the AR will not include this database.

5. Schedule

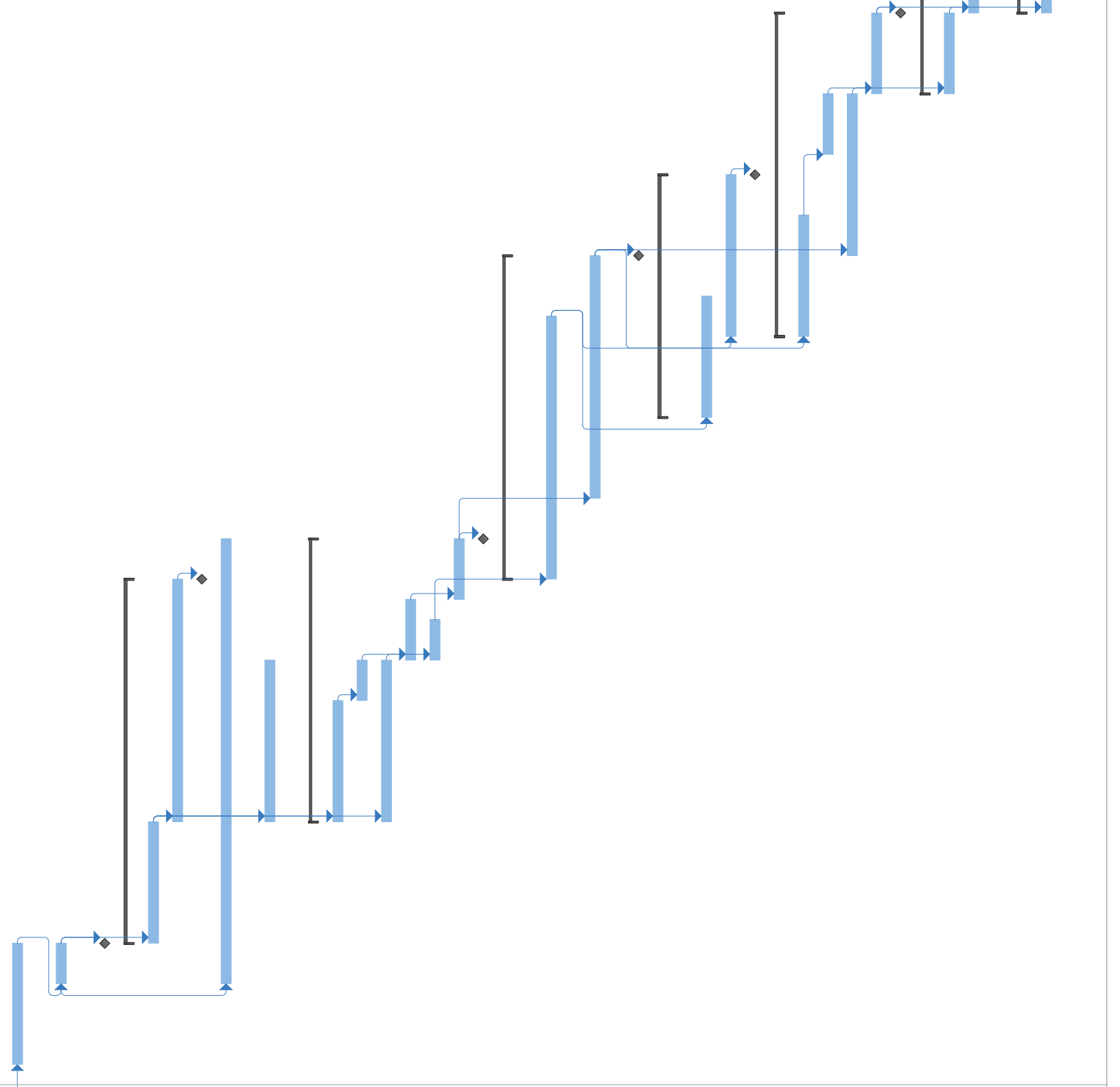
A schedule keyed to the tasks listed in Section 4 is shown in Figure 5.1 below.

6. References

List of former clients for comparable services, including names and telephone numbers.

Table 6-1: References

Client	Project/Location	Contact	SOW
California Public Utilities Commission	Santa Barbara County Reliability Project – transmission upgrade project Santa Barbara and Ventura Counties, CA	Jensen Uchida, CPUC Energy Division 415-703-5484 jensen.uchida@cpuc.ca.gov	<ul style="list-style-type: none"> Prepared third-party EIR Identified water supply mitigation Engaged in public outreach with local tribes for feedback on archaeological resources Oversaw environmental compliance monitoring during construction
Bureau of Land Management, Bakersfield Field Office (BKFO)	Bakersfield Supplemental EIS/Resource Management Plan Amendment (RMPA)	Carly Summers 661-391-6146 csummers@blm.gov	<ul style="list-style-type: none"> Helping BLM complete a court-ordered SEIS to address potential impacts of hydraulic fracturing on lands and mineral estate managed by the BKFO.
Allen Matkins Leck Gamble Mallory & Natsis LLP	California Valley Solar Ranch San Luis Obispo County, CA	Renee L. Robin, Senior Counsel 415-273-8413 rrobin@allenmatkins.com	<ul style="list-style-type: none"> NEPA and CEQA expertise



Peer-Review, & Identify	30 days
Final Studies (if required)	10 days
	0 days
	90 days
	30 days
	60 days
	0 days
Description, Purpose and Environmental Setting	110 days
Technical Resource	40 days
for Public Review	70 days
	30 days
	10 days
	40 days
	15 days
	10 days
	15 days
	0 days
Final Period and Summary of	80 days
Meeting and Comment	65 days
Hearing and Comment	60 days
	0 days
Comments on Draft EIR and	60 days
Comments on Draft EIS	30 days
Comments on Draft EIR	40 days
	0 days
Final Draft Final EIS and EIR	80 days
Final EIS	30 days
	15 days
Final EIR	40 days
	20 days
	0 days
	50 days
Publish Final EIS	20 days
Publish Final EIR	30 days
	0 days
Final Record	60 days
Final Record	30 days
Final Record	40 days
	0 days

Appendix A

Resumes of Key Personnel



With E & E, James manages large and complicated environmental impact and other studies in the energy and infrastructure sectors.

EDUCATION

M.B.A., Strategic Planning and International Business, University of California, Berkeley, Haas School of Business

B.A., Economics and Environmental Planning, University of California, Davis

CERTIFICATIONS

Envision Sustainability Professional (ENV SP), Institute for Sustainable Infrastructure

James W. Frolich, MBA, ENV SP

National Consulting Manager

Mr. Frolich brings more than 25 years' experience specializing in environmental and social impact assessment, regulatory compliance and contaminated site management. He has extensive experience with CEQA and NEPA as well as the federal, California and local permit requirements. He is a recognized expert on the environmental and social issues surrounding energy development and has spoken on the subject at conferences and in the media around the world.

Mr. Frolich has extensive experience in the energy sector in California and participated in a number of offshore development projects and onshore infrastructure in Santa Barbara County, including parts of this project. He has managed the evaluation of pipelines, transmission lines and other linear projects in California and the West. He has been responsible for environmental studies with values of over \$15 million and infrastructure construction projects in the \$100s of millions. Mr. Frolich is a sustaining member of the International Association for Impact Assessment and is a member of the Association of Environmental Professionals, German Project Managers Society, the Canadian Institute of Mining, Metallurgy and Petroleum and the Geothermal Resources Council. He is an Envision Sustainability Professional which is focused on resilient development and environmental protection for primarily linear projects.

Biosolids Zoning Ordinance Amendment EIR, Kern County, California.

Mr. Frolich is serving as project director for preparation of a program-level Environmental Impact Report (EIR) for Kern County under the requirements of the California Environmental Quality Act (CEQA).

San Francisco Bay Delta Plan Amendment, California State Water Resources Control Board, California.

Mr. Frolich provided project management services associated with a plan amendment to protect and restore salmon habitat and other environmental values. The work included extensive hydrological, agricultural and economic modeling, a peer reviewed scientific basis report to demonstrate that the amendment was scientifically sound, an economic analysis and environmental impact assessment under the California Environmental Quality Act (CEQA).

Hercules Development Permitting and Environmental Report Support, Santa Barbara Channel, California.

With Ogden Environmental and Energy Services (now Amec), for Shell Western E&P, Mr. Frolich provided support to prepare permitting strategy reports and environmental reports for exploration and development, contributed to the development plan, and reviewed agency CEQA and NEPA documents and process for the major Hercules offshore oil development.

Point Arguello Offshore Oil Development Project, Santa Barbara Channel, California. With Ogden Environmental and Energy Services (now Amec), for Chevron USA, Mr. Frolich provided support to prepare permitting strategy reports, environmental reports for exploration and development, contributed to the development plan, and reviewed agency CEQA and NEPA documents and processes for Point Arguello offshore oil development.

Coal Oil Point Offshore and Onshore Oil and Gas Development Project, Santa Barbara Channel, California. With Ogden Environmental and Energy Services (now Amec), for ARCO, Mr. Frolich served as the project manager for permitting process, environmental studies, and government-prepared CEQA and NEPA oversight for ARCO's large and controversial offshore and onshore oil and gas development project.

Fraser River Pipeline, Vancouver, British Columbia. With Golder Associates, Ltd., for North American Pipeline Inc., Mr. Frolich provided senior quality assurance for the preparation of an EMP and services during construction for replacement of two pipelines using horizontal directional drilling for the Terasen Gas.

Fuel Storage Annex and Pipeline Restoration, Hickam AFB, Hawaii. With The Environmental Company Inc., (TEC, now Cardno), for the US Air Force, Mr. Frolich served as the program director for a multi-million-dollar investigation and remediation at Kipapa and Waikakalaua Fuel Storage Annexes. He directed the investigation and remediation of contamination from thirteen multi-million-gallon underground storage tanks at two locations and 19 miles of pipeline and associated valve pits. Work included extensive coordination with local community and native Hawaiians, and with local, state, and federal agencies.

Fuel Storage Annex Pipeline Remediation, Honolulu, Hawaii. With The Environmental Company Inc., (TEC, now Cardno), for the USACE, Pacific, Mr. Frolich directed development of workplan documents and provision of environmental oversight for cleaning the 19 miles of pipeline through central Oahu.

Pipeline Remediation, Honolulu, Hawaii. With The Environmental Company Inc., (TEC, now Cardno), for Home Depot, Mr. Frolich directed work and safety plans, environmental and safety oversight and monitoring for cleaning and removal of the part of the pipeline that was already in private hands. Mr. Frolich also negotiated removal solutions with US Air Force and State of Hawaii.

Pipeline Explosion Remediation, Barcelona, Spain. With Ogden Environmental and Energy Services (now Amec), for Repsol, S.A., Mr. Frolich directed the remediation of gasoline contamination in the Llobregat River drinking water aquifer resulting from a pipeline explosion.

LUIS F. PEREZ

Project Role: Deputy Project Manager

Education: M.A. Organizational Management Fielding Graduate University, B.A. Environmental Science and Public Relations, Northern Arizona University

Expertise: CEQA Project Management, Land Use Analysis, Permitting and Compliance - 30 years

Mr. Perez is a Senior Project Manager with MRS Environmental. Before joining MRS, Mr. Perez acquired extensive public agency experience working for Santa Barbara County, which included interpretation of land use and environmental policies and regulations for large development projects, recommendations to decision-makers and public presentations. He was an Energy Specialist with the Santa Barbara County Energy Division for 16 years, working on permitting and environmental review for onshore and offshore oil and gas projects. Mr. Perez is involved with the management and preparation of environmental studies, primarily focusing on the implementation of CEQA for oil and gas development projects in California. His major areas of expertise are in land use issues of major oil and gas development and transportation projects. Mr. Perez has extensive experience in the preparation of environmental documents, staff reports for decision-makers, presentations for decision-makers, public workshops and hearings.

PROFESSIONAL EXPERIENCE

While working for MRS Environmental, for the last 12 years Mr. Perez has worked on the preparation of the Hermosa Beach Oil Development Project EIR, the Whittier Main Oil Field EIR, Paredon EIR, the Baldwin Hills Community Standards District EIR, the Conoco-Phillips Santa Maria Refinery Expansion EIR, the Chevron El Segundo Marine Terminal Lease Extension EIR, the Guadalupe Oil Field Fencing Plan, and the preparation of the Venoco Full Field Development Project EIR.

Mr. Perez was the Project Manager for multiple oil and gas development projects for the County of Santa Barbara. Those projects included:

- The Pacific Pipeline Project, which was a proposal for construction of a pipeline from the Gaviota Area to refineries in Los Angeles. The Molino Gas Development Project, which was the first project approved for drilling from an onshore location into an offshore reservoir. The Chevron Point Arguello Project, which included three platforms, oil and gas pipeline and an onshore processing facility. Mr. Perez reviewed applications, conducted environmental review and processed permits for various proposals, including Marine Tankering, Process Reconfiguration, and the Rocky Point Unit drilling project, among others.
- Mr. Perez was also the Project Manager for a number of decommissioning of oil and gas projects that had reached the end of their economic life. Those projects included the abandonment of the Texaco Pipeline through Hollister Ranch, the decommissioning of the Unocal Cojo Marine Terminal and the decommissioning of the Texaco Gaviota Gas Plant, among others. In addition, Mr. Perez led the team effort required to oversee compliance with mitigation required for the execution of the different projects.

- While working for the County, Mr. Perez was also tasked with the management and supervision of the contract to provide Oil and Gas permitting and compliance services to the City of Goleta by Santa Barbara County. The efforts included to manage and supervise teams, report writing, public hearings and presentations for the Venoco Full Field Development Project, Venoco State Lease 421 Repairs, and Venoco Line 96 SCADA system.
- Mr. Perez also managed the contract to provide oil and gas permitting and compliance services to the City of Carpinteria, which included application completeness review, policy considerations, and preparation of environmental documents.
- Mr. Perez has also acquired significant experience in the implementation and compliance of oil and gas and construction projects by overseeing the operation of the All American Pipeline Project, the Chevron Point Arguello Project, the Gaviota Marine Terminal Project, the Exxon Santa Ynez Unit Project, the Santa Maria Asphalt Refinery, among others.

Mr. Perez was the government liaison for the permitting and compliance of the construction of the Cano Limon-Rio Zulia Pipeline Project in Colombia, South America for Mannesmann Anlagenbau, AG. The project involved coordination with multiple agencies, preparation of documents, emergency response preparedness training, and environmental restoration.

Mr. Perez received his M.A. in Organizational Management from Fielding Graduate University and received a B.A. in Environmental Science and Public Relations from Northern Arizona University



A skilled strategic advisor and NEPA/CEQA practitioner, Cheryl has managed several highly controversial projects. She uses her experience to shape project teams that are responsive to agency needs and streamlines permitting for complex projects.

EDUCATION

B.A., Interdepartmental Studies,
with distinction, University
of Rochester

CERTIFICATIONS

Certified Planner, American
Institute of Certified
Planners

Cheryl A. Karpowicz, AICP

Project Sponsor

Ms. Karpowicz leads E & E's work on major infrastructure projects and has directed health, safety, and environmental permitting projects worth billions of dollars for clients in the United States, South America, Asia, and the Middle East. She is a key strategist for renewable energy, marine terminal and development, LNG terminal, pipeline, oil and gas exploration and production, and fiber optic cable projects. She provides direction to enable project teams to fully understand permit requirements and processes and to develop aggressive but workable schedules, reduce risk, and ensure compliance with permit conditions during project construction.

Based in California, Ms. Karpowicz has worked for and with key regulatory agencies on numerous linear projects and is an expert in the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). She has directed dozens of major environmental impact assessment projects requiring permits or approvals from agencies including the California Department of Fish and Wildlife; State Lands Commission (CSLC), Public Utilities Commission (CPUC), CalTrans (Department of Transportation); Air Resources Board; Department of Water Resources; and State Historic Preservation Office.

CPUC CEQA/NEPA Compliance Services for Electric Transmission/Renewable Energy Projects

Ms. Karpowicz provides strategic advice and direction for the permitting of electric transmission projects. In September 2013, she presented "Using IT/GIS Tools and Stakeholder Information to Build a Better Project" at the fifth annual Transmission West Summit. As E & E's corporate sponsor for the preparation of documents that require compliance with NEPA and the California Environmental Quality Act (CEQA), she works with the project managers to build QC and QA into project plans and reviews key deliverables. She also organizes and presents workshops for CPUC staff and provides strategic advice on emerging topics such as the treatment of greenhouse gas (GHG) impacts in environmental documents and choosing the appropriate CEQA document.

SCE Eldorado-Ivanpah Transmission Project (EITP), Nevada to California. For CPUC and BLM, Ms. Karpowicz was the project director for E & E's preparation of the award-winning, joint third-party EIR/EIS under the California Environmental Quality Act (CEQA) and NEPA for this 35-mile transmission line and substation project of Southern California Edison (SCE). The project showcases CPUC's new Proponent's Environmental Assessment (PEA) streamlining process, which Ms. Karpowicz helped CPUC develop in order to expedite the environmental review process. Through advanced coordination and proactive consultation, E & E's EITP team facilitated early decision making

on key issues and published a draft EIR/EIS in under 11 months and a final EIR/EIS in approximately 17 months; CPUC approved the EITP in December 2010 and construction will begin in 2012.

Lucerne Valley Solar Project, San Bernardino County, California. Ms. Karpowicz was the project director for E & E's third-party EIS being prepared for BLM for Chevron Energy Solutions' Lucerne Valley solar photovoltaic (PV) power plant, to be located on 422 acres of land. The EIS addressed the environmental effects of five months of construction and subsequent operation of a 49-MW solar field, control and maintenance building, and substation to provide interconnection to an existing 33-kV line.

CO₂ Transmission Pipeline, California. For a confidential client, Ms. Karpowicz directed a feasibility study for 225 miles of carbon dioxide (CO₂) transmission pipeline and laterals to determine whether the project could be permitted in California. The overall project goal was to reduce GHG emissions. E & E's work included a fatal flaw analysis and permitting strategy for collection of CO₂ from several sources in southern California. Ms. Karpowicz evaluated potential lead agencies, including BLM, for a joint, third-party EIS/EIR for the project. She worked with the project team to evaluate air permitting requirements for compressor stations and the potential need for emission reduction credits. She successfully obtained information from key agencies about feasible permit strategies.

Calnev Pipeline Expansion Project, California and Nevada. As project director, Ms. Karpowicz provided QA/QC for E & E's corridor analysis along Interstate 15 (I-15) in California and Nevada conducted as part of E & E's preparation of an EIS/EIR addressing the proposed expansion and construction of 233 miles of petroleum product pipeline to be submitted to BLM and San Bernardino County. Under her direction, team members identified project permitting requirements of over 25 federal, state, and local agencies.

Mojave Pipeline Northward Expansion, California. For Mojave Pipeline Operating Company, she managed E & E's preparation of a joint, third-party EIR/EIS for the proposed 760-mile, \$500-million Northward Expansion natural gas pipeline project, proposed to traverse 15 California counties from Bakersfield to Sacramento. She provided key liaison with FERC and CSLC to ensure that all agency concerns and requirements were met.

San Joaquin Valley Pipeline, California. For BLM and CSLC, Ms. Karpowicz managed E & E's preparation of the combined EIS/EIR for this \$110-million, 260-mile heated oil pipeline. She coordinated contributions and comments from over 30 local, state, and federal agencies; made presentations at two public hearings; provided QC; and was responsible for meeting regulatory deadlines throughout the one-year comment period.

Point Arguello/Gaviota Oil and Gas Development Project, Santa Barbara County, California. This \$400-million Chevron project included a 16-mile pipeline and a 65-acre oil and gas processing facility. Ms. Karpowicz was senior project advisor for E & E's preparation of the Environmental Quality Assurance Program (EQAP).

California Direct Pipeline, Montana, Idaho, Nevada, and California. She was special advisor for E & E's preparation of a preliminary EIR. She provided consultation with the applicant and reviewed the overall EIR to ensure adherence to corporate quality assurance objectives.



Kevin Magner

Web Solutions and Visual Communications

As E & E's Creative Director, Mr. Magner manages the Graphic Design Department and provides art direction on all graphics work for corporate projects. Using the Adobe Creative Suite, he designs and directs the production of technical illustrations for E & E reports, public information releases, brochures, and high-quality page layout for other deliverables. In support of projects targeting stakeholder engagement, Mr. Magner designs and supervises overall project branding, display boards, factsheets, presentations and digital video production. He creates report covers, guidebooks, posters, infographics, advertisements and other graphics for both digital and print.

EDUCATION

B.F.A., Communication Design,
cum laude, University at
Buffalo

Kiantone Pipeline, New York and Pennsylvania. Mr. Magner led graphics preparation for E & E's EIS for United Refining Company for the proposed 98-mile Kiantone petroleum product pipeline. For the soil erosion and sedimentation control plan and erosion control and restoration procedures plan, he prepared graphics to help delineate the locations for temporary and permanent erosion control structures and the restoration techniques for streambanks and rights-of-way.

Offshore Wind Master Plan, New York State. New York State Energy Research and Development Authority (NYSERDA) has embarked on a comprehensive master planning process designed to best inform offshore wind development. As part of the stakeholder engagement efforts on this project, Mr. Magner oversaw the design and production of display materials for a series of public meetings including 10 poster stations. These posters visually outlined the basics of offshore wind development, public comment opportunities, studies and surveys needed and proposed project locations. He also produced additional stakeholder engagement materials ranging from factsheets and signage to newspaper advertisements.

Statewide Energy Efficiency Study, New York State. As part of a sector outreach campaign for the New York State Energy Research and Development Authority, Mr. Magner prepared handouts and poster boards for energy efficiency workshops for healthcare facilities and helped develop the *Energy Management Guidebook for Health Care Facilities*, which is available online for download and was created to help health care facilities across the state assess their energy performance, identify and implement actions to improve energy efficiency, and monitor and evaluate the results.

Hudson River PCB Cleanup, New York State. Mr. Magner coordinated the design and production of graphics for numerous six-foot display boards and other presentation materials being used to support the ongoing series of public meetings supporting the community involvement effort for this major drilling project of EPA Region 2 and the Kansas City District of the United States Army Corps of Engineers (USACE). He developed technical illustrations for documents including the community involvement plan and quality-of-life performance standards, both of which were published for public release and included on the client website.

Public School District Emergency Response/Crisis Management Plan, Buffalo, New York. To support E & E's development of the emergency response and crisis management plan encompassing operations at about 140 public and private schools throughout the City of Buffalo, Mr. Magner produced graphic materials including building-level resource worksheets and capability checklists, hazard analysis worksheets, covers, and other supporting technical illustrations. He also designed poster displays and handouts for public open house meetings.

Astoria Power Plant, New York City. In support of Orion Power's repowering project, Mr. Magner and his staff have produced graphic material for numerous public meetings. He led the design of five 6-foot graphic displays to give an overview of the project history and proposed action. He also led the preparation of a series of eight fact sheets that provided introductory text, in booklet format, to guide attendees through the meetings.

Greenpoint Site, Brooklyn, New York. Under a separate contract for NYSDEC, Mr. Magner provided the graphics associated with E & E's vapor intrusion/indoor air sampling in the area of the Greenpoint petroleum remediation sites. He oversaw the development of graphics and supplied art direction for materials produced for public meetings including, posters and factsheets in three languages; postcards; and signage.

Peace Bridge Expansion, Buffalo, New York and Fort Erie, Canada. For the Buffalo and Fort Erie Public Bridge Authority, Mr. Magner directed the production of graphics materials ranging from project schedules to PowerPoint presentations and display boards for the public workshops, to support the binational EIS team that evaluated the environmental and socioeconomic impacts of bridge design/expansion alternatives. He also led the preparation and revision of a series of maps showing each alternative crossing location.

Buffalo Convention Center, Buffalo, New York. For the scoping phase of this project for the Erie County Department of Environment and Planning, Mr. Magner directed the preparation of a trifold brochure highlighting the New York State Environmental Quality Review Act process; various fact sheets; and a series of 4- by 6-foot presentation display boards for the public meetings, highlighting details of the proposed action, project alternatives, public involvement, various other EIS topics, and "green" building design.

Naval Facilities, Eastern US. Mr. Magner manages the production of all graphics and multimedia information for public involvement under E & E's multiyear contract with the Atlantic Division of the Naval Facilities Engineering Command (NAVFAC Atlantic). He has prepared fact sheets, displays, brochures, newspaper advertisements, and other graphics for nine public scoping meetings regarding the home basing of F/A-18 E/F aircraft at East Coast naval bases. He oversaw development of a digital video that incorporated a taped introduction from the Captain of the Navy, still photographs, and an animated sequence. He provided art direction and oversaw the production of several 6-foot posters incorporating charts, graphics, photographs, and text. He also designed a brochure that explained the NEPA EIS process. The project scoping phase was followed by the public release of a draft EIS (DEIS); the DEIS release was followed by a series of 14 public hearings in four states, and Mr. Magner coordinated the production of poster displays, fact sheets, PowerPoint presentations, comment sheets, signs, and other materials for the meetings.



Jackie leads and participates in the development, processing, and maintenance of project websites; management information system databases; and work, cost, equipment, and schedule tracking systems. She supports information technology level-of-effort planning and cost estimation.

EDUCATION

B.S., Management, Canisius College

Jaclyn M. Antonio

Web Solutions/Comment Management

Ms. Antonio manages technology projects; leads development and maintenance of project websites and management information system databases; and oversees E & E subcontractors for larger, more complex development projects.

Comment Response System (CORES). Ms. Antonio is the lead developer for E & E's proprietary, Internet-based, comment response system, which utilizes the latest database and Internet technologies to help project teams manage thousands of comments and responses with a single, easily searchable project system. CORES improves overall project efficiency by identifying similar comments so that common responses can be applied. CORES modules include Comment and Response, Mailing List/Stakeholder Management, Document Management, Admin Record, and Data Gap. A Calendar and Project Team area also are available within the system to assist the project teams.

Plains & Eastern Clean Line, Arkansas, Oklahoma, and Tennessee.

Ms. Antonio was E & E's lead web developer for the public website and private stakeholder management website supporting a client's proposed 720-mile, high-voltage, long-haul, direct current transmission line that will connect renewable resources on the Great Plains with consumers in the eastern United States.

Multisite Environmental Services Program, Nationwide. Ms. Antonio was E & E's lead developer for the redesign of the entire website for this major, nationwide program for the United States Air Force (USAF) Reserve Command. She provided database programming in SQL, led the development of the online help system using RoboHelp software, led the redesign of the Environmental Compliance Assessment and Management Program intranet, and developed and is overseeing maintenance of the online document management system and Environmental aspects Inventory.

"What If NYC" Design Competition Websites, New York City. For New York City Emergency Management (NYCEM), Ms. Antonio developed the entire three-part competition website. It included a public website that enabled competition participants to upload their submissions directly to a centralized location; an administration website to enable the competition judges to review submissions and choose a winner; and a public website displaying all submitted entries, including the winning ones.

Broadwater Energy LNG Project, Long Island Sound, New York. Ms. Antonio led E & E's website design and development and SQL database development for a \$700-million, 1 billion cubic foot per day liquefied natural gas (LNG) terminal with floating, storage, and regasification unit, on behalf of Broadwater Energy, a joint venture of TCPL USA LNG, Inc., and Shell Broadwater Holdings, LLC.

Third Planet Windpower Branding and Website, Nationwide. Ms. Antonio was a member of the E & E team that designed the second-generation website and content for Third Planet Windpower, LLC, an emerging energy development company.

Citywide Asset Logistics Management System (CALMS). For the New York City Office of Emergency Management, Ms. Antonio has served as project manager and lead developer for E & E's support of the CALMS tool for eight years. CALMS stemmed from the creation of a citywide emergency logistics plan 13 years ago in response to the 9/11 attacks. CALMS is a web-based logistics database for all five boroughs and all resources of the City of New York; it pools data and information that city staff can use to inform their response to a disaster. It tracks information at a facility level: for example, shelters, evacuation centers, staging centers, and fleet inventory are all recorded in the system. The most recent evolution of CALMS includes Ms. Antonio's ongoing work to build a hazard consequence tool into the system. In other words, the system will archive the consequences of various disasters (e.g., power outages associated with hurricanes, peak in rain, airport delays, subway outages, etc.). The goal is to have 50 datasets to model and assess hazards tied to particular events to learn and prepare better going forward.

Ms. Antonio also serves as manager of subcontractors; she has strategically integrated a variety of subcontractors into the project, enabling E & E to grow our development team during times of peak need—such as significant modifications to the tool in a short period of time—but also scale the team back during times of less need. This has created a high level of project cost efficiency for the city.

Additional Website Development, Nationwide. Ms. Antonio helped develop and maintain the websites for the multibillion-dollar 65-mile Neptune Regional Transmission System (a subsea electric cable transmission network in New York and New Jersey); the international Peace Bridge Expansion (Buffalo, New York and Fort Erie, Canada); the Freeport LNG terminal in Texas; and the Part 1 project implementation report for the Loxahatchee River Watershed Restoration Plan (former North Palm Beach County-Part 1 project), a component of the Comprehensive Everglades Restoration Plan. For the Florida Department of Environmental Protection, she provided web development and database programming in SQL for the statewide Petroleum Preapproval Cleanup Program (“Team 6” program), as well as for the site-specific cleanup of the Cole’s Cleaners dry-cleaning site in Jacksonville. For a major producer of industrial products for the process and general manufacturing industries, she developed an EH&S website that allows for the updating of facility location information, updating of safety and environmental data, and production of facility roll-up reports and multiyear summary reports. In addition, Ms. Antonio developed several websites to support the marketing efforts of E & E’s affiliate, Walsh Environmental, LLC.



Melisa provides business operations support to E & E project managers for a wide range of environmental projects.

Melisa R. Mahoney

CORES Coordinator

Ms. Mahoney maintains a regional role, supporting a variety of environmental projects with a public comment component by managing the administrative processes and tools for public comment databases. She assists project managers with quality protocol implementation, prioritizing substantive comments, and organizing responses. Her background includes project management; environmental policy and regulation, including the National Environmental Policy Act (NEPA) and urban ecology; and watershed biogeochemistry.

EDUCATION

B.S., Environmental
Studies/Geography,
Portland State University

2017 Minnesota Department of Commerce, Line 3 Revised Draft Environmental Impact Statement (DEIS).

Ms. Mahoney played a critical role in processing almost 3,000 public comments, in record-setting time, and helping project managers focus on the most critical comments and issues. She reviewed and processed hundreds of pages of electronic and handwritten comments by the public, nongovernmental organizations, Native American tribes, and federal, state, and local agencies regarding the DEIS, and determined whether comments were substantive or non-substantive. On a weekly basis, Ms. Mahoney was tasked with downloading public comments from the clients FTP site and converting the comments to readable documents for uploading into CORES, E & E's proprietary comment response system. Throughout the public comment period, she reviewed content to determine whether it required a formal response. She provided daily status reports to section writers and task managers due to the client's extremely short deadline to publish the final EIS.

Tacoma LNG SEPA EIS, Washington. For the City of Tacoma, Development Service, E & E prepared a third-party State Environmental Protection Act (SEPA) EIS for a proposed liquefied natural gas (LNG) bunkering facility at the Port of Tacoma, Washington. Ms. Mahoney supported the project by managing public comment uploads into the CORES system and highlighting substantive comments for section writers to address in the final EIS. Hundreds of comments were received electronically from the public, nongovernmental organizations, Native American tribes, and federal, state, and local agencies. Each comment was converted into readable documents for upload into the CORES system and flagged accordingly for responses. Ms. Mahoney also updated and verified cited sources for various sections of the EIS.

BLM, Rand Historical Mining Complex. For the Bureau of Land Management (BLM), Ms. Mahoney was a member of the E & E team that helped draft the record of decision (ROD) for this Mojave Desert mining complex, which was found to have elevated arsenic concentrations. Written in coordination with the BLM, the ROD incorporated responses to public comments on the proposed plan. Ms. Mahoney supported the project team by categorizing and maintaining documents related to the ROD. She systematically evaluated, organized, and maintained files according to federal public record guidelines.

Columbia County Hazard Mitigation Plan, Columbia County, New York. In 2006 and 2007, E & E completed a 1.5-year, multijurisdictional (county-level with 23 local jurisdictions) all-hazard mitigation planning project in compliance with FEMA guidance. In 2013, the County retained E & E to review and update the plan. For the Columbia County Office of Emergency Management, Ms. Mahoney supported E & E's project manager on a number of tasks focusing on quality assurance and meeting preparation, as well as quality assurance on the review and update of the Columbia County Hazard Mitigation plan.

Comprehensive Emergency Management Plan (CEMP)/HMP, Chautauqua County, New York. For the Chautauqua County Office of Emergency Services, Ms. Mahoney assisted E & E's primary planner for E & E's update of the Chautauqua County CEMP. The project included updates to bring the plan in line with the National Response Framework (NRF) and best practices in state and local emergency planning. In addition, the CEMP project addressed the County's hazardous materials response plan and mass casualty response plan. Ms. Mahoney focused on quality assurance and meeting preparation and provided quality assurance.

Colorado Resiliency Framework Services. E & E worked collaboratively with the Colorado Resiliency and Recovery Office to prepare the Colorado Resiliency Framework, the state's first resiliency plan. The Framework's development included an extensive public engagement process along with convening of working groups and committees, and a peer review process that provided valuable input to the final document. Ms. Mahoney supported the team concerning several tasks that focused on quality assurance and meeting preparation.

Carty Natural Gas Pipeline Assessment, Morrow County. E & E assessed the likely effects of this pipeline's hydrostatic testing discharge and assisted with the design of a sediment trap/temporary retention structure to limit those effects as required by the state Water Pollution Control Facilities permit. E & E conducted fish exclusion activities at a flumed pipeline crossing. Fish were salvaged from the area to be dewatered by netting and electrofishing methods in accordance with the state's permitting regulations. Ms. Mahoney supported the E & E team by providing construction monitoring support for the pipeline and worked with local, state, and federal agencies. She prepared bi-weekly reports for FERC based on the daily environmental inspection reports. She reported on compliance issues, prepared tracking tables, and performed other administrative tasks to keep the project on schedule such as document preparation for permits/renewals.

Additional Training and Education

Ms. Mahoney completed professional development courses at the FEMA Emergency Management Institute, including Incident Command, Leadership and Influence, and Decision Making and Problem Solving. She is certified in CPR/First Aid, and completed wilderness survival training Mt Hood Community College in Gresham, OR. She is proficient in MS Office, including Excel, PowerPoint, Word, Outlook, Adobe Photoshop and IOkey by touch.



Rachel combines her exceptional writing, review, and organizational abilities to ensure that E & E's clients meet tight permitting deadlines and keep complicated infrastructure projects moving forward on schedule.

EDUCATION

B.A., English Literature, *magna cum laude*, San Francisco State University

Rachel James, AICP

CEQA Coordinator

Ms. James' 20-year professional background spans both planning and technical writing. She manages California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) documents related to industrial-scale energy development and participates in environmental regulatory compliance evaluations and permitting programs. She completes literature reviews, site file searches, and writes sections on agriculture, hazards, safety, land use, and other resource areas for environmental documents. At E & E, she manages all aspects of EIRs and other environmental documentation to ensure they meet E & E quality standards, client guidelines, and requirements of CEQA and NEPA.

Santa Barbara County Reliability Project, Santa Barbara and Ventura Counties, California.

Ms. James managed a complicated third-party EIR on behalf of the California Public Utilities Commission (CPUC) for this 36-mile Southern California Edison transmission upgrade project, which involves reconductoring

existing 66-kV transmission lines, telecommunications installation, and substation upgrades to improve reliability in the Santa Barbara Electrical Needs Area. Traversing ranch land and residential areas spanning the border between Santa Barbara and Ventura Counties, the project had a unique legal background due to partial construction between 1999 and 2004. Due to questions regarding whether the project was exempt from CEQA compliance, the California Coastal Commission issued a Stop Work order in 2005, prior to the CPUC and E & E's involvement. Seven years later, the applicant filed an application for a Permit to Construct to the CPUC, and E & E was tasked with completing an EIR for the work necessary to complete the original project. At the request of the Santa Barbara County Planning Department—acting as a responsible agency due to its management of a Local Coastal Plan covering part of the project area—the EIR also included several chapters related to impacts associated with the past work. In particular, several chapters focused on identifying significant long-term impacts that may have resulted from the past work and evaluated project options that would reduce those impacts, primarily with respect to aesthetic impacts in the California Coastal Zone. Ms. James led the technical review team, managed the schedule/budget, and worked with the archaeological team to coordinate with the Santa Ynez Band of Mission Chumash Indians and other Chumash tribes to elicit feedback regarding cultural resources in the area. The Permit to Construct was approved by the CPUC in November 2015, and Ms. James is currently managing the construction monitoring phase of the project.

Kern County Oil and Gas Development Zoning EIR, California. For the Kern County Planning and Community Development Division, Ms. James was the deputy project manager for a project-level EIR that evaluated impacts associated with an amendment to Title 19- Kern County Zoning Ordinance, focused on oil and gas local permitting. The EIR covered future Kern County oil and gas exploration and production activities within a 3,600 square mile (2.8 million acre) project boundary area over a

25-year planning horizon and included analysis of potential impacts associated with such activities, including well stimulation of hydraulic fracturing and underground injection.

Ms. James wrote the Future Development Scenario portion of the Project Description, which described oil and gas development activities and ancillary activities within the project boundary area. Ms. James' early definition of the different types of operations (i.e., industrial-level extraction, agricultural-level operations, and urban-level operations) became the backbone of the County's "Tier" system, upon which the team based its analyses. Ms. James was also the primary author of the Land Use and Planning section of the EIR and wrote the Environmental Setting portion of the Agriculture Section.

Eldorado-Ivanpah Transmission Project (EITP), Nevada to California. For CPUC and the Bureau of Land Management (BLM), Ms. James managed the technical and editorial review process for the award-winning, joint third-party EIR/EIS that E & E prepared under CEQA and NEPA for this 35-mile transmission line and substation project of Southern California Edison. She made significant contributions to many sections of the document, including those addressing hazardous materials and safety, land use, public services, and traffic. To evaluate land use issues associated with a proposed airport and a conservation easement in Nevada, she examined impacts of the proposed runway, coordinating with the Federal Aviation Administration and regional airport planners to establish appropriate impact significance criteria. Ms. James also incorporated this information into the Hazards and Hazardous Materials and Public Services sections of the EIR/EIS. She evaluated impacts on BLM land that crossed through the Boulder City Conservation Easement; prepared the recreation section of the EIR/EIS, which included an analysis of the project's potential impact on the large, annual off-highway vehicle races on dry lakes in the Ivanpah Valley; and participated in research for a distributed generation alternative that was included in the alternative screening report. She also prepared fact sheets on transmission lines, electromagnetic frequency, and corona noise to support public involvement efforts.

To support preparation of the EITP administrative draft, which involved coordination of comments received from four different organizations, Ms. James created an internal comment-tracking database to streamline the process. As the leader of the editorial team, she reviewed all sections of the EITP EIR/EIS to ensure both internal consistency and accuracy. She provided coordination with section authors to ensure that all project updates and changes were incorporated into the analyses and to manage overall schedule in coordination with the project manager and deputy project manager.

Eldorado Valley Utility Corridor Programmatic EA, Clark County, Nevada. Ms. James was E & E's project manager for preparation of this programmatic EA for BLM's Las Vegas Field Office. Due to large-scale solar and transmission projects proposed or under construction in the area, the BLM required a consultant with an in-depth understanding of the complex nature of past land transactions to write a legally defensible environmental document. Ms. James led document production, tracked schedule and budget, and was the primary point-of-contact with the BLM management team. As a core author, she wrote the sections on the project description, purpose and need, geology, hydrology, recreation, land use, socioeconomics, and cumulative. She also coordinated with the visual resources specialist to select key observation points for the visual analysis.



Jennifer serves as an ecologist, project manager, and permit coordinator for energy industry clients.

EDUCATION

M.B.A. *focus* Global Environmental Sustainability & International Business, Colorado State University

B.S. Environmental Science, Biology, School of Environment & Natural Resources, The Ohio State University

Jennifer Jackson

NEPA Coordinator

Ms. Jackson is an ecologist, project manager, and regional permit coordinator with more than 16 years of experience conducting a range of environmental services to a diverse client base. She is experienced in land use planning; local (SUPs, CUPs, 1041s), state, and federal permitting (NEPA); special status botanical and wildlife surveys; vegetation and habitat mapping; federal and state wildlife agency coordination, ecological restoration planning and implementation; and ecological construction monitoring.

She has conducted biological assessments and assisted in the preparation of NEPA EAs and EISs, Land Management Plans, Stewardship Plans, and other technical environmental and ecological related reports. Agencies she has supported include Bureau of Land Management (BLM), National Park Service (NPS), United States Geological Survey (USGS), USDA Forest Service, United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), Colorado Parks and Wildlife (CPW), Wyoming Game and Fish Department (WGFD), United States Army Corps of Engineers (USACE), Regional Water Quality Control Board of California, California State Parks, and Denver Mountain Parks, as well as for developers, private property

owners, land trusts, and other organizations in Arizona, California, Colorado, Nevada, New Mexico, New Hampshire, Oregon, Puerto Rico, Utah, and Wyoming.

BLM Bakersfield Field Office SEIS, California. Ms. Jackson is serving as deputy project manager for a Bakersfield California Field Office supplemental EIS (SEIS) in response to a judicial decision to reanalyze impacts from oil and gas development as part of their Resource Management Plan.

Roan Plateau RMPA/SEIS for BLM, Colorado. Ms. Jackson was deputy project manager and a key author on the Roan Plateau RMPA/SEIS for the BLM Colorado River Valley Field Office. E & E developed a Resource Management Plan Amendment/supplemental EIS (RMPA/SEIS) in response to a judicial decision remanding the original Record of Decision (ROD). Areas of critical environmental concern (ACECs) and other special designations are a key concern in this EIS. In addition to project management, Ms. Jackson authored grazing/rangeland, wildland fire, and forestry impact analyses, and coordinated the appendices for the RMPA/Final SEIS.

BLM Greater Crossbow EIS, Wyoming. Ms. Jackson was the vegetation author for this EIS and prepared the impact analysis for a third-party EIS for a proposed oil and gas project in central Wyoming. This project spans two BLM field offices and includes part of the Thunder Basin National Grassland. While BLM manages the mineral estate, the surface estate is owned by USDA Forest Service, the State of Wyoming, and private owners. Key issues for this EIS are special status species, groundwater, air quality, and surface use on USDA Forest Service lands.

Third-Party NEPA Support at Yellowstone National Park, Wyoming. Ms. Jackson served as project manager for an EA associated with a proposed core tower and aquatic sites in Yellowstone National Park. She has been involved in providing a range of technical services to conduct site-specific EAs in support of construction and operations of the National Ecological Observatory Network (NEON) in several western states.

Third-Party NEPA Support Grand Teton National Park, Wyoming Ms. Jackson served as deputy project/document manager and key author for a third-party EA on behalf of Grand Teton National Park, Campus Improvements to the University of Wyoming-National Park Service Research Center.

Third-Party NEPA Support, DA Forest Service Pawnee National Grassland, Colorado. In support of Noble Energy, Inc.'s Roads and Pipelines Project, Ms. Jackson served as deputy project/document manager and technical author for a third-party EA on behalf of the USDA Forest Service Pawnee National Grassland, located in northeastern Colorado.

NEPA Support for Mining Project for BLM Carlsbad Field Office, New Mexico. Ms. Jackson served as deputy project manager for an EA prepared on behalf of the BLM for IC Potash's Geotechnical Program. Ms. Jackson also conducted baseline biological surveys in support of the associated EIS and contributed to other technical documents in support of the project.

Third-Party NEPA Support, Western States for National Ecological Observatory Network. Ms. Jackson has been involved in providing a range of technical services to conduct site-specific EAs in support of NEON construction and operations, funded by the National Science Foundation. She has provided third-party NEPA support for the USDA Forest Service and BLM for NEON projects in Utah and Colorado, among others.



Caitlin brings experience in planning and managing environmental compliance for land development and transportation infrastructure projects.

Caitlin Marie Chase

Core Writing Team: EIS/EIR

An environmental specialist in our San Francisco office, Ms. Chase's background includes experience in managing and preparing all levels of CEQA/NEPA documentation and managing environmental reviews for land development and infrastructure projects. Ms. Chase understands the types of challenges that agencies may encounter during the course of a project, and is adept at developing mitigation strategies to overcome them. Accordingly, Ms. Chase coordinates with agencies, technical specialists, and project engineers to efficiently navigate the environmental clearance processes with the best available information. She can quickly solve problems and respond to client, agency, and stakeholder perspectives throughout the environmental review process.

EDUCATION

M.S., Environmental Management, University of San Francisco

B.A., Environmental Studies, University of Vermont, Honors College

AFFILIATIONS

Association of Environmental Professionals (AEP) - Vice President of Programs, San Francisco Bay Area Chapter

Amendment to Title 19 – Kern County Zoning Ordinance (2018 - A) for Agricultural Use of Biosolids, Program EIR, Kern County, California.

Ms. Chase is deputy project manager for this program-level EIR regarding the Amendment to Title 19 of the Kern County Zoning Ordinance (2018-A) for Agricultural Use of Biosolids. The EIR will identify and evaluate potential direct and indirect environmental impacts associated with a proposed amendment to Chapter 19.12 (Exclusive Agricultural (A) District) of the Kern County Ordinance to regulate land application of biosolids in unincorporated areas in Kern County. Ms. Chase is responsible for coordinating with the project team and specialists regarding methodology, preparation of the EIR, and maintaining the project schedule.

Olinda Last Mile Underserved Broadband Project IS/MND, CPUC - Shasta County, California. Ms. Chase is serving as deputy project manager on behalf of the CPUC for the Initial Study/Mitigated Negative Declaration for the Olinda Last Mile Underserved Broadband Project, which entails installation of 18 miles of new fiber-optic cable in unincorporated Shasta County, California. Ms. Chase is assisting the project team to prepare resource sections and coordinate agency and Native American Consultation pursuant to requirements under Assembly Bill (AB) 52. Much of the proposed line is located adjacent to environmentally sensitive areas; Ms. Chase works with the technical team to accurately assess potential impacts to biological resources and wetland habitats.

TL674A Reconfiguration and TL666D Removal Project IS/MND, San Diego County, California. For CPUC, Ms. Chase served as primary author for several sections for the CEQA IS/MND Environmental Analysis as part of the San Diego Gas & Electric (SDG&E) TL674A Reconfiguration and TL666D Removal Project in the Cities of San Diego and Del Mar. This project proposes to remove existing kV power lines, or convert existing kV power lines into an underground configuration. The project

location is entirely within the Coastal Zone and within multiple highly biologically sensitive coastal ecosystems.

Coast Corridor Tier 1 Program EIS/EIR, Federal Railroad Administration, Caltrans Division of Rail, and San Luis Obispo Council of Governments, California. With Circlepoint, Ms. Chase assisted in developing the first tier combined NEPA/CEQA document for improvements and expanded passenger rail service along the Coast Corridor (San Francisco to Los Angeles) that address safety and reliability concerns. The document looked broadly at potential environmental concerns, highlighting mitigation and avoidance strategies for subsequent project-level reviews. Ms. Chase was responsible for writing technical sections of the environmental document, as well as managing on-going coordination with the client and subconsultant team.

California High-Speed Rail Palmdale to Burbank Section EIR/EIS, California High-Speed Rail Authority, California. While with Circlepoint, Ms. Chase led the technical team's efforts to prepare the Community Impact Assessment, Economic Impact Analysis, and Relocation Impact Report. The analysis evaluated the potential changes to the community as a result of the project from a social and economic perspective. Accordingly, Ms. Chase worked with the subconsultant team to ensure that public input was considered in the analysis and that the reports complied with California High-Speed Rail Authority methodology and Federal/State regulations. In addition, Ms. Chase oversaw the cultural analysis and Section 106 consultation per the Programmatic Agreement and prepared the land use planning analysis, which required clear understanding of applicable plans and initiatives within the Los Angeles County region. Ms. Chase managed deliverable timelines, client review comments, and quality assurance/quality control (QA/QC) efforts to ensure timely delivery of project milestones.

BART Silicon Valley Phase II Extension Project EIS/EIR, Santa Clara Valley Transportation Authority, California. While with Circlepoint, Ms. Chase supported the environmental consulting team as a technical task leader to prepare the Socioeconomics and Environmental Justice Technical Report in compliance with the Federal Transit Administration (FTA) Circular 4703.1. Ms. Chase worked with the environmental consultant team to synthesize demographic data, incorporate community feedback, and evaluate potential impacts/benefits of construction and operation of the project. In addition, Ms. Chase prepared several resource section analyses of the SEIR/SEIS and worked with the team to respond to public and agency review comments. As typical with large-scale transit development projects, key environmental issues considered in the analysis were mostly related construction impacts as a result of temporary road closures, detours, etc. Ms. Chase worked closely with VTA and the project team to ensure that the construction analysis in these reports sufficiently addressed these key public concerns.



Aileen integrates her CEQA expertise and biological expertise to evaluate complex environmental challenges and develop mitigation strategies to minimize project-related environmental concerns.

EDUCATION

B.A., Zoology/Spanish/Latin American Studies (focus in Latin American Ecology & Conservation), University of Wisconsin

Aileen Cole

Core Writing Team: EIS/EIR

Ms. Cole is skilled in the preparation of CEQA documents for large-scale utility projects within the State of California, including linear transmission infrastructure projects. Additionally, she has conducted due diligence permit reviews and prepared technical reports for solar facilities, assisted in the review of the DEIS for a proposed invasive species eradication project within protected federal lands, and helped prepare conservation easement baseline reports. She has conducted extensive on-the-ground field assessments across diverse ecosystems and landscapes throughout the continental United States and Latin America, collecting data for scientific studies and compiling data for incorporation into environmental reports and studies. Her comprehensive field experience with public and private lands, agricultural properties, rural and urban areas, developed sites, utilities, and diverse ecosystems allows Ms. Cole to integrate her land use knowledge and scientific perspective into exciting community initiatives and broad planning efforts.

Pipeline Safety and Reliability Project, San Diego County, California.

On the behalf of the California Public Utilities Commission (CPUC), Ms. Cole helped prepare the Master Environmental Assessment (MEA) for the Pipeline Safety and Reliability Project. Originally intended as an Environmental Impact Report (EIR), the CPUC acted to deny the application for a Certificate of Public Convenience and Necessity to construct the 47-mile transmission pipeline project spanning much of San Diego County. Ms. Cole, who contributed as a primary author to the Biological Resources assessment in the Administrative Draft EIR for the proposed pipeline project, reviewed, restructured, and revised the EIR to suit MEA CEQA needs. The proposed project as associated Administrative Draft EIR Biological Resources assessment incorporated multiple complex measures, including de-rating an existing pipeline to comply with a Pipeline Safety Enhancement Plan, the construction of a transmission pipeline, and improving operations to allow for increased utility reliability during high-demand periods. Ms. Cole reviewed available data from recent and historical surveys; evaluated potential for impacts to biological resources including special status species, aquatic resources, critical and potential suitable habitat resources, and sensitive natural communities associated with project construction and/or operations and maintenance procedures; and developed mitigation strategies to reduce the potential for such impacts. As part of MEA preparation, Ms. Cole reframed the EIR to capture the biological setting along the former proposed project alignment, while suiting MEA content needs. Additionally, Ms. Cole contributed to the preliminary alternatives screening process and to the project-related noise analysis, received and reviewed public scoping comments pertaining to the project, and notified subject authors of notable public concerns and questions pertaining to the proposed project.

Biosolids Ordinance Amendment, Kern County, California. For the Kern County Planning and Natural Resources Department, Ms. Cole assisted in preparation of the EIR (currently under County

review as an Administrative Draft EIR) for the Amendment to Title 19 – Kern County Zoning Ordinance (2018 - A) for Agricultural Use of Biosolids. Ms. Cole is the primary author for the Biological Resources, Public Services, Land Use, and Cumulative Impacts EIR sections, and provided substantial contributions Introduction, Hazards and Hazardous Materials, and Hydrology and Water Quality EIR sections. EIR preparation involved an extensive evaluation of existing biological, hydrological, and other conditions within and proximal to Exclusive Agriculture lands in Kern County, to which biosolids may be applied following implementation of the proposed ordinance amendment. Ms. Cole identified potential onsite and offsite impacts associated with the land application of biosolids, and developed mitigation strategies to be implemented on a programmatic level to minimize these impacts. She also received scoping comments pertaining to the ordinance amendment and directed the scoping concerns to the appropriate resource experts, to be addressed in individual EIR sections.

TL674A Reconfiguration and TL666D Removal Project, San Diego County, California. Ms. Cole is a primary author for the Biological Resources, Recreation, and Hydrology and Water Quality sections for the IS/MND Environmental Analysis as part of the TL674A Reconfiguration and TL666D Removal Project in the Cities of San Diego and Del Mar. The project proposes construction activities occurring entirely within the Coastal Zone, including areas that support numerous highly biologically sensitive coastal ecosystems and Important Bird Areas. As part of the environmental analysis, Ms. Cole evaluated project- and region-related data from both the applicant and reliable external sources to determine the potential for project-related impacts to environmentally sensitive resources. Based on data findings, Ms. Cole developed appropriate mitigation strategies that protect at-risk resources while ensuring that required construction activities may proceed.

Mesa 500-kV Substation Project, Los Angeles County, California. To comply with CEQA requirements, Ms. Cole is assisting in the ongoing mitigation monitoring and reporting phases associated with the expansion of the existing 220-kV Mesa Substation in Los Angeles County to a 500-kV substation. The substation expansion also includes the expansion of telecommunications and transmission lines in highly developed environment. Her tasks include reviewing and responding to applicant-proposed plans and permits required for compliance with the mitigation measures as defined in the project’s Final EIR, reviewing monitoring and incident reports to evaluate compliance, and reviewing weekly and monthly reports pertaining to project-wide activities associated with all CEQA resource areas.

Environmental Impact Study for a Submarine Fiber Optic Cable in the Dominican Republic. Ms. Cole is a contributing author for the “Cable Submarino República Dominicana” (CSR) submarine fiber optic cable installation project, spanning from Puerto Rican waters to the eastern coast of the Dominican Republic. To prepare an Environmental Impact Study (Estudio de Impacto Ambiental, EsIA) that identifies potential environmental impacts associated with the project, serves as an appropriate public disclosure document, and fulfills local and federal environmental agency requirements, Ms. Cole reviewed regionally appropriate data and incorporated this information into the EsIA for appropriate impact identification. Because climate change is a point of significant concern for the governing environmental agencies in the Dominican Republic, she played close attention to potential climate-related risks and hazards associated with project implementation. Ms. Cole’s bilingual English/Spanish skills helped the project team navigate the complex international regulatory framework associated with proposed project installation.



Ilja uses nearly two decades of experience as a wildlife biologist, permitting specialist, and project manager to help energy industry clients successfully permit and construct their solar, wind, pipeline, transmission line, and power plant projects.

EDUCATION

B.S., Ecology, Behavior and Evolution, University of California at San Diego

Ilja Nieuwenhuizen

Core Writing Team: EIS/EIR

Mr. Nieuwenhuizen has 19 years' experience with biological resource assessment, environmental compliance, permitting, and review for a variety of energy infrastructure projects, including solar and wind energy generation projects, natural gas pipelines, transmission lines, and power plants. He leads or supports the development of environmental documents and permit applications, including FERC resource reports, environmental impact statements and assessments (EISs/EAs), application narratives and support exhibits for Oregon Energy Facility Siting Council permit applications and county conditional use applications and survey reports. He conducts critical issues analysis (CIA), route selection, and scheduling to prepare projects for the construction phase.

Silver State Solar Project, Clark County, Nevada. Mr.

Nieuwenhuizen reviewed the results of desert tortoise surveys prepared by the proponent and wrote the biological resource section of E & E's third-party EIS addressing the 400MW solar development project of First Solar Development, Inc., proposed for location on 2,900 acres of land under BLM jurisdiction.

Lucerne Valley Solar Project, San Bernardino County, California. For E & E's third-party EIS for Chevron Energy Solutions' Lucerne Valley Solar Project, which consists of a 49MW solar photovoltaic power plant proposed on 422 acres of land, Mr. Nieuwenhuizen reviewed the results of desert tortoise surveys and oversaw the preparation of the biological resource section concerning desert tortoise. The EIS addressed environmental impacts arising from five months of construction followed by operation of the solar field, control and maintenance building, and substation. Mr. Nieuwenhuizen worked with BLM and other agency staff to identify appropriate mitigation to reduce the impacts on the desert tortoise.

Inland California Express Pipeline, California. For a confidential client, Mr. Nieuwenhuizen conducted biological surveys and contributed to the routing analysis for this project designed to convert approximately 100 miles of the pipeline system from natural gas to crude oil. The project involves siting a rail offloading facility along an existing ROW and construction of a 16-inch approximately 16-mile-long pipeline from the rail unloading facility to the Inland California Express. He conducted habitat surveys along the ROW in accordance with four distinct habitat conservation plans.

Ruby Natural Gas Pipeline, Wyoming to Oregon. For El Paso Corporation (now Kinder Morgan, Inc.), he contributed to E & E's preparation of FERC resource reports and permit applications for this 680-mile, four-state natural gas pipeline crossing private, state, and federal lands, including those managed by BLM and the USDA Forest Service. He helped produce several ancillary reports and plans, including Ruby's horizontal directional drill contingency plan and noxious weed control plan. He consulted with agency resource specialists and responded to agency comments on project resource reports and plans. He helped coordinate photographic log records of construction across project wetlands and bodies of surface water for state and federal agencies, including the United States Army Corps of Engineers (USACE). In addition to contributing to the document and report writing, Mr. Nieuwenhuizen spent over six months in the field, completing sensitive species surveys and delineating wetlands and bodies of surface water along the proposed project ROW.

SCE Eldorado-Ivanpah Transmission Project (EITP), Nevada to California. For the California Public Utilities Commission and BLM, he was a member of E & E's biological resources team that prepared the award-winning, joint third-party EIR/EIS under the California Environmental Quality Act and NEPA for this 35-mile transmission line and substation project of Southern California Edison (SCE). As the herpetological expert assigned to the biological resources section, he reviewed technical reports prepared by the project applicant and participated in site visits to ensure that the surveys were conducted according to established protocol.

Natural Gas Pipeline Assessment. For a confidential client, as environmental inspector for this natural gas pipeline project, Mr. Nieuwenhuizen was E & E's lead biologist for the preparation of FERC resource reports and an applicant-prepared EA addressing the feasibility of constructing a natural gas pipeline intended to provide fuel to a proposed natural gas-fired, combined-cycle power plant. He was the primary author for Resource Reports 1 (Project Description) and 3 (Biological Resources) and provided reviews of all other sections. He wrote the biological survey work plan and is managing all 2011-2012 field surveys for special-status wildlife and plant species, noxious weeds, and wetland and stream delineations. He participates in client and agency meetings and addresses agency and client comments on draft documents.

GREG CHITTICK

Project Role: Risk of Upset and Air Quality Support Staff

Education: M.S. Mechanical Engineering, B.S Mechanical Engineering, UC Berkeley

Expertise: Project Management, Air Quality, Risk Assessments and Hazard Modeling, Acoustics, Technical Analysis. 30 years

Mr. Chittick is a Senior Scientist and Project Manager with MRS Environmental with more than 30 years of experience specializing in project management in combination with the technical analysis areas of safety, risk, air quality analysis, noise, aesthetics, visual, traffic and GIS systems. At MRS, he has been involved in preparing and managing air quality studies and environmental impact assessments, environmental technology studies, computer mapping analysis, modeling accidental releases of hazardous materials, and conducting risk analysis studies for small and large facilities. Mr. Chittick has worked with the County of Santa Barbara for over 20 years on an extensive range of projects. His combination of effective and efficient project management with extensive experience in technical analysis makes him an exceptionally well qualified project manager.

Mr. Chittick also worked for more than 10 years with Arthur D. Little, Inc., based in Boston, on risk, air quality and EIR analysis. Mr. Chittick previously worked at Lawrence Berkeley Laboratory on studies related to building energy efficiency. Mr. Chittick is a member of the American Society of Mechanical Engineers, Southern California Association of Risk Analysis, the Chlorine Institute, and the International Institute of Ammonia Refrigeration.

Mr. Chittick's areas of expertise include:

Key Expertise:

- Air Quality Analysis
- Air Quality Modeling
- Health Risk Assessment Modeling
- Hazardous Materials Assessment
- Quantitative Risk Assessment
- Modeling of Accidental releases
- Acoustics Analysis
- Traffic Analysis
- Visual Assessment
- GIS Analysis

ENVIRONMENTAL IMPACT ASSESSMENTS HIGHLIGHTS

- Mr. Chittick has managed a number of environmental impact studies, including analysis on pipeline transportation of crude oil and oil and gas processing facilities. Specific to Santa Barbara County, recent projects include the ExxonMobil Interim Trucking EIR, PCEC EIR, Santa Maria Energy EIR and the Foxen Canyon Pipeline EIR. These projects were all related to CEQA.

- Mr. Chittick has performed technical impact analysis related to EIR and EIS projects in a number of different impact areas including risk and hazardous materials, air quality, traffic analyses, noise analysis, traffic analysis visual impacts, and environmental justice.
- Mr. Chittick has completed numerous air quality analyses for more than 30 environmental assessment documents over the past 30 years. Analyses have included assessment of criteria pollutants, including emissions from hydrocarbon impacted soil handling activities associate with the Guadalupe project; toxic pollutants, including AB2588 health risk assessments; CO hot spots analysis and greenhouse gas emissions analysis, including electrical grid assessments; and indirect emissions. Modeling conducted as part of these analyses included ISC, AERMOD, SLAB, ACE, HARP, HARP2, CALINE4, URBEMIS, SupeChems, CANARY and CalEEMod, among numerous others.
- Mr. Chittick assessed the quantitative risk impacts using QRA techniques on oil and gas projects, hydrogen plants and pipelines, offshore drilling, and production units as well as pipelines and marine terminals. Risk analysis examines risks to public health as well as the quantitative analysis of oil spill probabilities and impacts to the environment. Recent local analysis includes the Venoco Ellwood Lease Line Adjustment Project and the Venoco Ellwood Line 96 Installation Project (for the CSLC).
- Mr. Chittick has conducted quantitative risk analysis for a broad range of transportation related projects, including transportation of gas liquids and ammonia on highways and pipeline transportation of crude oils. His studies have included developing QRA models, FN curves and mitigation measures to reduce risk impacts. Recent local projects include review of the East Cat Canyon project QRA for Aera Energy.
- Mr. Chittick has conducted numerous chemical release and dispersion modeling analyses, including releases of hydrogen, ammonia, gas liquids, hydrocarbons, produced gas containing hydrogen sulfide, and vapor from spilled combustible liquids, including crude oil. Models include CANARY, SuperChems, SLAB, AERMOD, Aloha, and multi-component models.

Experience for Environmental Projects

- Orcutt Hill Resource Enhancement Plan Project: Santa Barbara County
- ERG Operating Company Foxen Petroleum Pipeline Project: Sana Barbara County
- Santa Maria Energy Production Plan and Development Plan: Sana Barbara County
- Venoco South Ellwood Field Project: California State Lands Commission
- Phillips 66 Company Rail Spur Extension and Crude Unloading Project EIR: San Luis Obispo
- Becker and Legacy Wells Abandonment and Remediation Project: CSLC
- E&B Oil Drilling and Production Project EIR: City of Hermosa Beach
- Baldwin Hills Oil Field Monitoring Project: County of Los Angeles
- Assisting County of Santa Barbara for Analysis for Energy Projects
- City of Carson Oil and Gas Support
- GHG CEQA Thresholds Development: Santa Barbara County APCD



Silvia is an air quality, GHG, and community noise professional. She builds meaningful stakeholder relationships and provides an in-depth knowledge of the CEQA, NEPA, and international EIA processes.

Silvia A. Yanez

Air Quality, GHG

Ms. Yanez' 16-year background includes four years as a member of E & E's staff in Venezuela and seven years in California, providing both environmental and engineering expertise for the oil and gas, electric transmission, telecommunications, and renewable energy industries. She has played a key role in the completion of numerous U.S.-based and international studies needed to obtain environmental permits for energy and infrastructure facilities. As lead technical author for air quality, greenhouse gas (GHG), noise and vibration, and public health and safety for over 25 projects in the Western United States, Ms. Yanez has established relationships with key agencies involved in project permitting, such as air quality management and air pollution and control districts, and city/county planning departments.

EDUCATION

M.S., Development and Environment, Universidad Simón Bolívar, Venezuela

Diploma (M.S. equivalent), Environmental Management, Universidad Simón Bolívar, Venezuela

Diploma (B.S. equivalent), Chemical Engineering, Universidad Simón Bolívar, Venezuela

CERTIFICATIONS

Venezuelan College of Engineers

Qualified Environmental, Social and Health Impact Assessment Facilitator, Chevron Energy Technology Company

Santa Barbara County Reliability Project EIR, Santa Barbara and Ventura Counties, California. On behalf of CPUC, Ms. Yanez was the lead author in charge of the project description and the air quality, GHG, and noise and vibration impact analyses for the third-party EIR of SCE's Santa Barbara County Reliability Project. The project included the removal and/or replacement of existing 66-kilovolt (kV) subtransmission structures facilities, modifications to existing substations, installation of telecommunications facilities, and removal of subtransmission infrastructure decommissioned during past work activities between 1999 and 2004. In addition to describing the existing project setting, she summarized all applicable air quality, GHG, and noise regulations and plans; identified potential environmental impacts and mitigation measures; and developed mitigation measures.

Kern County Oil and Gas Development Zoning EIR, California. For the Kern County Planning and Community Department, Ms. Yanez served as E & E's lead technical author of the GHG and climate change impact analysis for the third-party CEQA EIR addressing the amendment to Chapter 19.98 (Oil and Gas Production) and related chapters of the Kern County Zoning Ordinance, which aimed to include additional provisions for local permitting of oil and gas production. As part of this EIR, Ms. Yanez conducted a detailed review of recent updates on federal, state, and local regulations and plans addressing climate change; validated GHG inventories provided by the applicant; analyzed potential impacts from direct and indirect GHG emissions caused from the project; and developed mitigation measures and best management practices to address potentially significant impacts.

Calnev Pipeline Expansion Project, California and Nevada. E & E conducted an Interstates 15 (I-15) corridor analysis in California and Nevada as part of E & E's preparation of an EIS/EIR addressing the proposed expansion and construction of 233 miles of petroleum product pipeline to be submitted to BLM and San Bernardino County. As lead specialist in charge of the air quality/climate change and noise impact analyses, she described existing conditions along multiple jurisdictions, summarized applicable plans and regulations, developed a comprehensive air pollutant and GHG emission inventory for each of the proposed project linear construction sections, analyzed potential project impacts, and developed mitigation and best management practices.

South Orange County Reliability Enhancement Project, Orange County, California. For CPUC, Ms. Yanez is leading the GHG and noise and vibration impact analyses for E & E's third-party CEQA EIR addressing a rebuilt substation.

West Chocolate Mountains Renewable Energy Project, Imperial and Riverside Counties, California. For the Bureau of Land Management (BLM), Ms. Yanez was E & E's lead technical author for the air quality/climate change and noise sections of the third-party NEPA EIS addressing issuance of solar and wind rights-of-way (ROWS) and geothermal leasing within the West Chocolate Mountains Renewable Energy Area (REEA) near the Salton Sea.

California Valley Solar Ranch (CVSR), San Luis Obispo County, California. Ms. Yanez was a member of E & E's technical team that completed the EA for a loan guarantee from DOE for this project, which includes a proposed 250-MW solar farm and the reconductoring of a 35-mile segment of PG&E's Morro Bay-Midway transmission line, crossing both San Luis Obispo and Kern Counties. She contributed to the analysis of air quality/climate change and noise impacts from project construction and operation, helped write the air quality and GHG sections, and provided a QA/QC review of the noise section prepared by San Luis Obispo County for the draft EIR under CEQA.

Eldorado-Ivanpah Transmission Project (EITP), Nevada to California. For CPUC and BLM, Ms. Yanez wrote the project description and alternatives section of the award-winning, joint third-party EIR/EIS that E & E prepared under CEQA and NEPA for this 35-mile transmission line and substation project of Southern California Edison (SCE). Ms. Yanez worked in close coordination with CPUC and BLM staff committed to completing project design and engineering information review in a timely manner. She also provided Spanish translations of the project-related documents for the public outreach effort. Her direct involvement in this project contributed to the completion of a streamlined NEPA/CEQA process in 17 months, from filing to FEIR/EIS Publication.

Alberhill Substation and Transmission Lines, Riverside County, California. For CPUC, she is leading the air quality, GHG, noise and vibration impact analyses for E & E's third-party CEQA EIR addressing SCE's proposed construction of a distribution substation and installation of associated transmission lines and communication cable on multiple site locations. In addition to describing the existing project setting, she is summarizing applicable air quality and noise regulations and plans; identifying potential environmental impacts and mitigation measures; and helping to develop project-specific public disclosure resources for the area's Hispanic community.

LAUREN M. BROWN

Project Role: QA/QC Biology

Education: B.S., Ecology and Systematic Biology, California Polytechnic State University, San Luis Obispo, 1991

Expertise: Biology, Oak Restoration

Over 26 years' experience conducting biological surveys, habitat/vegetation mapping, and monitoring for sensitive species protection and habitat recovery; experience with coordinating and consulting with federal, state and local regulatory agencies on scope and impact of projects; and abilities for partnering with planning team members and managers to gather data and prepare materials for documents and presentations

Considerable expertise in delineation of wetlands throughout California as well as neighboring states using the USACE 1987 Wetland Delineation Manual, the 2008 Supplement for the Arid West Region, and the 2010 Supplement for Western Mountains, Valleys and Coast Region, and State and local requirements. Additional resources include a familiarity with different types of wetland functional assessments, and completion of the California Rapid Assessment Method (CRAM) training for Riverine, Estuarine, and Vernal Pool Modules

Strong technical writing skills in support of NEPA/CEQA documents, and author and co-authorships for restoration plans, environmental reports, biological analyses, and other documents related to environmental planning, research, and impact assessments. Knowledge of regulatory compliance documentation, preparing initial studies and mitigated negative declarations, environmental management and habitat restoration plans, and producing permit applications in accordance with applicable federal, state, and local regulations and permitting requirements.

TRAINING/CERTIFICATES

- Jurisdictional Delineation of Wetlands and Waters of the United States, U.S. Army Corps of Engineers, Wetlands Training Institute, 1996.
- California Rapid Assessment Method (CRAM), Riverine and Estuarine Modules (2011), Vernal Pools and Vernal Pool Systems Modules (2012).
- 40-hour HAZWOPER Certification, plus annual 8-hour refresher (current).
- Certificate in Environmental Horticulture, Santa Barbara City College, 1999.

LIST OF PROJECTS/ASSIGNMENTS

Chevron Guadalupe Restoration Project, San Luis Obispo County, California. Marine Research Specialists, 1998 - present. Conducting botanical monitoring and document review to ensure compliance with County Conditions of Approval for Stage 1A of the Guadalupe Restoration/Oil Field Remediation Project. Serving as Independent Performance Monitor for completed restoration projects, including state and federal mitigation wetlands, and Site-Wide weed control. Previously served as group coordinator and recorder for a Restoration Working Group that included representatives from federal and state agencies responsible for oversight of native habitat and wetland restoration and special status plant species. The Applicant and Agency representatives of the Restoration Working Group worked collaboratively to prepare Wetlands

Restoration and Mitigation Plan that included site-specific functions and values assessment of impacted and created/restored wetlands for the purpose of measuring and determining success of mitigation.

Jurisdictional Determinations in support of the White Mountain Apache Tribe Rural Water System Project, Fort Apache, Arizona, White Mountain Apache Tribe. Leidos, 2012 - 2017. Conducted wetland delineation surveys in support of compliance with the Clean Water Act and National Environmental Policy Act for areas associated with a proposed Rural Water System Project on the Fort Apache Indian Reservation in Navajo and Gila Counties, Arizona. The proposed project includes construction and operation of the Miner Flat Dam and Reservoir, improvements to a water treatment plant and water diversion facility, and a 50 mile long pipeline.

EIS for Santa Susana Field Laboratory (SSFL) Energy Technology Engineering Center (ETEC) Site Closure. Leidos, 2012-2017. Provided botanical and wetland resources support for the biological sections for an EIS addressing cleanup of radiological and chemical contamination, site closure, and subsequent uses of the SSFL. Conducted rare plant and wetland delineation surveys of the 500-acre site (including adjacent undeveloped land) and prepared a Wetland Delineation Report for submittal to the USACE. Provided support for a site-wide Biological Assessment in accordance with the requirements of state and federal Endangered Species Acts addressing cleanup activities of the SSFL site.

Rare Plant Surveys, Wetland Delineations and Permitting Support for Multiple Projects on Marine Corps Base Camp Pendleton; San Diego County. Leidos, 2006 - 2017. Field team leader for vegetation mapping, rare plants surveys, and wetland delineations for several infrastructure improvement projects on Camp Pendleton. Prepared vegetation reports, rare plant reports, wetland delineation reports, jurisdictional determination forms, and relevant sections of environmental documents (BA, EIS). Prepared Section 404 and 401 permit applications and habitat restoration and mitigation plans.

Biological Resources Surveys and Reports in support of the US Marine Corps Rotary Wing Training EIS, Naval Region Southwest. Leidos, 2009-2011. Served as field survey team leader for vegetation mapping and rare plant surveys of approximately eighty sites (ranging from 10 to 25-acres) in several regions in California, Nevada, and Arizona, including sites in the eastern Sierra Nevada in California, adjacent Great Basin in Nevada, and lower Colorado Desert in southeastern California and southwestern Arizona. Also lead the field effort for conducting wetland delineation for fifty-three sites (20 acres each) in the eastern Sierra Nevada, California.

Venoco-Ellwood Marine Terminal EIR, Goleta, California. Marine Research Specialists, 2005 - 2010. Conducted field surveys and prepared the botanical and wetland resources sections of the MRS-SAIC jointly prepared EIR to consider environmental issues associated with the a new 10-year State lease that would allow Venoco to continue operating the offshore improvements associated with the Ellwood Marine Terminal, a crude oil marine loading terminal and associated storage facility. EIR included assessment of oil transportation alternatives including installation of a 9-mile on-shore pipeline.

Contra Costa Pipeline, Contra Costa County. CA, Marine Research Specialists (MRS), 2005-2006. Conducted field surveys and wetland delineations along a proposed hydrogen pipeline in Contra Costa County. Project included the surveying and mapping of approximately 12 miles of pipeline route for wetlands and Waters of the U.S., sensitive plant species, vegetation and native tree inventory.

Diablo Canyon Nuclear Power Plant Spent Fuel Storage Facility EIR, County of San Luis Obispo. Marine Research Specialists, 2003-2004. Conducted vegetation and rare plant surveys and prepared the botanical resources section of an EIR addressing potential impacts associated with construction of a nuclear waste storage facility.



Noreen offers extensive experience managing large, multidisciplinary resource teams for high-profile energy projects.

EDUCATION

B.S., Biology, California State University at Fresno

Noreen S. Roster

Biological Resources

Ms. Roster's combined skills as a biologist and accomplished manager of built environment projects provides tremendous impact and value for her clients. Her strong science background and complete understanding of construction practices for linear projects give her "big picture" vision and the ability to troubleshoot. She is particularly adept at identifying risk points, especially in large-scale projects, which could derail a project timeline or budget. She also excels at determining risk factors and mitigating them, creating a valuable time and cost efficiency. Her 27 years of experience also includes proficiency in working through complex permitting issues, often crossing multiple states, municipalities, and jurisdictions.

Ms. Roster is experienced in EA and EIS preparation, wetland mitigation and restoration, environmental permit acquisition for linear projects, Endangered Species Act consultation, and regulatory compliance monitoring. She plans and manages biological assessments (BAs), habitat evaluations, endangered species surveys, and permit support to ensure timeliness, cost-effectiveness, and regulatory compliance.

BHP Billiton Cabrillo Port Offshore LNG Import Terminal, Ventura County, California. For the California State Lands Commission and United States Coast Guard, Ms. Roster prepared the terrestrial biology section of the third-party joint EIS/EIR required under NEPA and the California Environmental Quality Act (CEQA) for this proposed offshore LNG facility. Document preparation required the siting of additional shore landingsites and pipeline routes, identification of project impacts, assessment of both construction and cumulative impacts on resources, and development of mitigation measures.

Ruby Natural Gas Pipeline, Wyoming to Oregon. For El Paso Corporation (now Kinder Morgan, Inc.), Ms. Roster managed all of E & E's preconstruction biological surveys for this 680-mile natural gas pipeline and was the client's representative for consultation with the state and federal natural resource agencies. She led the multidisciplinary biological team that conducted extensive ecological surveys across private, state, and federal lands in four states. To maximize the efficiency of data collection, Ms. Roster worked with E & E's geographic information system (GIS) and information technology experts to implement innovative field data collection, database management, and reporting systems, including web-based data mapping. For four years, she led a team of nearly 50 biologists to characterize existing biological conditions, conduct specific sensitive species surveys, and write reports and permit applications while maintaining daily coordination with the El Paso environmental management team. To address potential impacts on sensitive species, she worked with educational institutions and other nongovernmental organizations to implement innovative mitigation measures.

Ms. Roster also led environmental monitoring during the pipeline's construction, working with the client's environmental management and legal team to ensure compliance with environmental permit conditions.

Kern County Oil and Gas Development Zoning EIR, California. For the Kern County Planning and Community Development Division, Ms. Roster was the project manager for a project-level EIR that evaluated impacts associated with an amendment to Title 19 - Kern County Zoning Ordinance, focused on oil and gas local permitting. The EIR covered future Kern County oil and gas exploration and production activities within a 3,600 square mile (2.8 million acre) project boundary area over a 25-year planning horizon and included analysis of potential impacts associated with such activities, including well stimulation of hydraulic fracturing and underground injection. The proposed zoning amendment establishes updated development standards and conditions to address environmental impacts of oil and gas activities. The amendment also establishes a new "Oil and Gas Conformity Review" ministerial permit procedure for county approval of future well drilling and operations to ensure compliance with the updated standards and for ongoing tracking and compliance monitoring.

Ms. Roster managed the E & E team developing the EIR and facilitated the interaction with Kern County staff and their legal counsel. She worked with Kern County staff and their legal counsel to make sure all public comments received on the EIR were categorized correctly and ensured all response to comments were tagged to the correct comment category. She worked closely with the biological subcontractor to develop the biological resource section of the EIR and to develop responses to public comments. She attended public meetings to provide support to Kern County on biological resources, and to assist legal counsel with responses raised during the meetings.

Kern County Oil and Gas Development Zoning EIR, California. For the Kern County Planning and Community Development Division, Ms. Roster was the project manager for a project-level EIR that evaluated impacts associated with an amendment to Title 19 - Kern County Zoning Ordinance, focused on oil and gas local permitting. The EIR covered future Kern County oil and gas exploration and production activities within a 3,600 square mile (2.8 million acre) project boundary area over a 25-year planning horizon and included analysis of potential impacts associated with such activities, including well stimulation of hydraulic fracturing and underground injection. The proposed zoning amendment establishes updated development standards and conditions to address environmental impacts of oil and gas activities. Led by Ms. Roster, the E & E team worked with Kern County, outside legal counsel, and a coalition of oil and gas developers to address hundreds of public comments and revise impact and mitigation sections for the final EIR. To achieve the aggressive schedule for the Final EIS, E & E team members and outside counsel congregated at the County offices and worked non-stop over a two-week period to incorporate all comments into our CORES system and provide responses.

Education

Ph.D., Anthropology, University of Pennsylvania

B.A., Anthropology/Art History, University of California, Berkeley

Years of Experience

26

Certification/Licenses

Register of Professional Archaeologists, RPA #15820

NHPA Sections 106/110 Compliance

NEPA Compliance and Document Preparation

CEQA for Historical and Cultural Resources

40-Hour HAZWOPER Training

10-Hour OSHA Construction Awareness Training

CPR, AED, First Aid Trained

Professional Affiliations

Society for American Archaeology

Society for California Archaeology

Redlands Area Historical Society

Redlands Historic and Scenic Preservation Commission (Commissioner)

Availability for Plains

25%

Angela H. Keller, Ph.D., RPA

Principal Investigator/Archaeologist

Dr. Keller is a Registered Professional Archaeologist with more than two decades of archaeological experience working in California, the US Southwest, Belize, Mexico, and Europe. She has been with Statistical Research, Inc. (SRI) for 13 years. As a Principal Investigator with SRI, Dr. Keller coordinates cultural resources support, regulatory compliance, and quality assurance for numerous projects in California and the US West. She has administered a BLM cultural use permit and meets the Secretary of Interior's Professional Qualifications Standards for prehistoric and historic archaeology. Dr. Keller has experience and training in compliance with CEQA, NEPA, and Sections 106 and 110 of NHPA, as well as Native American coordination including compliance with California AB 52. Dr. Keller has presented papers in a variety of professional venues and authored more than 100 technical reports, articles, and book chapters. Dr. Keller's area of particular interest is landscape archaeology and spatial analysis of large-scale projects. Most of her work has focused on the prehistory and history of California and Mesoamerica with an emphasis on use of space, public architecture, land modification, military and mining history, and invertebrate analysis.

Intensive Survey and Site Evaluations, Marine Corps Air Ground Combat Center (MCAGCC) Twentynine Palms, San Bernardino County, California

Principal Investigator. For Naval Facilities Engineering Command Southwest (NAVFAC SW), Dr. Keller is supervising six concurrent task orders for the survey of approximately 30,000 acres and the evaluation of 26 previously recorded sites in the upper Johnson Valley expansion area of the MCAGCC. The projects involve recording a landscape of mining and prospecting dating largely to the mid-to-late twentieth century and aimed at the extraction of precious metals (gold and silver) and industrial commodities (iron and copper). Prehistoric sites cluster around now-dry lakebeds. **2015-Present**

Geoarchaeological Model Testing, Naval Support Activity Monterey, California

Principal Investigator. For NAVFAC SW, Dr. Keller supervised an intensive subsurface testing program to assess the archaeological sensitivity of the entire Main Base property. SRI's work refined a preliminary geoarchaeological model of buried site potential using hand-excavated augers in a grid array. Produced interim and final reports of findings with recommendations concerning monitoring and mitigation requirements for the Main Base. **2017-2018**

Banning Quarry Expansion Project, Riverside County, California

Principal Investigator. For Robertson's Ready Mix, Dr. Keller provided a cultural and paleontological resources assessment as required for CEQA compliance. The assessment included standard searches of the archives maintained by the California Historical Resources Information System, the Native American Heritage Commission, and the Natural History Museum of Los Angeles County, as well as historical archives including photographic collections and historical maps. **2017-2018**

Survey of 10,000 Acres at Naval Air Weapons Station (NAWS) China Lake,

California Principal Investigator. For Naval Facilities Engineering Command Atlantic, Dr. Keller supervised the survey of roughly 10,000 acres at the NAWS China Lake facility in Kern, San Bernardino, and Inyo Counties, California (2015-2017). The project entailed the intensive archaeological survey of the recessional north shoreline of pluvial Lake China, as required under Section 110 of NHPA. Crews documented all sites and isolated finds per base and California state standards, and collected diagnostic artifacts. Select project data presented at the 2016 Society for California Archaeology (SCA) Meetings. **2015–2017**

Metro Environmental Compliance On-Call Services, Los Angeles County, California

Principal Investigator. For Los Angeles County Metropolitan Transportation Authority (Metro), Dr. Keller supervised numerous task orders supporting development and maintenance projects including construction monitoring on three major rail projects. Supervised 35-40 technical specialists from eight consulting firms to provide a range of cultural and paleontological resources management services including construction monitoring, Native American monitoring, SHPO consultation, document review, compliance plan and technical report production, feature and site assessment, data and fossil recovery, and cultural resources regulatory consultation as required under CEQA, NEPA, and Section 106 of NHPA. Most projects required HAZWOPER-trained staff. **2013–2015**

M-70 Pipeline Repair Project, Angeles National Forest, California

Principal Investigator. For ExxonMobil, Dr. Keller supervised the permitting of a proposed pipeline repair project in the Angeles National Forest. Project work included records searches, archaeological survey, and coordination with the Angeles National Forest. The survey conducted under an ARPA permit issued by the Forest. Dr. Keller produced a report of survey and background research results for Forest approval. **2014–2015**

EIR Development for Six Oil and Gas Production Fields in Kern, Fresno, and Monterey Counties, California

Principal Investigator. For Chevron Energy, Dr. Keller oversaw the development of cultural resources and paleontological assessments in support of the compilation of Environmental Impact Report documents for six non-contiguous oil fields in three counties in California. She developed a new, streamlined process for cultural resources compliance under CEQA tailored to the needs of oil and gas exploration and extraction. Dr. Keller authored supporting technical reports and cultural resource sections required for the creation of six EIR documents in compliance with CEQA. **2012–2013**

Selected Cultural Resource Management Publications

2018 *Cultural and Paleontological Resource Evaluation and Impact Assessment for the 1111 Sunset Boulevard Project, City of Los Angeles, California.* Technical Report 18-05. Statistical Research, Redlands, California.

2018 *Cultural Resource Evaluation and Impact Assessment for the Banning Quarry Development Project, City of Banning, Riverside County, California.* Technical Report 18-03. Statistical Research, Redlands, California.

2017 *Cultural Resource Monitoring Report for the Goodman Commerce Center Specific Plan Project (No. 11-0271), City of Eastvale, Riverside County, California.* Technical Report 16-98. Statistical Research, Redlands, California.

2017 *An Archaeological Survey of 9,300 Acres at Marine Corps Air Ground Combat Center, Twentynine Palms, California.* Technical Report 17-41. Statistical Research, Redlands, California.

2017 *Evaluation of Seven Archaeological Sites in the Bessemer Mine and Galway Lake Training Areas at Marine Corps Air Ground Combat Center, Twentynine Palms, California.* Technical Report 17-11. Statistical Research, Redlands, California.



Ted offers his clients more than 39 years of hands on archaeological expertise, along with a strong understanding of regulations and well-established relationships with federal agencies.

EDUCATION

M.A. Anthropology, Colorado State University

B.A. Anthropology, Colorado State University

CERTIFICATIONS

Registered Professional

Archaeologist, Register of Professional Archaeologist

Ted Hoefler III, RPA

Cultural Resources

Mr. Hoefler has been conducting archaeological and historical investigations in the western United States since 1979. His research interests include cultural landscapes, modeling archaeological site locations, human behavioral ecology, hunter-gather subsistence and settlement, lithic technology, and the archaeology of historic mining. Mr. Hoefler has conducted work for most federal agencies, including the Bureau of Land Management (BLM), USDA Forest Service, Bureau of Reclamation (BOR), Federal Energy Regulatory Commission (FERC), U.S. Army Corps of Engineers (USACE), National Park Service (NPS), Federal Highway Administration (FHWA), and Federal Emergency Management Administration (FEMA). Mr. Hoefler has worked extensively with the National Environmental Protection Act (NEPA), the National Historic Preservation Act (NHPA), and Section 4f of the FHWA regulations and USACE Appendix C. He was a co-author on *Colorado Prehistory: A Context for the Rio Grande Basin* and a reviewer for *Colorado History: A Context for Historical Archaeology*.

Experience Prior to E & E

Cultural Resource Analysts, Inc. (CRA)

Mr. Hoefler served as the senior vice president for marketing and business development in Lexington, Kentucky and principal investigator CRA's western office in Longmont, Colorado. He was responsible for the daily operation of the Longmont, Colorado, Sheridan, Wyoming, and Woods Cross, Utah offices. Duties included marketing, proposal development, project and office budgeting, personnel management, project supervision, research design development, report editing, and photographer (BLM Level II – Medium Format).

Tallgrass Energy Haxtun Pipeline Replacement Project, Core Consultants, in Logan and Phillips Counties, Colorado. Mr. Hoefler was the principal investigator for a Class III inventory for 13 mile-FERC regulated pipeline (2016).

Boone Hill Solar Energy Project, sPower, Pueblo County, Colorado (2017). Mr. Hoefler was principal reviewer of a Class I review of the archaeological and historic background report of the 1,800-acre project area.

Town Of Fleming, Colorado Wastewater Treatment Facility, Logan County, Colorado. For the Town of Fleming, Mr. Hoefler was the principal investigator for a 54-acre inventory of the town's wastewater expansion area (2017).

Uinta Wind Project Expansion, Core Consultants, Uinta County, Wyoming (2017). Mr. Hoefler was the principal investigator for a file search and literature review of a 19,595-acre wind project.

Niyol Wind Energy Project, NextEra, Logan County, Colorado (2017). Mr. Hoefler was principal investigator on a Class I analysis of the archaeological and historic background on the project area.

Sheep Mountain 3D Seismic Inventory, Huerfano County, Colorado. For Dawson Geophysical, Mr. Hoefler was the principal investigator on the inventory of a 3D seismic exploration project that spans 18 sections (2015-2017).

Spring Creek Solar Project, Core Consultants, Cowley County, Kansas. Mr. Hoefler was the principal investigator for a file search and literature review of a 437-acre solar project (2016).

BLM Little Snake Field Office Vegetation Thinning Projects, Moffat County, Colorado. Mr. Hoefler was the principal investigator for a Class III inventory on several BLM tracts, including Simsberry (554 acres), Langley (4,374 acres), and Scandinavian Gulch (987 acres) (2016).

Alvin-Sand Hills Transmission Line, Tri-State Generation and Transmission, Grand County, Colorado. For Tri-State Generation and Transmission, Mr. Hoefler was the principal investigator on the inventory of 1,700 feet of transmission line on the Tri-State Alvin to Sand Hills Transmission Line (2015).

Converse County Oil and Gas Initiative EIS, Converse County, Wyoming. For Anadarko Petroleum Samson Oil and Gas Company, Mr. Hoefler was the principal investigator for the Class I investigation of the prehistoric and historic resources on a 1.5 million-acre project area. The project included in-depth archival research on the Bozeman Trail and the Child's Cut-off of the Oregon Trail. (2013-2015).

Encana-Burlington Resources Moneta Divide EIS, Fremont and Natrona Counties, Wyoming. Mr. Hoefler was the principal investigator for a Class I cultural resource analysis and EIS preparation of a 335,660-acre natural gas field development (2013-2016).

Uinta County 3D Seismic Project, Uinta County, Wyoming. For Epoch Southwest LLC and Dawson Geophysical, Mr. Hoefler was the principal investigator for a 1,400-mile 3D seismic inventory. Inventory was conducted on 1,000 miles of seismic lines and 400 miles of access roads and snail trails in a 200-section parcel. Nearly 400 sites were recorded and evaluated (2011-2012).

Encana Non-Pressurized Lance EIS, Sublette County, Wyoming. For ICF International, Mr. Hoefler was the principal investigator for a Class I cultural resource analysis and EIS preparation of the 140,859 acre natural gas field Development. (2010-2014).

Homer Deep/Winter Flats I and II, Class III Cultural Resource Inventory, Mesa and Garfield Counties, Colorado. For Black Hills Plateau Production, LLC, Mr. Hoefler was the principal investigator responsible for overseeing inventory of multiple well pads and access roads (2009-2010).

Campbell Hill Wind Energy Project Class III Cultural Resources Inventory, Duke Energy, Converse and Natrona Counties, Wyoming (2008-2009). Mr. Hoefler was the principal investigator for an inventory of a 3,500-acre wind energy project.

JOHN F. PEIRSON, JR.

Project Role: Hazards/Risk Evaluation

Education: Advanced Studies in Chemical Engineering Columbia University, B.S. Mathematics, Hartwick College

Expertise: Management of CEQA/NEPA Projects, Air Quality, Risk of Upset, Permitting and Compliance - 35 years

Mr. Peirson is President of MRS Environmental. Before joining MRS Environmental, he was a principal with Marine Research Specialists for 16 years. Prior to that Mr. Peirson was a Director in Arthur D. Little's Environmental Health & Safety Practice and Director in their Santa Barbara and Ventura offices. For more than 30 years, Mr. Peirson has been extensively involved in preparing CEQA documents for various State and local agencies. The focus of Mr. Peirson's work has mainly been in oil and gas development, remediation, and industrial chemical. He has also worked with several companies, including PXP, Shell, Aera Energy, Chevron, and Air Products on permitting diverse types of projects in California.

Mr. Peirson has been involved CEQA permitting activities since 1983. He has participated in the preparation and CEQA permitting of more than 60 major projects within California. Most of these projects have been very controversial and involved considerable work in developing permitting strategy. None of the EIRs that Mr. Peirson has led have ever been overturned in Court. Mr. Peirson has provided more than 600 hours of testimony to local and State decision makers, which have included Planning Commissions, Boards of Supervisors, the State Lands Commission and the California Coastal Commission. He also has extensive experience in working with local and State government staff in developing permit conditions and findings associated with development projects.

Mr. Peirson's relevant assignments include the following:

- Mr. Peirson was the Project Manager for the Phillips 66 Rail Spur and Unloading Facility EIR. This was one of the largest and most controversial project on the Central Coast in the last few decades. Mr. Peirson managed a team out about 20 staff members who were responsible for the development of the EIR. The EIR analysis looked at the impacts of rail operations throughout the State of California. The EIR also addressed impacts of crude oil trucking as part of the alternatives analysis. Mr. Peirson was responsible for coordinating the development and analysis of mitigation measures across the various issue areas assessed in the EIR. Mr. Peirson also served as one of the principal investigators for air quality and risk of upset.
- Mr. Peirson was Project Manager for the Excelaron Exploration and Development EIR. This EIR assessed the environmental impacts of a proposed oil and gas development project in the Huasna Valley, in San Luis Obispo County. The key issue areas in the EIR were air quality, GHGs, risk of upset, traffic, and fire protection. Mr. Peirson served as one of the principal investigators on air quality and risk of upset. The Project included the trucking of crude oil from the production site to refinery destinations in the Los Angeles basin. MR. Peirson worked closely with San Luis Obispo County Public Works on assessing the adequacy of private roads that were proposed for use as part of the Project.

- Mr. Peirson was Project Manager for the Guadalupe Oil Field Remediation and Abandonment EIR. This EIR evaluated environmental impacts associated with the remediation and abandonment of the Guadalupe Oil Field by Unocal. This highly environmentally sensitive site covers approximately 3,000 acres within the Guadalupe-Nipomo Dunes system. This highly complex project assessed several remediation technologies and their impacts and effectiveness on various spill locations with diverse characteristics. The project, which lasted more than two years, involved extensive field work both onshore and offshore. The project also included a six-month remedial investigation of the extent of the contamination. The site contains more than 90 petroleum plumes. The project involved over 100 staff members working in 18 different environmental issue areas.
- Mr. Peirson was the Project Manager of an EIR for the County of Los Angeles covering the development of a Community Standards District (CSD) for the Baldwin Hills Oil Field. The project involved the evaluation of a hypothetical development scenario to determine the level of impacts and associated mitigation measures. The mitigation measures were then used to develop a CSD, which would serve to regulate any future development within the Boundaries of the CSD. Mr. Peirson was responsible for managing the preparation of the EIR and for drafting CSD provisions.
- Mr. Peirson managed the permitting of a hydrogen plant in Carson, California for Air Products and Chemicals. The project involved developing a set of technical reports to support the applications to the City of Carson and the South Coast Air Quality Management District. The key technical reports covered air emissions, risk of upset, noise, and traffic. The project was approved by the City of Carson, and air permits for construction and operation were issued by the South Coast Air Quality Management District.
- Mr. Peirson was the Project Manager for the Santa Ynez Unit Development SEIR prepared for the County of Santa Barbara. The SEIR addressed the environmental impacts of proposed changes from the SYU project that focused primarily on the facilities in Las Flores Canyon. This was a controversial project at the time and involved considerable interaction with the Applicant and the public. Mr. Peirson managed a team of 25 professionals on the SEIR impact assessment.
- Mr. Peirson was Project Manager for Santa Barbara County's Tranquillon Ridge Oil and Gas Development Project, LOGP Produced Water Treatment System Project, and Sisquoc Pipeline Bi-Directional Flow Project EIR. This complicated EIR assessed the environmental impacts associated with three different, but interrelated projects proposed by three applicants. The proposed Tranquillon Ridge Project would involve the development of oil and gas wells in a proposed State Tidelands Lease from Platform Irene, which is in Federal Waters and is currently used to develop and produce the Point Pedernales Field. This EIR involved a wide range of alternatives for oil development, pipeline replacement, processing facility location, and drill mud/cuttings disposal.
- Mr. Peirson was the Program Manager for the Chevron Point Arguello Field Q-6 Supplemental EIR, which addressed the transportation of oil by tanker from the Gaviota Interim Marine Terminal. As part of this Supplemental EIR, he helped develop an air quality impact analysis for various tanker routes as well as for most of the alternatives covered in the Gaviota Marine Terminal Supplemental EIR/EIS. Mr. Peirson was also responsible for the preparation of the alternatives description and screening analysis done as part of the Q-6 Supplemental EIR.



Faye's diverse background in the military and within municipalities enables her to understand and mitigate risk from multiple perspectives.

EDUCATION

B.S., Environmental
Management, Columbia
Southern University

Faye Walstead Keelan

Hazards/Risk Evaluation

With 18 years' experience and through roles in the military and within municipalities Ms. Walstead Keelan has gained a solid understanding of government regulations, permit requirements, and standards. She specializes in emergency response and management, having received awards for her instruction of CBRN-E, HAZMAT, and emergency response courses. She is currently working toward certification with the International Association of Emergency Managers.

Professional Experience

Emergency Response Specialist, Portland, Oregon. Ms. Walstead Keelan provides on-call HAZMAT, oil, and CBRN-E emergency response and preparedness support to EPA Region 10 under the START-IV contract.

Resiliency and Emergency Planning Specialist, Portland, Oregon.

Ms. Walstead Keelan supports a variety of state and municipal clients with development of risk assessments, emergency plans, and emergency preparedness exercises.

Experience Prior to E & E

City of Forest Grove Administrative Services, Forest Grove, Oregon. As program coordinator for the City of Forest Grove Administrative Services and its many departments, Ms. Walstead Keelan performed a wide variety of confidential and complex administrative and technical duties. She conducted research and analysis on complex administrative and operational issues in the areas of sustainability, conservation and economic development; collaborated with advisory boards, commissions, and professional groups in the areas of sustainability, conservation, and economic development via regularly scheduled meetings; and prepared reports based on data collected, providing statistical and fiscal information. Ms. Walstead Keelan's responsibilities also included formulating, planning, and executing marketing strategies in support of the city's Light and Power and Economic Development programs and goals. She assisted in marketing program outcome evaluations and prioritized workload to ensure deadlines were met. While serving as the Light and Power department's public information officer, she acted as the department's liaison with the media in efforts to promote department programs; wrote and distributed press releases and responses to requests for information; and ensured compliance with public disclosure laws related to department records. While acting as staff liaison to the city's Sustainability Commission, Ms. Walstead Keelan attended all related meetings; evaluated the commission's proposed strategies; and recommended modifications where needed. She also developed programs to implement strategies related to economic development, sustainability, or conservation adopted by the City Council; updated, consulted with, and advised senior managers regarding customer outreach and marketing strategies related to department programs; maintained records; and evaluated the effectiveness of new or ongoing city programs.

City of Forest Grove Police Department, Forest Grove, Oregon. As Code Enforcement Officer for the Forest Grove Police Department, Faye responded to and investigated complaints concerning code violations regarding structures, land use, nuisances, and issues of public safety. She inspected properties and contacted owners to resolve complaints; issued investigation notices; conducted inquiries; and produced reports, maps and/or photo documentation.

Washington County Solid Waste and Recycling, Aloha, Oregon. As Code Enforcement Officer for this solid waste and recycling center, Ms. Walstead Keelan was responsible for researching records related to solid waste and nuisance control complaints, contacting affected agencies and individuals, and writing summaries of findings and recommendations. She also conducted violation investigations and processed violations of land development or solid waste and nuisance control ordinances, sending warnings to violators, issuing abatement or violation notices, and maintaining records of violation investigations. She reviewed past cases and actions, determined segregation compliance with land use designations or franchise conditions and service standards, and prepared violation letters for lot segregations, franchised collectors, and disposal site operators. Ms. Walstead Keelan was also responsible for reviewing requirements for building permit issuance, researching development case files, and reviewing conditions for approval and lot of record status.

City of Sioux Falls Environmental, Sioux Falls, South Dakota. As Acting Sustainability Coordinator, Ms. Walstead Keelan coordinated and observed day-to-day operations of the Hazardous Household Waste Facility and ensured consistent operations with employees and contractors. As Sustainability Technician, she assisted in the development and implementation of comprehensive public information programs including, but not limited to, recycling, resource conservation, solid waste diversion, reduction and disposal of household hazardous waste, and water conservation. She also prepared correspondence, records, and reports to document the implementation or modification of rules, laws, and policies relating to recycling and solid waste disposal.

City of Sioux Falls Landfill, Sioux Falls, South Dakota. As an environmental technician, Ms. Walstead Keelan collected water, wastewater, sludge, soil, and other samples, and performed field sampling and environmental monitoring at assigned locations. She monitored and maintained the landfill gas and leachate systems to include dual-phase well balancing, flare and compressor systems for the landfill gas, substations for leachate management and the SCADA system for monitoring all of these various components. She made recommendations to control or eliminate unsafe conditions at workplaces and public facilities; maintained files for hazardous materials, databases, chemical usage data, and information showing equipment locations; recorded test data; and prepared reports, summaries, and charts showing test results for air and water permit compliance. In addition, Ms. Walstead Keelan calibrated, operated, and maintained analytical sampling, flow monitoring, and leachate gas equipment per specifications.

United States Army, Multiple locations. Ms. Walstead Keelan's various roles in the military have included Company Warrant Officer/Executive Officer, HAZMAT Response Company; Instructor for Chemical, Biological, Radiological, Nuclear and High Yield Explosives Specialist Training, Advanced & Senior Leadership Courses, HAZMAT Operations and Technician Level Certification Courses; Platoon Sergeant, Observer/Controller, Drivers Training & Safety Lanes; Training NCO/Weapons of Mass Destruction Recon and Emergency Response; and Human Resources Specialist.



Carl is a transportation and land use planning expert. He has supported state and federal permitting and reporting for E & E's energy industry clients all over the country.

EDUCATION

M.U.P., Urban Planning,
University at Buffalo

B.A., Environmental Design,
University at Buffalo

CERTIFICATIONS

Certified Planner, American
Institute of Certified
Planners

Carl E. Sadowski, AICP

Traffic and Transportation

A certified planner with nine years' experience, Mr. Sadowski specializes in the development of urban and environmental plans and community outreach for sustainable communities, effective transportation networks, and alternative transportation modes.

Mr. Sadowski has coordinated with traffic engineers to plan and develop traffic impact studies that address a project's unique traffic concerns and meet CEQA and NEPA requirements. To support his projects, he conducts qualitative and quantitative statistical transportation and urban planning research using online survey tools, transportation routing software, and GIS applications. He performs socioeconomic and land use evaluations for EISs, environmental assessments (EAs), and environmental reviews (ERs) for proposed industrial plants, commercial/municipal facilities, pipelines, transportation and infrastructure projects, and urban and residential development projects.

He completes literature reviews; site file searches; and interviews with agency representatives, facility employees, and local residents to obtain information concerning existing and proposed site operations, regulatory compliance issues, and agency and public perceptions and concerns.

Third-Party EA, Borrego Border Project, Texas to Mexico. Mr. Sadowski supported E & E's project manager for development of an EA for the Borrego Border Project on behalf of the US Department of State, Office of Environmental Quality and Transboundary Issues. In addition to supporting review of the presidential permit application and associated documentation and technical reports to determine adequacy, Mr. Sadowski led development of the land use, transportation, and socioeconomic sections of the EA to address key issues related to the Texas region and any proposed alternatives.

Tacoma LNG SEPA EIS, Washington (2015). For the City of Tacoma, Development Service, E & E developed a third-party State Environmental Policy Act (SEPA) EIS for a proposed LNG bunkering facility at the Port of Tacoma, Washington, and related natural gas pipeline extensions and improvements. Mr. Sadowski analyzed transportation impacts and incorporated findings into the draft EIS.

Transmission and Wind

Great Northern Transmission Line Third-Party EIS, Minnesota. Mr. Sadowski developed the land use, transportation, and public services sections of an EIS for a proposed 220-mile, 500 kV transmission line. The high-profile project has national importance because the United States Department of Energy (DOE) is looking to use this project to demonstrate how a joint state/federal EIS can be completed in an expedited manner.

Northern Pass Transmission Line Third-Party EIS, Quebec, Canada to Deerfield, New Hampshire.

Mr. Sadowski researched and wrote the transportation section for the EIS, including vehicle and air infrastructure impacts from the proposed project, when E & E was selected by the DOE to assist in preparing a third-party EIS for this proposed \$1.4 billion, 192-mile, 345 kV transmission line extending from Quebec, Canada into New Hampshire

Mesa Substation Environmental Impact Report (EIR), Los Angeles County, California. The California Public Utilities Commission (CPUC) prepared this EIR to meet CEQA requirements for a substation project that includes transmission and telecommunications components. Ms. Sadowski prepared the transportation section of the EIR, which required close coordination with traffic engineers to ensure the traffic analysis met CEQA requirements.

Valley-Ivyglen Subtransmission Line and Alberhill System Project, Riverside County, California.

Mr. Sadowski drafted the transportation impacts section of the EIR that analyzed the environmental impacts of the Valley–Ivyglen Subtransmission and Alberhill System Projects. The projects were separate, but the EIR analyzed both due to their close proximity. The Valley–Ivyglen Project included a 26-mile, 115-kV subtransmission line and the Alberhill System Project included a 500-kV substation and about 23 miles of transmission line in southern California.



Paul has 24 years' experience in environmental investigations for energy development projects.

Paul E. Jones, P.G.

Geology

With 24 years' experience, Mr. Jones supports E & E investigations and remedial programs for sites containing hazardous materials and waste, USTs, pipeline facilities, and industrial and commercial facilities. Since 2014, Mr. Jones has been a member of E & E's San Francisco office, preparing hazards and hazardous materials, geology/soils, and mineral resources sections of environmental impact reports (EIRs) for construction of electrical transmission lines, electrical substations, natural gas pipelines, renewable energy power plants, and other projects.

EDUCATION

B.S., Geology, Southern Illinois University at Carbondale

CERTIFICATIONS

Licensed Professional Geologist, State of California

EIR for Amended Zoning Ordinance for Local Permitting of Oil and Gas Activities, Kern County, California. For the Kern County Planning and Community Development Division, Mr. Jones supported the preparation of the hazards/hazardous materials section, prepared the mineral resources section, and prepared a technical appendix of this extensive programmatic EIR, which

considered the environmental impacts from the proposed local permitting of oil and gas industry exploration and production activities on 3,110 square miles of County jurisdictional land in the western portion of Kern County. Mr. Jones researched and prepared the technical appendix, which compared and contrasted current drilling and hydraulic fracturing practices in eight oil and gas producing regions of the country with those in Kern County. The drilling and fracturing appendix described/compared/contrasted geologic characteristics, production statistics, drilling/hydraulic fracturing practices, water use practices, waste handling and disposal practices, and the various key oil and gas industry regulatory requirements for Kern County with those characteristics for the other oil and gas plays evaluated.

Mesa Substation EIR, Los Angeles County, California. The California Public Utilities Commission (CPUC) required this EIR to meet CEQA requirements for an electrical reliability enhancement project. Mr. Jones researched and prepared the geology/soils and mineral resources sections of this EIR, including the preparation of mitigation measures. The Mesa Substation EIR considered the environmental impacts from the construction of a new electrical substation, deconstruction of the existing substation, associated upgrades at a number of other substations, and construction of miles of associated telecommunications and electrical transmission lines. Technical topics evaluated include hazards such as strong seismic ground shaking, liquefaction, rupture of earthquake faults, landslides, unstable soils or geology, land subsidence, erosion, soil expansion or contraction, and suitability of soils for operation of septic tanks or alternative wastewater disposal systems. Technical topics evaluated as part of the mineral resources section include potential for the project to prevent the extraction of mineral resources such as sand and gravel, oil and gas, and other mineral commodities.

Rainbow Pipeline EIR, San Diego County, California. The CPUC required this EIR to meet CEQA requirements for a natural gas pipeline reliability enhancement project. Mr. Jones researched and prepared the geology/soils and mineral resources sections of this EIR, including the preparation of mitigation measures. The EIR considered the environmental impacts from the construction of a new pipeline and associated access roads, main line valves, interconnections with the existing system, lay-down yards, and de-rating of the pipeline it will replace. Technical topics evaluated include hazards such as strong seismic ground shaking, liquefaction, rupture of earthquake faults, landslides, unstable soils or geology, land subsidence, erosion, soil expansion or contraction, and suitability of soils for operation of septic tanks or alternative wastewater disposal systems. Technical topics evaluated as part of the mineral resources section include potential for the project to prevent the extraction of mineral resources such as sand and gravel, oil and gas, and other mineral commodities.

Del Mar IS/MND, San Diego County, California. The CPUC required this EIR to meet CEQA requirements for an electrical reliability enhancement project. Mr. Jones researched and prepared the geology/soils and mineral resources sections of this IS/MND, including the preparation of mitigation measures. The Del Mar IS/MND considered the environmental impacts from the removal of miles of existing electrical transmission lines, reconfiguration of other electrical transmission lines, and associated infrastructure. Technical topics evaluated include hazards such as strong seismic ground shaking, liquefaction, rupture of earthquake faults, landslides, unstable soils or geology, land subsidence, erosion, soil expansion or contraction, and suitability of soils for operation of septic tanks or alternative wastewater disposal systems. Technical topics evaluated as part of the mineral resources section include potential for the project to prevent the extraction of mineral resources such as sand and gravel, oil and gas, and other mineral commodities.

AVEP Solar Project, Kern County, California. The Kern County Planning and Natural Resources Department requested that the project proponent prepare a preliminary soils analysis to support the County's preparation of an EIR to meet CEQA requirements for this solar power generation project. Mr. Jones prepared the preliminary soils analysis, including recommendations for measures to mitigate impacts. The AVEP preliminary soils analysis considered the environmental impacts from the construction of new solar power arrays, transformers, generation tie lines to existing substations, and modifications at existing substations. Technical topics evaluated include hazards such as soil erosion, liquefaction, landslides, unstable soils or geology, land subsidence, soil expansion or contraction, and suitability of soils for operation of septic tanks or alternative wastewater disposal systems.

Zoning Ordinance Amendment to Allow Land Application of Biosolids, Kern County, California. The Kern County Planning and Natural Resources Department requested this EIR to meet CEQA requirements for this programmatic zoning ordinance amendment project. Mr. Jones researched and prepared the soils/geology and mineral resources sections analyses, including mitigate measures. The EIR analysis considered the environmental impacts from allowing the transportation and land application of biosolids on agricultural land in Kern County. Technical topics evaluated include hazards such as strong seismic ground shaking, liquefaction, rupture of earthquake faults, landslides, unstable soils or geology, land subsidence, erosion, soil expansion or contraction, and suitability of soils for operation of septic tanks or alternative wastewater disposal systems. Technical topics evaluated as part of the mineral resources section include potential for the project to prevent the extraction of mineral resources such as sand and gravel, oil and gas, and other mineral commodities.



A geologist and NEPA expert, Susan offers comprehensive experience analyzing development project impacts in the West and has managed and participated in numerous environmental investigations and projects for a wide range of clients.

EDUCATION

M.A., Geology, Queens College of the City University of New York

B.A., Geology, Queens College of the City University of New York

Graduate course work in geochemistry, State University of New York at Albany

Susan Serreze

Project Manager

Ms. Serreze's extensive experience in environmental project management—honed over 30 years in this field—includes multi-million dollar public and private sector projects predominantly in permitting and regulatory compliance programs. Her technical experience includes NEPA EAs and EISs, environmental investigation and remediation; and regulatory compliance.

Project Experience

BLM Greater Crossbow Third-Party EIS, Wyoming. Ms. Serreze was project manager for a third-party EIS for oil and gas development in central Wyoming. This project spanned two BLM field offices (FOs) and included part of the Thunder Basin National Grassland. She successfully managed the needs and expectations for two clients with their distinct nuances and stakeholders. Key issues for this EIS were special status species, groundwater, air quality, and surface use on USDA Forest Service lands including paleontological resources. Ms. Serreze managed all phases of the draft EIS preparation including participating in meetings with stakeholders. Ms. Serreze completed 20 technical reports to support the USDA Forest Service.

Pan Project Third-Party EA, Ely, Nevada. Ms. Serreze completed a third-party EA for the BLM Ely FO. This EA was in response to proposed mine exploration in an area of potentially significant cultural resources. Ms. Serreze worked closely with the BLM project manager and resources specialists to determine resources of concern

for this project. Ms. Serreze evaluated or reviewed and revised all resources brought forward for analysis, including paleontology, wildlife, special status species, soil, vegetation, cultural, visual, and recreation resources. Potential temporary and long-term impacts to resources were evaluated along with mitigating and reclamation measures. Cumulative impacts to resources were evaluated.

Neon Third-Party EA, Rocky Mountain National Park, Colorado. Ms. Serreze developed a third-party EA for a National Ecological Observation Network (NEON) site in the Rocky Mountain National Park, for the National Park Service (NPS). Of key concern for this EA was the visual impact of a 28-meter tower from adjacent park land and from recreational vistas such as Long's Peak and other nearby peaks. She prepared public scoping materials, and further developed much of the existing environment and impact analysis.

Neon Third-Party EA, Yellowstone National Park, Colorado. Ms. Serreze contributed to a third-party EA for a NEON site in the Rocky Mountain National Park, for the NPS. Of key concern for this EA was the visual impact of a 28-meter tower from adjacent parkland and recreational vistas. She developed sections of the existing environment and impact analysis including geology and soil.

Bakersfield RMPA/SEIS for BLM, California. Ms. Serreze recently completed developing the existing environmental assessment and impact analysis sections for soil, geology, and Areas of Critical Environmental Concern (ACECs) for the BLM Bakersfield Field Office. This effort was to determine the impact of hydraulic fracturing on BLM resources.

Programmatic Targeted Grazing Environmental Assessment for the Nevada BLM. Ms. Serreze developed the existing environment section for soils to support this statewide EA. Ms. Serreze reviewed RMPs from all Nevada field offices and resolved technical and stylistic differences between the field office RMPs to describe soil characteristics that would support the impact.

RMPA and EA for a Solar Designation Leasing Area, BLM Las Vegas Field Office, Nevada. Ms. Serreze developed preliminary resources of concern, existing environment and impact analysis sections for a solar designation area. She reviewed previous BLM NEPA documents, consolidated information and determined impacts to paleontological, soil, geology, and visual resources.

Fortification Creek RMPA/EA for BLM, Buffalo, Wyoming. Ms. Serreze was the project manager for development of the Fortification Creek RMPA/EA. The focus of this EA was coal bed methane development. She was the key author of this RMPA/EA and developed or provided major revision to the air quality, soil, geology, paleontology, fluid minerals, surface water, groundwater, and visual resources sections and to fuels and fire, transportation, recreation, socioeconomics, special designations, and environmental justice sections.

Canyons of the Ancients RMP/EIS for BLM, Cortez, Colorado. Ms. Serreze was principal technical editor, coordinating the efforts of authors and subcontractors to ensure the RMP/EIS was written in a consistent style and voice. She edited the Affected Environment and Impact Analysis sections of the draft RMP and wrote the geology, paleontology, and soil resources sections.

Roan Plateau RMPA/EIS and RMPA/SEIS for BLM, Colorado. Ms. Serreze served as document and data manager in the BLM Roan Plateau RMPA/EIS, and was assistant project manager and a key author on the Roan Plateau RMPA/SEIS for the BLM Colorado River Valley FO. E & E developed this RMPA/SEIS in response to a judicial decision remanding the original Record of Decision (ROD). Ms. Serreze has participated in all phases of the project.

American Flat Mill EA for BLM, Carson City, Nevada. Ms. Serreze was a lead author for the development of an EA for disposition of the American Flat Mill in the Comstock Mining District of Nevada. Ms. Serreze developed the affected environment and environmental consequences sections for most resources, assisted in the formulation of detailed alternatives, and coordinated information and text from other resource specialists.

Office of Surface Mining Programmatic EIS for Impacts to Streams from Coal Mining. Ms. Serreze participated in a programmatic EIS to consider the impact of potential revisions to regulations implementing the Surface Mining Reclamation and Control Act of 1977 (SMCRA). These revisions were intended to improve protection of streams from the adverse impacts of surface coal mining operations. She developed the soil existing environment and environmental consequences sections of the report.



Erin A. Lynch, P.G.

Water Resources

As a project manager and chief hydrogeologist, Erin has planned and implemented complex RIs and site assessments and develops site-specific removal programs.

EDUCATION

M.S., Geology, Michigan State University

B.S., Geology/Geophysics, Michigan State University

CERTIFICATIONS

Registered Professional Geologist, State of Oregon

Ms. Lynch offers over 30 years' experience in the evaluation, assessment, and interpretation of hydrological, hydrogeological, geophysical, and geological data. As a project manager and chief hydrogeologist, her responsibilities encompass design and implementation of sampling programs, aquifer test design and analysis, development of conceptual site models, groundwater flow and contaminant fate and transport modeling, and statistical analyses. She was recently lead geologist for the Kern County Oil and Gas Development Zoning EIR, for which E & E assessed impacts associated with drilling an average of 2,697 new wells per year for the next 25 years in the western half of the county—an area that relies heavily on groundwater for its annual supply.

Ruby Natural Gas Pipeline, Wyoming to Oregon. For El Paso Corporation (now Kinder Morgan, Inc.), Ms. Lynch served as the lead hydrologist in E & E's preparation of the Federal Energy Regulatory Commission (FERC) water resource report and water related state and federal permits for this high profile, four-state, 675-mile natural gas pipeline. In addition to preparing the water resource report, she also prepared the hydrostatic test plan and the waterbody crossing risk

assessment and monitoring plans. Ms. Lynch provided expert advice and technical support in identifying and sampling water sources for hydrostatic testing and dust abatement and in identifying appropriate locations and methods for hydrostatic test water discharge.

Water was a particularly sensitive issue for this area of the country from both a quality and quantity standpoint and required a high level of communication with the appropriate state agencies. She represented El Paso with the United States Fish and Wildlife Service (USFWS). She assisted the USFWS in the development of their waterbody crossing risk assessment methodology and is an author with the USFWS on a recent paper presenting the methodology. Ms. Lynch represented El Paso with tribes along the project route that expressed concern over potential damage to sacred waters and numerous other issues that arose during pipeline construction. She has also successfully provided her expertise post-construction representing El Paso with landowners along the project route claiming damage to their water resources from construction.

Northern Pass Transmission Line Third-Party EIS, Quebec, Canada to Deerfield, New Hampshire.

Ms. Lynch was E & E's lead scientist for preparation of both water resources and geology and soils technical reports in support of a third-party EIS submitted to DOE for this proposed 192-mile high-voltage direct current (HVDC) transmission line, designed to deliver hydropower from Quebec to southern New Hampshire. This is a high profile project because of its international nature and because it crosses National Forest land. Water resources were of particular concern on this project and work was highly scrutinized by the Forest Service and other stakeholder agencies.

Kern County Oil and Gas Development Zoning EIR Assessment. For the Kern County Planning and Community Development Division, Ms. Lynch was responsible for writing the hydrology section and preparing the water quality map for a project-level environmental impact report (EIR) that evaluates impacts associated with an amendment to Title 19- Kern County Zoning Ordinance, focused on local oil and gas permitting. The EIR covers future Kern County oil and gas exploration and production activities within a 3,600 square mile (2.8 million acre) project boundary area and includes an analysis of potential environmental impacts associated with exploration and extraction activities, including well stimulation of hydraulic fracturing and underground injection. The proposed zoning amendment will establish updated development standards and conditions to address environmental impacts of oil and gas activities. It will also establish a new “Oil and Gas Conformity Review” ministerial permit procedure for county approval of future well drilling and operations to ensure compliance with the updated development standards and conditions and for ongoing tracking and compliance monitoring.

SCE Eldorado-Ivanpah Transmission Project (EITP), Nevada to California. For the California Public Utilities Commission (CPUC) and BLM, Ms. Lynch helped prepare the hydrology and water quality section of the award-winning, joint third-party EIR/EIS that E & E prepared under the California Environmental Quality Act (CEQA) and NEPA for this 35-mile transmission line and substation project of Southern California Edison (SCE). She reviewed the preliminary hydrology and water quality reports to help ensure their adequacy.

Triton Substation, Riverside County, California. For CPUC, she is preparing the hydrology and water quality sections of E & E’s third-party initial study and mitigation, monitoring, and reporting plan for this SCE project.

Alberhill Substation and Transmission Lines, Riverside County, California. For CPUC, she is a member of the E & E team preparing a third-party EIR for this proposed SCE substation and associated transmission lines.

PG&E Palermo-East Nicolaus Line, Northern California. For CPUC, Ms. Lynch prepared the hydrology and water quality sections of E & E’s third-party CEQA initial study addressing a transmission line reconstruction project intended to help meet present and forecasted electric demands in Butte, Yuba, and Sutter Counties.

Shiloh III Wind Farm, Solano County, California. For the Solano County Department of Resource Management, she prepared the hydrology and water quality sections of E & E’s third-party EIR for this wind energy plant, to be located adjacent to the Shiloh I and II facilities in the Montezuma Hills wind resource area. The EIR addressed potential environmental impacts of developing the Shiloh III project to produce up to 118 MW of wind-generated electricity with 59 wind turbines and associated generators, towers, foundations, and pad-mounted transformers; project access roads, control cables, and power collection cables; a substation; and transmission lines.

Appendix B

Comments to Standard Contract Provisions

AGREEMENT FOR SERVICES OF INDEPENDENT CONTRACTOR

THIS AGREEMENT (hereafter Agreement) is made by and between the County of Santa Barbara, a political subdivision of the State of California (hereafter COUNTY) and {ENTER BUSINESS} having its principal place of business at {ENTER ADDRESS} (hereafter CONTRACTOR) wherein CONTRACTOR agrees to provide and COUNTY agrees to accept the services specified herein.

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, the parties agree as follows:

1. DESIGNATED REPRESENTATIVE. {ENTER REPRESENTATIVE'S NAME} at phone number {ENTER PHONE NUMBER} is the representative of COUNTY and will administer this Agreement for and on behalf of COUNTY. {ENTER CONTRACTOR REPRESENTATIVE} at phone number {ENTER PHONE NUMBER} is the authorized representative for CONTRACTOR. Changes in designated representatives shall be made only after advance written notice to the other party.

2. NOTICES. Any notice or consent required or permitted to be given under this Agreement shall be given to the respective parties in writing, by first class mail, postage prepaid, or otherwise delivered as follows:

To COUNTY: {ENTER NAME, BUSINESS, ADDRESS, STATE, ZIP}
To CONTRACTOR: {ENTER NAME, BUSINESS, ADDRESS, STATE, ZIP}

or at such other address or to such other person that the parties may from time to time designate. Notices and consents under this section, which are sent by mail, shall be deemed to be received five (5) days following their deposit in the U.S. mail.

3. SCOPE OF SERVICES. CONTRACTOR agrees to provide services to COUNTY in accordance with EXHIBIT A attached hereto and incorporated herein by reference.

4. TERM. CONTRACTOR shall commence performance on {ENTER DATE} and end performance upon completion, but no later than {ENTER DATE} unless otherwise directed by COUNTY or unless earlier terminated.

5. COMPENSATION OF CONTRACTOR. CONTRACTOR shall be paid for performance under this Agreement in accordance with the terms of EXHIBIT B attached hereto and incorporated herein by reference. Billing shall be made by invoice, which shall include the contract number assigned by COUNTY and which is delivered to the address given in Section 2 **NOTICES**, above following completion of the increments identified on EXHIBIT B. Unless otherwise specified on EXHIBIT B, payment shall be net thirty (30) days from presentation of invoice.

6. INDEPENDENT CONTRACTOR. CONTRACTOR shall perform all of its services under this Agreement as an independent contractor and not as an employee of COUNTY. CONTRACTOR understands and acknowledges that it shall not be entitled to any of the benefits of a COUNTY employee, including but not limited to vacation, sick leave, administrative leave, health insurance, disability insurance, retirement, unemployment insurance, workers' compensation and protection of tenure.

7. STANDARD OF PERFORMANCE. CONTRACTOR represents that it has the skills, expertise, and licenses/permits necessary to perform the services required under this Agreement. Accordingly, CONTRACTOR shall perform all such services in the manner and according to the standards observed by a competent practitioner of the same profession in which CONTRACTOR is engaged. All products of whatsoever nature, which CONTRACTOR delivers to COUNTY pursuant to this Agreement, shall be prepared in a first class and workmanlike manner and shall conform to the standards of quality normally observed by a person practicing in CONTRACTOR's profession. CONTRACTOR shall correct or revise

any errors or omissions, at COUNTY'S request without additional compensation. Permits and/or licenses shall be obtained and maintained by CONTRACTOR without additional compensation.

8. TAXES. COUNTY shall not be responsible for paying any taxes on CONTRACTOR's behalf, and should COUNTY be required to do so by state, federal, or local taxing agencies, CONTRACTOR agrees to promptly reimburse COUNTY for the full value of such paid taxes plus interest and penalty, if any. These taxes shall include, but not be limited to, the following: FICA (Social Security), unemployment insurance contributions, income tax, disability insurance, and workers' compensation insurance.

9. CONFLICT OF INTEREST. CONTRACTOR covenants that CONTRACTOR presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement. CONTRACTOR further covenants that in the performance of this Agreement, no person having any such interest shall be employed by CONTRACTOR.

The term "organizational conflict of interest" means that a relationship exists whereby CONTRACTOR has interests which may diminish the capacity to give impartial, technically sound, objective assistance and advice or may otherwise result in a biased work product or may result in an unfair competitive advantage.

CONTRACTOR agrees that if an organizational conflict of interest is discovered with respect to this CONTRACT, CONTRACTOR shall make an immediate and full disclosure in writing to COUNTY which shall include a description of the action which the CONTRACTOR has taken or proposes to take to avoid, eliminate or neutralize the conflict. COUNTY may, however, terminate the CONTRACT if it could be in the best interests of the COUNTY.

0. RESPONSIBILITIES OF COUNTY. COUNTY shall provide all information reasonably necessary by CONTRACTOR in performing the services provided herein.

1. OWNERSHIP OF DOCUMENTS. COUNTY shall be the owner of the following items incidental to this Agreement upon production, whether or not completed: all data collected, all documents of any type whatsoever, and any material necessary for the practical use of the data and/or documents from the time of collection and/or production whether or not performance under this Agreement is completed or terminated prior to completion. CONTRACTOR shall not release any materials under this section except after prior written approval of COUNTY.

No materials produced in whole or in part under this Agreement shall be subject to copyright in the United States or in any other country except as determined at the sole discretion of COUNTY. COUNTY shall have the unrestricted authority to publish, disclose, distribute, and otherwise use in whole or in part, any reports, data, documents or other materials prepared under this Agreement.

2. RECORDS, AUDIT, AND REVIEW. CONTRACTOR shall keep such business records pursuant to this Agreement as would be kept by a reasonably prudent practitioner of CONTRACTOR's profession and shall maintain such records for at least four (4) years following the termination of this Agreement. All accounting records shall be kept in accordance with generally accepted accounting practices. COUNTY shall have the right to audit and review all such documents and records at any time during CONTRACTOR's regular business hours or upon reasonable notice.

3. INDEMNIFICATION AND INSURANCE. CONTRACTOR shall agree to defend, indemnify and save harmless the COUNTY and to procure and maintain insurance in accordance with the provisions of EXHIBIT C attached hereto and incorporated herein by reference.

4. NONDISCRIMINATION. COUNTY hereby notifies CONTRACTOR that COUNTY's Unlawful Discrimination Ordinance (Article XIII of Chapter 2 of the Santa Barbara County Code) applies to this

Agreement and is incorporated herein by this reference with the same force and effect as if the ordinance were specifically set out herein and CONTRACTOR agrees to comply with said ordinance.

15. **NONEXCLUSIVE AGREEMENT.** CONTRACTOR understands that this is not an exclusive Agreement and that COUNTY shall have the right to negotiate with and enter into contracts with others providing the same or similar services as those provided by CONTRACTOR as the COUNTY desires.

16. **ASSIGNMENT.** CONTRACTOR shall not assign any of its rights nor transfer any of its obligations under this Agreement without the prior written consent of COUNTY and any attempt to so assign or so transfer without such consent shall be void and without legal effect and shall constitute grounds for termination.

17. **TERMINATION.**

A. **By COUNTY.** COUNTY may, by written notice to CONTRACTOR, terminate this Agreement in whole or in part at any time, whether for COUNTY's convenience or because of the failure of CONTRACTOR to fulfill the obligations herein. Upon receipt of notice, CONTRACTOR shall immediately discontinue all services effected (unless the notice directs otherwise), and deliver to COUNTY all data, estimates, graphs, summaries, reports, and all other records, documents or papers as may have been accumulated or produced by CONTRACTOR in performing this Agreement, whether completed or in process.

1. For Convenience. COUNTY may terminate this Agreement upon thirty (30) days written notice. Following notice of such termination, CONTRACTOR shall promptly cease work and notify COUNTY as to the status of its performance.

Notwithstanding any other payment provision of this Agreement, COUNTY shall pay CONTRACTOR for service performed to the date of termination to include a prorated amount of compensation due hereunder less payments, if any, previously made. In no event shall CONTRACTOR be paid an amount in excess of the full price under this Agreement nor for profit on unperformed portions of service. CONTRACTOR shall furnish to COUNTY such financial information as in the judgment of COUNTY is necessary to determine the reasonable value of the services rendered by CONTRACTOR. In the event of a dispute as to the reasonable value of the services rendered by CONTRACTOR, the decision of COUNTY shall be final. The foregoing is cumulative and shall not effect any right or remedy which COUNTY may have in law or equity.

2. For Cause. Should CONTRACTOR default in the performance of this Agreement or materially breach any of its provisions, COUNTY may, at COUNTY's sole option, terminate this Agreement by written notice, which shall be effective upon receipt by CONTRACTOR.

B. **By CONTRACTOR.** Should COUNTY fail to pay CONTRACTOR all or any part of the payment set forth in EXHIBIT B, CONTRACTOR may, at CONTRACTOR's option terminate this agreement if such failure is not remedied by COUNTY within thirty (30) days of written notice to COUNTY of such late payment.

18. **SECTION HEADINGS.** The headings of the several sections, and any Table of Contents appended hereto, shall be solely for convenience of reference and shall not affect the meaning, construction or effect hereof.

19. **SEVERABILITY.** If any one or more of the provisions contained herein shall for any reason be held to be invalid, illegal or unenforceable in any respect, then such provision or provisions shall be deemed severable from the remaining provisions hereof, and such invalidity, illegality or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

20. REMEDIES NOT EXCLUSIVE. No remedy herein conferred upon or reserved to COUNTY is intended to be exclusive of any other remedy or remedies, and each and every such remedy, to the extent permitted by law, shall be cumulative and in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or otherwise.

21. TIME IS OF THE ESSENCE. Time is of the essence in this Agreement and each covenant and term is a condition herein.

22. NO WAIVER OF DEFAULT. No delay or omission of COUNTY to exercise any right or power arising upon the occurrence of any event of default shall impair any such right or power or shall be construed to be a waiver of any such default or an acquiescence therein; and every power and remedy given by this Agreement to COUNTY shall be exercised from time to time and as often as may be deemed expedient in the sole discretion of COUNTY.

23. ENTIRE AGREEMENT AND AMENDMENT. In conjunction with the matters considered herein, this Agreement contains the entire understanding and agreement of the parties and there have been no promises, representations, agreements, warranties or undertakings by any of the parties, either oral or written, of any character or nature hereafter binding except as set forth herein. This Agreement may be altered, amended or modified only by an instrument in writing, executed by the parties to this Agreement and by no other means. Each party waives their future right to claim, contest or assert that this Agreement was modified, canceled, superseded, or changed by any oral agreements, course of conduct, waiver or estoppel.

24. SUCCESSORS AND ASSIGNS. All representations, covenants and warranties set forth in this Agreement, by or on behalf of, or for the benefit of any or all of the parties hereto, shall be binding upon and inure to the benefit of such party, its successors and assigns.

25. COMPLIANCE WITH LAW. CONTRACTOR shall, at his sole cost and expense, comply with all County, State and Federal ordinances and statutes now in force or which may hereafter be in force with regard to this Agreement. The judgment of any court of competent jurisdiction, or the admission of CONTRACTOR in any action or proceeding against CONTRACTOR, whether COUNTY be a party thereto or not, that CONTRACTOR has violated any such ordinance or statute, shall be conclusive of that fact as between CONTRACTOR and COUNTY.

26. CALIFORNIA LAW. This Agreement shall be governed by the laws of the State of California. Any litigation regarding this Agreement or its contents shall be filed in the County of Santa Barbara, if in state court, or in the federal district court nearest to Santa Barbara County, if in federal court.

27. EXECUTION OF COUNTERPARTS. This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the parties shall preserve undestroyed, shall together constitute one and the same instrument.

28. AUTHORITY. All parties to this Agreement warrant and represent that they have the power and authority to enter into this Agreement in the names, titles and capacities herein stated and on behalf of any entities, persons, or firms represented or purported to be represented by such entity(ies), person(s), or firm(s) and that all formal requirements necessary or required by any state and/or federal law in order to enter into this Agreement have been fully complied with. Furthermore, by entering into this Agreement, CONTRACTOR hereby warrants that it shall not have breached the terms or conditions of any other contract or agreement to which CONTRACTOR is obligated, which breach would have a material effect hereon.

29. PRECEDENCE. In the event of conflict between the provisions contained in the numbered sections of this Agreement and the provisions contained in the Exhibits, the provisions of the Exhibits shall prevail over those in the numbered sections.

30. **SUBCONTRACTORS**. CONTRACTOR is authorized to subcontract with subcontractors identified in Contractor's Proposal. CONTRACTOR shall be fully responsible for all services performed by its subcontractor. CONTRACTOR shall secure from its subcontractor all rights for COUNTY in this Agreement, including audit rights.

31. **HANDLING OF PROPRIETARY INFORMATION**. CONTRACTOR understands and agrees that certain materials which may be provided by COUNTY may be classified and conspicuously labelled as proprietary confidential information. That material is to be subject to the following special provisions:

A. All reasonable steps will be taken to prevent disclosure of the material to any person except those personnel of CONTRACTOR working on the project who have a need to use the material.

B. Upon conclusion of CONTRACTOR'S work, CONTRACTOR shall return all copies of the material direct to party providing such material. CONTRACTOR shall contact COUNTY to obtain the name of the specific party authorized to receive the material.

32. **IMMATERIAL CHANGES**. CONTRACTOR and COUNTY agree that immaterial changes to the Statement of Work (time frame and mutually agreeable Statement of Work changes which will not result in a change to the total contract amount) may be authorized by Planning and Development Director, or designee in writing, and will not constitute an amendment to the Agreement.

33. **NEWS RELEASES/INTERVIEWS**. CONTRACTOR agrees for itself, its agents, employees and subcontractors, it will not communicate with representatives of the communications media concerning the subject matter of this Agreement without prior written approval of the COUNTY Project Coordinator. CONTRACTOR further agrees that all media requests for communication will be referred to COUNTY'S responsible personnel.

//
//
Agreement for Services of Independent Contractor between the **County of Santa Barbara** and **{ENTER CONTRACTOR}**.

IN WITNESS WHEREOF, the parties have executed this Agreement to be effective on the date executed by COUNTY.

ATTEST:
CLERK OF THE BOARD
MONA MIYASATO

COUNTY OF SANTA BARBARA:

By: _____ By: _____
Deputy Chair, Board of Supervisors
Date:

RECOMMENDED FOR APPROVAL:

CONTRACTOR:

By: _____ By: _____
Department Head SocSec or TaxID Number _____

APPROVED AS TO FORM:
MICHAEL GHIZZONI
COUNTY COUNSEL

APPROVED AS TO ACCOUNTING FORM:
ROBERT W GEIS, CPA
AUDITOR-CONTROLLER

By: _____ By: _____
Deputy County Counsel Deputy

APPROVED AS TO FORM:
RISK MANAGEMENT

By: _____
Risk Management

EXHIBIT A
STATEMENT OF WORK

//

//

//

//

//

EXHIBIT B

PAYMENT ARRANGEMENTS
Periodic Compensation (with attached Schedule of Fees)

A. For CONTRACTOR services to be rendered under this contract, CONTRACTOR shall be paid a total contract amount, including cost reimbursements, on a fixed price basis

Deleted: not to exceed

B. Payment for services shall be made upon CONTRACTOR's satisfaction of the scope and methodology contained in **EXHIBIT A** as determined by the CONTRACTOR. Payment shall be based on the completion of milestones, as defined in **Attachment B1**

Deleted: and /or reimbursement of costs

Deleted: and/or reimbursement of costs

Deleted: upon the costs, expenses, overhead charges and hourly rates for personnel

C. {ENTER PERIOD(i.e., monthly, quarterly, annually)}, CONTRACTOR shall submit to COUNTY DESIGNATED REPRESENTATIVE an invoice or certified claim of work performed over the period specified. These invoices or certified claims shall include the Contract Number. COUNTY REPRESENTATIVE shall evaluate the invoices or certified claims if found to be satisfactory and within the cost basis of **Attachment B1**. COUNTY shall pay invoices or claims for satisfactory work within 30 days of presentation.

Deleted: (Schedule of Fees). Invoices submitted for payment that are based upon **Attachment B1** must contain sufficient detail to enable an audit of the charges and provide supporting documentation if so specified in **EXHIBIT A**.

D. COUNTY's failure to discover or object to any unsatisfactory work or billings prior to payment will not constitute a waiver of COUNTY's right to require CONTRACTOR to correct such work or billings or seek any other legal remedy.

EXHIBIT C

Indemnification and Insurance Requirements (For Professional Contracts)

INDEMNIFICATION

CONTRACTOR agrees to indemnify and hold harmless COUNTY and its officers, officials, employees, agents and volunteers from and against any and all claims, actions, losses, damages, judgments and/or liabilities, including reasonable attorney's fees incurred by COUNTY, to the extent proximately caused by CONTRACTOR's negligent acts, errors or omissions, in the performance of this Agreement, except where such indemnification is prohibited by law. CONTRACTOR's indemnification obligation does not apply to COUNTY's negligence or willful misconduct.

Deleted: , defend (with counsel reasonably approved by COUNTY)

Deleted: arising out of this Agreement from any cause whatsoever, including the

Deleted: of any person or entity and for any costs or expenses (including but not limited to attorneys' fees) incurred by COUNTY on account of any claim

Deleted: applies to COUNTY's active as well as passive negligence but

Deleted: sole

NOTIFICATION OF ACCIDENTS AND SURVIVAL OF INDEMNIFICATION PROVISIONS

CONTRACTOR shall notify COUNTY immediately in the event of any accident or injury arising out of or in connection with this Agreement. The indemnification provisions in this Agreement shall survive any expiration or termination of this Agreement.

INSURANCE

CONTRACTOR shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the CONTRACTOR, his agents, representatives, employees or subcontractors.

A. Minimum Scope of Insurance

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office (ISO) Form CG 00 01 covering CGL on an "occurrence" basis, including products-completed operations, personal & advertising injury, with limits no less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate.
2. **Automobile Liability:** ISO Form Number CA 00 01 covering any auto (Code 1), or if CONTRACTOR has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limit no less than \$1,000,000 per accident for bodily injury and property damage.
3. **Workers' Compensation:** as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
4. **Professional Liability (Errors and Omissions)** Insurance appropriate to the CONTRACTOR'S profession, with limit of no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate.

If the CONTRACTOR maintains higher limits than the minimums shown above, the COUNTY requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the COUNTY.

B. Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions:

1. **Additional Insured** – COUNTY, its officers, officials, employees, agents and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the CONTRACTOR including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the CONTRACTOR's insurance at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is used).
2. **Primary Coverage** – For any claims related to this Agreement, the CONTRACTOR's insurance coverage shall be primary insurance as respects the COUNTY, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the COUNTY, its officers, officials, employees, agents or volunteers shall be excess of the CONTRACTOR's insurance and shall not contribute with it.
3. **Notice of Cancellation** – Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the COUNTY.
4. **Waiver of Subrogation Rights** – CONTRACTOR hereby grants to COUNTY a waiver of any right to subrogation which any insurer of said CONTRACTOR may acquire against the COUNTY by virtue of the payment of any loss under such insurance. CONTRACTOR agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not the COUNTY has received a waiver of subrogation endorsement from the insurer.
5. **Deductibles and Self-Insured Retention** – Any deductibles or self-insured retentions must be declared to and approved by the COUNTY. The COUNTY may require the CONTRACTOR to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.
6. **Acceptability of Insurers** – Unless otherwise approved by Risk Management, insurance shall be written by insurers authorized to do business in the State of California and with a minimum A.M. Best's Insurance Guide rating of "A- VII".
7. **Verification of Coverage** – CONTRACTOR shall furnish the COUNTY with proof of insurance, original certificates and amendatory endorsements as required by this Agreement. The proof of insurance, certificates and endorsements are to be received and approved by the COUNTY before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the CONTRACTOR's obligation to provide them. The CONTRACTOR shall furnish evidence of renewal of coverage throughout the term of the Agreement. The COUNTY reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.
8. **Failure to Procure Coverage** – In the event that any policy of insurance required under this Agreement does not comply with the requirements, is not procured, or is canceled and not replaced, COUNTY has the right but not the obligation or duty to terminate the Agreement. Maintenance of required insurance coverage is a

Deleted: purchase coverage with a lower deductible or retention or

material element of the Agreement and failure to maintain or renew such coverage or to provide evidence of renewal may be treated by COUNTY as a material breach of contract.

9. **Subcontractors** – CONTRACTOR shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and CONTRACTOR shall ensure that COUNTY is an additional insured on insurance required from subcontractors.
10. **Claims Made Policies** – If any of the required policies provide coverage on a claims-made basis:
 - i. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
 - ii. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of contract work.
 - iii. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the CONTRACTOR must purchase “extended reporting” coverage for a minimum of five (5) years after completion of contract work.
11. **Special Risks or Circumstances** – COUNTY reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Any change requiring additional types of insurance coverage or higher coverage limits must be made by amendment to this Agreement. CONTRACTOR agrees to execute any such amendment within thirty (30) days of receipt.

Any failure, actual or alleged, on the part of COUNTY to monitor or enforce compliance with any of the insurance and indemnification requirements will not be deemed as a waiver of any rights on the part of COUNTY.

Appendix C

Evidence of Insurance



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
08/01/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Willis of New York, Inc. c/o 26 Century Blvd P.O. Box 305191 Nashville, TN 372305191 USA	CONTACT NAME: PHONE (A/C. No. Ext): 1-877-945-7378	FAX (A/C. No.): 1-888-467-2378
	E-MAIL ADDRESS: certificates@willis.com	
INSURED Ecology and Environment, Inc. 368 Pleasant View Drive Lancaster, NY 14086	INSURER(S) AFFORDING COVERAGE	
	INSURER A: Great Divide Insurance Company	NAIC # 25224
	INSURER B: Federal Insurance Company	20281
	INSURER C:	
	INSURER D:	
	INSURER E:	

COVERAGES

CERTIFICATE NUMBER: W7107348

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Blanket Contractual Liability GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC OTHER:			GLP2005977-16	08/01/2018	08/01/2019	EACH OCCURRENCE \$ 3,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 30,000 PERSONAL & ADV INJURY \$ 3,000,000 GENERAL AGGREGATE \$ 3,000,000 PRODUCTS - COMP/OP AGG \$ 3,000,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY			BAP2005983-16	08/01/2018	08/01/2019	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
B	<input type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			7987-27-63	08/01/2018	08/01/2019	EACH OCCURRENCE \$ 15,000,000 AGGREGATE \$ 15,000,000 Prod/Compl Ops. \$ 15,000,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N No	N/A	WCA2005979-16	08/01/2018	08/01/2019	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A	Pollution & Professional Liab. (Pollution - Occurrence) (Professional - Claims-made)			CCP2005976-16	08/01/2018	08/01/2019	Aggregate Limit \$11,000,000 Each Poll. Condition \$11,000,000 Each Prof. Claim \$11,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Excess Liability policy is following form and supports all listed coverages except Pollution and Professional Liability.

CERTIFICATE HOLDER

Specimen

Evidence of Insurance

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2015 ACORD CORPORATION. All rights reserved.

Attachment 1

Appendix 2: Ecology and Environment, Inc.'s Cost Proposal for the Plains Replacement Pipeline Project



Cost Proposal to Prepare an Environmental Impact Report and Environmental Impact Statement for the Plains Replacement Pipeline Project

December 6, 2018

Prepared for:

County of Santa Barbara Planning & Development Department
Bureau of Land Management,
Bakersfield Office

Prepared by:



and



**Proposal to Prepare an
Environmental Impact Report and
Environmental Impact Statement**

Plains Replacement Pipeline Project

Case Nos. 17DVP-00000-00010, 17CUP-00000-00027,
17DVP00000-00002 and 17DCP-00000-00060

APNs: VARIOUS

December 06, 2018

Prepared for:

**Energy, Minerals & Compliance Division
County of Santa Barbara Planning &
Development Department**

123 East Anapamu Street
Santa Barbara, CA 93101

The contents provided herein, including not-to-exceed cost, remain effective for a period of not less than forty-five (45) days from the proposal due date. E & E respectfully submits its comments and proposed alterations to the contract terms for your review and later negotiation. Please see Appendix B of the technical volume.

ECOLOGY AND ENVIRONMENT, INC.



Timothy J. Grady, P.E.
Senior Vice President

Cost Proposal

E & E's firm-fixed price excluding the contingency to perform the scope of work as described in our Technical Proposal is **\$999,927**. The price when including the contingency is **\$1,149,916**. A cost summary by task is provided in Table 1. An itemized budget breakdown by task is provided in Exhibit 2.

Table 1: Cost Summary by Task

Task Description	Cost
Task 1: Project Management & Project Management Plan	\$119,183
Task 2: Technical Data, Peer-Review & Identify Preliminary Alt	\$60,593
Task 3: Conduct Additional Studies, If Required	\$19,713
Task 4: Public Scoping	\$62,185
Task 5: Draft Project Description, Purpose and Need, and Alt	\$19,843
Task 6a: Air Quality	\$41,804
Task 6b: Biological Resources	\$39,215
Task 6c: Cultural Resources	\$41,271
Task 6d: Hazardous Materials / QRA	\$34,034
Task 6e: Traffic & Transportation	\$10,413
Task 6f: Geology	\$8,447
Task 6g: Land Use	\$11,383
Task 6h: Paleontological Resources	\$10,346
Task 6i: Water Resources	\$14,587
Task 6j: Other Resources	\$35,774
Task 7a: Administrative Draft NEPA	\$30,109
Task 7b: Administrative Draft CEQA	\$44,275
Task 7c: Final Draft NEPA	\$14,165
Task 7d: Final Draft CEQA	\$72,471
Task 8a: Public Comment Meeting and Comment Summary for EIS	\$26,309
Task 8b: Public Comment Meeting and Comment Summary for EIR	\$84,458
Task 9a: Responses to Comments of Draft EIS	\$16,747
Task 9b: Responses to Comments of Draft EIR	\$32,336
Task 10a: Administrative Final EIS	\$28,451
Task 10b: Administrative Final EIR	\$44,990
Task 11a: Prepare and Publish Final EIS	\$24,077
Task 11b: Prepare and Publish Final EIR	\$30,537
Task 12a: EIS Administrative Record	\$10,420
Task 12b: EIR Administrative Record	\$11,791
Total	\$999,927
Contingency	\$149,989
Total (w/ Contingency)	\$1,149,916

Cost Assumptions

E & E's price has been prepared utilizing the following cost assumptions.

Task 1 Project Management

- Duration: Project management based on a 14 month project schedule
- Meetings: Four project meetings, 1 day each, 1 RT travel, two E & E personnel, and one MRS personnel. Unit cost for meetings based on these assumptions.
- Monthly progress reports
- Invoicing based on milestones

Task 2 Technical Review

- Assumes review, one request for additional information (RAI), and review of response to RAI.
- Does not include review of a Biological Assessment for the purposes of the Endangered Species Act.

Task 3 Public Scoping

- Attend two public scoping meetings
- Prepare public notice
- Support of Web services, including BLM ePlanning
- Preparation of six posters and two handouts
- County to provide audio and visual recordings
- County and/or BLM to provide transcription services
- County and/or BLM provide all public scoping comments to E & E in a specified format
- E & E to collate all written and verbal comments into E & E's Comment Response Solutions (CORES) and BLM ePlanning platform.
- Assumes 1,000 individual comments
- Prepare Public Scoping Summary Report

Task 4 Conduct Additional Studies

- Conduct a three day field trip with biologist and hydrologist
- Assumes no specific species studies will be required

Task 5 Project Description, Environmental Setting & Alternatives

- Task would include a draft before Task 3, Public Scoping
- Agency review and final draft after Public Scoping

Task 6 Technical Resources Sections

- Assumes two internal drafts

Task 7 Administrative and Final Draft EIS & EIR

- One reproducible unbound copy, five bound copies, and two electronic copies with files divided into chapters of the administrative draft of the EIS for BLM (federal agencies) review
 - Two administrative reviews
- One reproducible unbound copy, five bound copies, and two electronic copies with files divided into chapters of the administrative draft of the EIR for Santa Barbara and San Luis Obispo Counties review.
- One reproducible unbound copy, 10 bound copies, and one searchable electronic copy with files divided into chapters of the final draft of EIS for BLM and is compatible for posting on BLM's ePlanning platform.
- One reproducible unbound copy, 30 bound copies, and 20 searchable electronic copies with files divided into chapters of the final draft of EIR for Santa Barbara County
- Preparation of the Notice of Availability for the Federal Register

Task 8 Public Comment on Draft EIS & EIR

- Assumes separate hearings for the Draft EIS and EIR
- Assumes two hearings each for the Draft EIS and EIR (based on RFP recommendation of BLM for two to three hearings)
- Santa Barbara County to provide audio and video recording of Draft EIR hearings
- E & E to provide for audio recording of BLM hearings
- E & E to provide for transcription services of audio recording of EIS and EIR hearings
 - Assume 18 hours of audio recordings, \$220 per hr.
- Venue for Draft EIS hearings to be arranged by E & E
- Venue for Draft EIR hearings to be arranged by Santa Barbara County
- Collate all written and verbal comments from EIS hearings into E & E's Comment Response Solutions (CORES)
 - Assumes 1,000 individual comments
- Collate all written and verbal comments from EIR hearings into E & E's Comment Response Solutions (CORES)
 - Assumes 5,000 individual comments

Task 9 Response to EIS & EIR Comments

- Provide direct responses to substantive comments, out-of-scope comments to be summarized
- Recommended changes to draft EIS and EIR
- No additional independent research or field studies.

Task 10 Administrative Final EIS & EIR

- Two administrative draft reviews by BLM
 - Assumes one unbound reproducible administrative Final and 10 electronic copies divided into chapters and searchable
- One administrative draft review by Santa Barbara County
 - One reproducible unbound copy, four bound copies, and four electronic copies divided into chapters.

Task 11 Final EIS & EIR

- One unbound reproducible Final EIS and one electronic copy compatible with BLM's ePlanning platform.
- One reproducible unbound Screencheck ("proposed") Final EIR, 30 bound hard copies of the Screencheck ("proposed") Final EIR, and 20 electronic copies of the Screencheck ("proposed") Final EIR.
- One reproducible unbound Final EIR, ten bound copies, 20 electronic copies divided into chapters in a searchable format.

Task 12 Administrative Record

- Monthly updates to administrative record
- Separate final administrative records for the EIS and EIR

Payment Milestones

The preferred breakdown of milestones and associated cost is provided in Exhibit 1.

Payment Terms

Payment terms are Net 30 days from date of invoice.

Exhibit 1: Milestone Payment Table*

Milestone	% of Contract Amount	Amount Released per Milestone	% of Total Contract Amount	Total Contract Amount Released
Submittal – Project Management Plan	10%	\$99,993	10%	\$99,993
Submittal – Request for Additional Information Memo	10%	\$99,993	20%	\$199,986
Submittal – Public Comment Summary Report	10%	\$99,993	30%	\$299,979
Submittal – Draft Project Description, Environmental Setting & Technical Resource Sections	20%	\$199,985	50%	\$499,964
Submittal – Draft EIS/EIR	20%	\$199,985	70%	\$699,949
Submittal – Comment Summaries for EIS and EIR	10%	\$99,993	80%	\$799,941
Submittal – Administrative Draft Final EIS and EIR	5%	\$49,996	85%	\$849,937
Submittal – Final EIS and EIR	5%	\$49,996	90%	\$899,933
Submittal – Administrative Record	10%	\$99,993	100%	\$999,927

*Table does not include contingency

Draft EIS & EIR for Public Review				Public Comment / Summary				Responses to Draft EIR / EIS				Admin Draft Final EIS / EIR				Final EIS / EIR				Admin Record											
Task 7.1	Task 7.2	Task 7.3	Task 7.4	Task 8.1	Task 8.2	Task 9.1	Task 9.2	Task 10.1	Task 10.2	Task 11.1	Task 11.2	Task 12.1	Task 12.2	Task 7.1	Task 7.2	Task 7.3	Task 7.4	Task 8.1	Task 8.2	Task 9.1	Task 9.2	Task 10.1	Task 10.2	Task 11.1	Task 11.2	Task 12.1	Task 12.2				
20	0	4	4	8	0	20	16	18	10	28	20	6	4	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
56	0	40	16	104	92	40	36	80	80	48	16	8	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
120	0	80	40	172	120	80	6	140	100	72	32	0	0	72	0	0	0	40	40	24	0	0	0	0	0	0	0	0	0		
292	140	40	72	4	0	32	24	40	48	68	40	24	0	68	0	0	0	148	100	40	0	0	0	0	0	0	0	0	0		
232	96	40	36	206	122	56	28	76	0	152	88	64	0	152	0	0	0	76	0	0	0	0	0	0	0	0	0	0	0		
52	16	24	4	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
876	256	312	116	506	346	330	120	502	278	392	184	92	94	330	120	210	278	502	278	392	184	92	92	186	208	186	92	92	94		
\$34,096	\$9,004	\$13,240	\$4,236	\$21,682	\$15,314	\$14,678	\$5,008	\$21,962	\$13,454	\$16,332	\$7,200	\$3,116	\$3,526	\$69,556	\$18,368	\$27,010	\$8,641	\$44,231	\$15,537	\$29,943	\$10,216	\$44,802	\$17,356	\$27,446	\$33,317	\$14,688	\$18,629	\$6,357	\$7,193		
\$103,652	\$27,372	\$40,250	\$12,877	\$65,913	\$46,555	\$44,621	\$15,224	\$66,764	\$40,900	\$49,649	\$21,888	\$9,473	\$10,719	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2,730	0	0	0	2,730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40,000	0	0	0	27,900	27,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42,730	0	0	0	34,784	30,226	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
\$146,382	\$27,372	\$40,250	\$12,877	\$100,698	\$76,780	\$44,621	\$15,224	\$66,764	\$40,900	\$49,649	\$21,888	\$9,473	\$10,719	14,638	2,737	4,025	1,288	10,070	4,090	4,965	2,189	2,776	2,019	947	2,019	947	2,019	947	1,072	1,072	
\$161,020	\$30,109	\$44,275	\$14,165	\$110,767	\$84,458	\$49,083	\$16,747	\$73,441	\$44,990	\$54,614	\$24,077	\$10,420	\$11,791	\$161,020	\$30,109	\$44,275	\$14,165	\$110,767	\$44,990	\$54,614	\$24,077	\$10,420	\$11,791	\$161,020	\$30,109	\$44,275	\$14,165	\$11,791	\$11,791	\$11,791	