

(b) the plant species to be used; (c) a schematic depicting the mitigation area; (d) time of year that the planting will occur and the methodology of the planting; (e) a description of the irrigation methodology if utilized; (f) measures to control exotic vegetation on site; (g) success criteria; (h) a detailed monitoring program; (i) and contingency measures should the success criteria not be met.

The oil field operator shall utilize a County approved seed mix to revegetate areas disturbed by construction activities. This mix shall consist of native, locally occurring species collected from local seed sources. Suitable container plants shall also be used to increase the age strata and function of the site. Revegetation shall include ground cover, grass, shrub, and tree species in order to match disturbed areas to surrounding conditions and to restore or improve wildlife habitat quality to pre-project or higher levels. The plan shall also include a monitoring element spanning a minimum of five years post-planting.

Permanent impacts to native vegetation shall be mitigated at a 3:1 ratio, disturbed habitat at 1:1, and barren areas seeded to reduce the potential for the spread of noxious weeds to Ballona Creek and adjacent Parkland. Permanent impacts to mulefat scrub, willow scrub, and willow riparian woodland will be replaced at a ratio of 5:1. Where onsite restoration is planned for mitigation of temporary impacts to sensitive vegetation communities, the operator shall identify a Habitat Restoration Specialist to be approved by the County to determine the most appropriate method of restoration.

The creation or restoration of habitat shall be monitored for five years to assess progress and identify potential problems with the restoration site. Remedial activities (e.g., additional planting, removal of non-native invasive species, or erosion control) shall be taken during the five-year period if necessary to ensure the success of the restoration effort. If the mitigation fails to meet the established performance criteria after the five-year maintenance and monitoring period, monitoring shall extend beyond the five-year period until the criteria are met or unless otherwise noted by the County. If a catastrophic event occurs, such as a fire, there will be a one time replacement. If a second catastrophic event occurs, no replanting is required.

BR.1-1b. Implement a Worker Environmental Awareness Program.

A Worker Environmental Awareness Program (WEAP) shall be implemented for construction crews by a qualified County approved biologist(s) prior to the commencement of any drilling or construction activities. Training materials and briefings shall include but not be limited to, discussion of the Federal and State Endangered Species Acts, the consequences of noncompliance with these acts, identification and values of sensitive plant and wildlife species and significant natural plant community habitats, fire protection measures, sensitivities of working near riparian areas and identification of sensitive species, hazardous substance spill prevention and containment measures, a contact person in the event of the discovery of dead or injured wildlife, and review of mitigation requirements. Training materials and a course outline shall be provided to the County for review and approval at least 30 days prior to the start of construction. Maps showing the location of sensitive wildlife or populations of rare plants, exclusion areas, or other construction limitations (i.e., limited operating periods for nesting birds) will be provided to the environmental monitors and construction crews prior to ground disturbance. The oil field operator shall provide the County a list of construction personnel who have completed training, and this list shall be updated by oil field operator as required when new personnel start work. No construction worker may work in the field for more than 10 days without receiving the WEAP.

Impact BR.2-1

Page 4.5-28, Paragraph 4

The conclusion presented in the Draft EIR that federal or State listed plant or animal species are not present is speculative and not supported by recent biological surveys of the project site. As such, the Draft EIR cannot claim that effects to listed species would not occur.

The proposed mitigation measures do not provide adequate language to detect and or protect sensitive plants and wildlife in the project areas. While some measures do provide guidance on protecting the resource in general, the measures do not clearly articulate the proposed survey methodology that would be used to conduct the survey, what actions would be taken to ensure the species is protected or mitigated, and lacks the reporting standards required by the public resource code. Specific comments on each mitigation measures are provided below.

Mitigation Measure BR.2-1a (1) defers adequate botanical studies to a later date, does not indicate the timing of the surveys, and does not provide or indicate what specific actions would be taken to protect or mitigate for the sensitive plant.

Mitigation Measure BR.2-1a (2) lacks specificity on the buffer for the survey area and infers that protection is only for migratory birds. With the exception of several exotic species such as European starling, all nesting birds are protected by both CDFG and the MBTA regulation. Currently the mitigation lacks sufficient protection to ensure compliance with these regulations.

Mitigation Measure BR.2-1a (5). Language such as "if feasible" will not provide resource protection for sensitive birds or wildlife. If nesting birds are present the removal of vegetation that results in the loss or abandonment of the nest would constitute a violation of the MBTA and can only be authorized by the USFWS Division of Law Enforcement.

Mitigation Measure BR.2-1b (1). Please see comment for Mitigation Measure BR.2-1a (5). This language does not provide clear guidance regarding the measures that will be taken to avoid a violation of the MBTA.

Mitigation Measure BR.2-1b (2). Typically the CDFG and USFWS require a 300- to 500-foot buffer between nesting birds and construction activities. However, this buffer may be adjusted based on specific conditions such as existing noise and disturbance, topography, or the birds' tolerance to disturbance. This buffer should be monitored by a biologist and the buffer distance modified after consultation with the CDFG.

Mitigation Measure BR.2-1b (3). Without specific language regarding when and how the surveys would be performed the measure does not provide adequate measures to protect the species. For example, this species may be very difficult to detect if soil temperatures are outside the normal activity range of this species. The measure does not identify what actions (i.e., raking, visual, etc.) would be taken to locate the species. In addition, the measure does not indicate the location of the translocation efforts or provide a mechanism for reporting the movement as required by CDFG Scientific Collecting permit guidelines.

Based on the concerns presented above, the following mitigation measures are recommended to replace the measures identified in the Draft EIR:

BR.2-1a. Conduct surveys for sensitive plants and avoid populations of listed and sensitive plants.

The oil field operator shall conduct protocol surveys for rare plants in all areas subject to ground-disturbing activity. The surveys shall be conducted during the appropriate blooming period(s) by a qualified County approved plant ecologist according to protocols established by the USFWS, CDFG, and CNPS. All listed plant species shall be marked and avoided if present. Impacts to

listed plant species would only be authorized through the context of a Biological Opinion or CDFG 2081 take authorization.

In consultation with the County approved plant ecologist, the project shall be redesigned, constructed, and operated in such a way as to avoid direct and indirect impacts to listed plant populations. All project activities and features shall be situated to avoid impacts to any populations of listed species found during surveys. Populations of listed plant species located within temporary construction areas shall be fenced or flagged for avoidance prior to construction, and a biological monitor shall be present to ensure compliance with off-limit areas.

Prior to site grading, any populations of listed plant species identified during the surveys shall be protected by a buffer zone. The buffer zone shall be established around these areas and shall be of sufficient size to eliminate potential disturbance to the plants from human activity and any other potential sources of disturbance including human trampling, erosion, and dust. The size of the buffer depends upon the proposed use of the immediately adjacent lands, and includes consideration of the plant's ecological requirements (e.g., sunlight, moisture, shade tolerance, edaphic physical and chemical characteristics) that are identified by the County approved qualified plant ecologist. At minimum, the buffer for tree and shrub species shall be equal to twice the drip line (i.e., two times the distance from the trunk to the canopy edge) in order to protect and preserve the root systems of the plant. The buffer for herbaceous species shall be, at minimum, 50 feet from the perimeter of the population or the individual. A smaller buffer may be established, provided there are adequate measures in place to avoid the take of the species, and with the approval of the USFWS, CDFG, and County.

BR.2-1b. Conduct pre-construction surveys and monitoring for breeding/nesting birds.

The oil field operator shall conduct pre-construction surveys for nesting birds if construction and removal activities are scheduled to occur during the breeding season. Surveys shall be conducted in areas within 500 feet of any construction activities (i.e., staging areas, drilling sites, and access road locations). Surveys for raptors shall be conducted for all areas from February 1 to August 31. Surveys for common/sensitive bird species shall be completed from March 15 to September 15. Operator shall designate a qualified County approved biologist to conduct pre-construction surveys and monitoring for breeding birds. If breeding birds with active nests are found, a biological monitor shall establish a 300-foot buffer around the nest and no activities will be allowed within the buffer until the young have fledged from the nest or the nest fails. The 300-foot buffer may be adjusted to reflect existing conditions including ambient noise and disturbance with the approval of the County and CDFG. The biological monitor shall conduct regular monitoring of the nest to determine success/failure and to ensure that project activities are not conducted within the buffer(s) until the nesting cycle is complete or the nest fails. The biological monitor shall be responsible for documenting the results of the surveys and the ongoing monitoring and will provide a copy of the monitoring reports for impact areas to the County. If for any reason a bird nest must be removed during the nesting season operator shall provide written documentation providing concurrence from the USFWS and CDFG authorizing the nest relocation. Operator shall provide a written report documenting the relocation efforts. The report shall include what actions were taken to avoid moving the nest, the location of the nest, what species is being relocated, the number and condition of the eggs taken from the nest, the location of where the eggs are incubated, the survival rate, the location of the nests where the chicks are relocated, and whether the birds were accepted by the adopted parent.

BR.2-1c. Conduct focused surveys for sensitive wildlife and implement monitoring, avoidance, and minimization measures.

A qualified County approved biologist shall conduct focused surveys for sensitive wildlife including coast horned lizards in all areas that support habitat for sensitive species. If sensitive wildlife

or coast horned lizards are detected in or adjacent to the proposed work area, no work shall be authorized until the biologist has inspected and cleared these areas.

The oil field operator shall retain a qualified County approved biologist with demonstrated expertise with species expected to occur in the planning area to monitor construction activities and assist operator in the implementation of the monitoring program if sensitive wildlife are encountered. The authorized biologist will be present during ground-disturbing activities immediately adjacent to or within habitat that supports populations of sensitive wildlife including coast horned lizards. If the installation of fencing is deemed necessary by the authorized biologist, a clearance survey for the coast horned lizards shall be conducted at the time of the fence installation. Clearance surveys for coast horned lizards shall be conducted by the authorized biologist prior to the initiation of construction each day. Individuals, if located, will be relocated to suitable habitat outside the project area.

Impact BR.2-2

Pages 4.5-34 and 4.5-35 General Comment

The Draft EIR does not disclose or discuss the types of sensitive wildlife that occur downstream of the oil fields, their locations, or evaluate what types of effects a release of oil into the creek would have on biological resources from either the spill or the associated clean-up activities. There is also no discussion of indirect effects to wildlife or vegetation from daily spills or what would occur from a major release. The Draft EIR indicates a catastrophic spill could occur every 4,900 years; and while the likelihood of a spill may be low under CEQA the Draft EIR has a responsibility to present information on the potential effects to biological resources that could be affected from such an event. The Draft EIR must provide a discussion of the effects of oil spills to biological resources, both direct and indirect, the effects of clean-up activities, and what actions have been taken to reduce or avoid impacts from both the spill and associated clean-up.

The conclusion that residual impacts from a large spill are less than significant is not supported by any analysis and fails to provide the decision maker with adequate information to draw an informed conclusion.

Mitigation Measure BR.2-2 (1). Currently, the measure lacks any specific actions that would be taken to reduce or mitigate the effects of a spill. The measure is vague and defers the mitigation to the development of a plan.

Mitigation Measure BR.2-2 (2 and 3). This section defers the actual analysis of a spill to a later document. Impacts of a spill and any clean-up activities must be addressed in the context of the Draft EIR and not deferred to a later date.

Impact BR.3 Wetlands

Page 4.5-36. General Comment

The Draft EIR is dismissive of potential jurisdictional features that occur within the borders of the existing oilfield. In California more than 95 percent of riparian habitats that were present prior to European settlement have been severely degraded or destroyed (Smith, 1977; Katibah, 1984). While these habitats constitute only a small fraction of the proposed project area and a low percentage of the total landscape (often less than one percent), they typically accommodate a disproportionately high number of species and provide a larger degree of ecological function than surrounding upland areas (Fischer and Fischenich, 2000). While degraded in some areas, the Draft EIR indicates several drainages occur in the project areas that have the potential to qualify as State or federal jurisdictional waters. The Draft EIR does not provide any clear information as to the regulatory steps that are required by law that must be taken when working in riparian or wetland areas. As the exact location of future drilling activities is not known the Draft EIR must either adequately delineate the features that occur in the project area or provide mitigation that requires a delineation of these areas and subsequent regulatory approval prior to clearing

or modifying these features. The following mitigation measure is recommended to replace the existing Draft EIR measure:

BR.3-1. Provide Documentation of Regulatory Permit Compliance.

Prior to construction in any riparian or potential wetland drainage feature, the operator shall provide copies of all approved permits (1602, 404, 401, 402) or letters from the CDFG, RWQCB, and USACE indicating the riparian and wetland areas do not fall under State or federal jurisdiction. Prior to ground disturbance in any potential riparian or wetland area, the operator shall have a qualified County approved biologist prepare a wetland delineation of the proposed work area. This report shall be submitted to the County and provided to the regulatory agencies during the application for water quality permits.

Impact BR.4 Wildlife Movement

Page 4.5-37. General Comment

The reviewer recognizes that much of the project site consists of degraded habitats within an urban matrix. In addition, the area is fenced which limits the movement of larger mammals. However, the existing habitat in the project area, including riparian areas and adjacent parkland, is a likely stopover for migratory birds. Currently the Draft EIR provides mitigation measures that indicate priority areas "should" be given to specific areas. The measure then references an existing mitigation measure (BR.1-1). To avoid ambiguity the language regarding the areas that will be restored must be clarified and included in the discussion of impacts for the section. Mitigation Measure BR.1-1 or the proposed new measures should then be referenced as the appropriate mitigation for this impact.

Subsection 4.5.5 Analysis of Proposed CSD

Page 4.5-39, Table 4.5.5

Mitigation Measures BR.1-1 through BR.1-3: see comments regarding Impact BR.1. A Habitat Restoration and Revegetation Plan should be prepared for each project. See recommended mitigation.

Section 4.6 Water Resources

Section 4.6.1.3 Groundwater

Page 4.6-4, Paragraphs 1, 2 and 3, Groundwater in Baldwin Hills

The statement that the Baldwin Hills are generally considered non-water bearing is accurate. However, the formations within the hills are in direct contact with the formations that comprise the aquifers within the adjacent groundwater basins (West Coast, Central and Santa Monica). This lateral continuity is important to understanding potential water quality impacts related to waterflood injection.

Page 4.6-16, Impact WR.2, A rupture or leak could substantially degrade groundwater quality

The impact statement should include consideration of a rupture or leak from injection wells, which could substantially degrade groundwater.

Page 4.6-15, Mitigation Measure, Potential impacts to local groundwater resources from a leaking or ruptured injection well casing or seal

An additional mitigation measure should be developed to address potential impacts to local groundwater if waterflood brackish water leaks from injection wells, seals or natural pathways into potable aquifers in the adjacent groundwater basins. The mitigation measure could also acknowledge the revised PXP Pipeline Management Plan to conduct routine testing of injection well casing and seals. The mitigation measure should include water quality testing of existing municipal supply wells and deep monitoring wells proximate to the Inglewood Oil Field. In addition, deep (500 to 1500 feet) aquifer-specific monitoring wells will likely need to be constructed to monitor water quality at locations between injection wells and nearby groundwater supply wells.

Section 4.6.4 Analysis of Potential Future Oil Field Development

Page 4.6-19 Impact WR.3

New grading and construction would alter the existing drainage pattern of the site and potentially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site.

The Draft EIR concludes that natural drainage would be altered by the project such that the rate and amount of storm surface runoff into detention basins would be altered thus potentially resulting in basin overtopping. Although this impact is warranted, it may be overstated; the likelihood of this happening is small. The impact finding should be supported by giving design capacities of the six detention basins in comparison to the expected runoff to be received by them.

Mitigation Measure WR.3-1 requires a hydrologic analysis in compliance with Los Angeles County regulations. The mitigation measure should also state that drainage patterns shall not be altered in a manner that increases the drainage area contributing to any of the detention basins, or otherwise increases the amount or frequency of runoff (such as through creation of new impervious areas), without reworking the basins to accommodate the increased runoff.

Cumulative Analysis. The cumulative analysis should provide an indication of the project area's relative contribution to the pollution and flood flows of Ballona Creek.

Section 4.7 Transportation and Circulation

General Comments

- Information regarding site access, parking, and local transit routes is presented in the environmental setting but is never referenced again in the analysis. However, these issues are usually analyzed in CEQA documents; even if no impacts are anticipated, some analysis should be presented in order to support an impact conclusion.
- This analysis does not address all the significance criteria listed in 1997 LA County Traffic Impact Analysis Report Guidelines (including interrupted traffic flow due to design features and unsafe access) in the analysis section, although some of these issues are addressed in the environmental setting.
- It is unclear if the trips associated with future development would be attributable to construction activities only or if they would be permanent (operational).
- The Draft EIR concludes that the addition of trips associated with future development would not result in significant impacts. However, it would be more effective to determine what would constitute a significant impact and then provide traffic parameters in the CSD that projects would not be allowed to exceed without implementation of mitigation measures or the need for further CEQA review.

Section 4.7.1.3 Site Access and Parking

Page 4.7-3, 7th Paragraph, Parking

It is stated that employee and truck parking is provided on site and that parking will not change with future development, however there is no discussion regarding capacity. Additionally, the statement "parking will not change" is vague — does this mean capacity will not change, designated parking areas will not change, or parking demand will not change? Please clarify.

Section 4.7.3 Analysis of Potential Future Oil Field Development

Page 4.7-10, 2nd Paragraph under Section 4.7.3

This paragraph states that current oil field operations require 150 employees for the day shift and that the number of employees during the first shift is anticipated to grow to 200 employees. However it is unclear

whether this increase of 50 personnel is attributable to the future baseline or future oil field development without looking at the tables and figures.

Section 4.8 Land Use⁵

Section 4.8.1.2 Existing Land Use

Page 4.8-2, Paragraph 2, Project Site Land Use

In addition to the land uses associated with oil production within the Inglewood Oil Field, the proposed project site (within the CSD boundary) includes an open space area, a portion of the Holy Cross Cemetery and a Southern California Edison (Edison) facility (substation) and a gas plant; these are not adjacent land uses. They should be noted in the text of this paragraph, which describes existing land uses within the site proper. The Draft EIR should discuss why these areas are included in the CSD.

Page 4.8-2, Table 4.8.1, Summary of Land Uses that Abut the Perimeter of the CSD

Religious (cemetery) uses, open space, and Quasi-Public- Utilities (the Edison substation and a gas plant) are not, in full, adjacent to the CSD boundary but also fall within it. The acreages of these existing land uses within the CSD boundary should be provided.

Section 4.8.1.3 Land Use Plans and Policies

Page 4.8-6, Paragraph 3, Los Angeles County General Plan

The paragraph does not define short and medium range “actions” or identify whether the proposed project is considered a short or medium range action. Additionally, the text does not explain how the County of Los Angeles’ “allocation of resources” applies to the proposed project. The purpose of this paragraph is unclear.

Pages 4.8-6 and 4.8-7, Project Site Land Use Designations

According to Figure 4.8-3a (Land Use Policy Map – Los Angeles County), the proposed project site additionally contains two relatively small areas designated Commercial. The text of this section, however, does not identify allowable or compatible land uses associated with the Commercial designation. Allowable and compatible land uses associated with the Commercial designation should be noted, and any conflicts with oil development and production should be identified.

Section 4.8.3, Significance Criteria

Page 4.8-17, Paragraph 1

Per the State CEQA Initial Study Form (Appendix G of the CEQA Guidelines), the third impact criteria addressed within the land use analysis is:

“Conflict with any applicable habitat conservation plan or natural community conservation plan.”

The vast majority of the time, this impact criteria is also addressed in the land use analysis prepared for EIRs. This impact criteria should be addressed within the Draft EIR’s land use analysis due to the significant community effort and support associated with the Baldwin Hills Park Master Plan, which is, in part, a habitat restoration and conservation plan.

Additionally, the first impact criteria should be modified to demonstrate the proposed project’s potential effects on both existing and planned land uses both within the proposed project site and its surroundings, as follows:

⁵ 2002. Community Conservancy International (CCI). Baldwin Hills Park Master Plan. Prepared by the Community Conservancy International. Prepared for the California Department of Parks and Recreation and the Baldwin Hills Conservancy. May 2002. http://www.bhc.ca.gov/documents/Baldwin_Hills_Master_Plan_Final.pdf. Accessed July 20, 2008

“Incompatible with, or preclude or diminish existing and planned land uses within and surrounding the area of effect, or result in substantial quality of life effects on occupants within and surrounding the area of effect.”

Section 4.8.4 Analysis of Potential Oil Field Development

The analysis is limited to addressing potential effects associated with noise (Impact LU.1), visual and aesthetic resources (Impact LU.2 and LU.3), and air quality and public health (Impact LU.4). Although these types of impacts are germane and appropriate to address land uses surrounding the proposed project site, none of these impacts relate directly to existing or future land uses (and compatibility) or land use planning (e.g., not land use planning policy, as addressed in Section 4.8.5, but future and planned land use development per known pending and approved projects and land use designations). The impact analysis should include the following:

Impact LU.5. Implementation of the proposed project would cause temporary disruptions or preclusions of existing and planned residential and non-residential land uses within and surrounding the site.

Impact LU.6. Implementation of the proposed project would cause the long-term disruption or preclusion of existing and planned residential and non-residential land uses within and surrounding the site.

By addressing these two impacts, the proposed project’s land use effects on those areas within the CSD boundary that are not within the active field boundary will be disclosed and mitigated, as needed and feasible. Additionally, the proposed site’s planned future use as a park will be addressed, analyzed, and mitigated, as needed and feasible.

Section 4.8.5 Planning and Zoning Consistency

Page 4.8-21, Table 4.8.2, Consistency with Los Angeles County General Plan Policy

1) General Goals and Policies – Environmental Protection

- Add a consistency analysis for Policy 15 (“Protect areas that have significant natural resources and scenic values, including significant ecological areas, the coastal zone and prime agricultural lands.”)
- Add a consistency analysis for Policy 21 (“Stress the development of community parks particularly in areas of the greatest deficiency, and take advantage of opportunities to preserve large natural and scenic areas.”)

2) Land Use Element – Quality, Compatible Design

- Add a consistency analysis for Policy 17 (“Establish and implement regulatory controls that ensure compatibility of development adjacent to or within major public open space and recreation areas including National Forests, the National Recreation Area, and State and regional parks.”)

Comment for Section 4.8.5: The Baldwin Hills Park Master Plan (Plan) was prepared for two governmental agencies, the California Department of Parks and Recreation and the Baldwin Hills Conservancy. During its preparation, consultations with over 30 different public agencies were conducted, over 200 individual meetings with a broad range of organizations, community leaders, elected officials and other stakeholders were undertaken, and two public workshops with, collectively, over 700 attendees were held to ensure that the Plan “balanced community needs and concerns with natural resource protection needs and physical site constraints” (Community Conservancy International [CCI], 2002). Additionally, an 85-member Baldwin Hills Park Advisory Committee was formed for development of the Plan to provide community guidance on the planning process (CCI, 2002).

The Plan is consistent with the goals contained in Senate Bill 1084 (SB 1084), and contains a suite of 14 Specific Management Goals and a series of General Management Goals (CCI, 2002). The Plan also states the overall goals of the park’s various conceptual design plans (e.g., identified design alternatives) (CCI, 2002). Although it is acknowledged that the Plan is not a formally adopted land management and

planning document, it is a document of both local and regional importance. Additionally, as noted in the Recreation Section (Subsection 4.10.1, Environmental Setting), the area surrounding Baldwin Hills is one of the most park-poor urban areas in the State, thereby making realization of the intent and goals of the Plan a significant local and regional objective at both community and agency levels. The proposed project's nexus to the Plan should be addressed in Draft EIR Section 4.8.5, and an analysis of whether the proposed project would impede or foster the Plan's intent and goals should be included.

Additional comment for Section 4.8.5: See comment under Section 4.10.2 Regulatory Setting (Recreation).

Page 4.8-26 Table 4.8.3 Culver City Sphere of Influence Policy 1.B

The City of Culver City does not agree with the policy analysis presented in the table with regard to consistency with the Culver City Sphere of Influence. The consistency analysis should also consider air quality and toxics, and the determination should be revised to address the issues presented in this comment letter. Also, the measures for landscaping and aesthetics have not been proven to effectively mitigate impacts. Therefore, the City does not believe that the project is consistent with Policy 1.B.

Section 4.9 Noise and Vibration

General Comment

The Draft EIR noise section does not provide any consistency analysis of the proposed project to applicable County of Los Angeles and Culver City noise ordinances and policies.

Section 4.9.1 Environmental Setting

Page 4.9-10, Baseline Vibration Monitoring

There is no discussion as to how vehicle movements on local roadways contribute to existing vibration levels.

Section 4.9.2 Regulatory Setting

Page 4.9-11, Section 4.9.2.1 (Los Angeles County Code)

Explain why proposed project activities, including drilling, would not be subject to the Los Angeles County Code exterior noise standards for designated land use zones and time intervals (Section 12.08.390) during construction. Furthermore, explain why proposed project activities would not be subject to Los Angeles County Code (Section 12.08.440, Part A) prohibiting construction activity hours if it may cause a disturbance at a nearby residential or commercial property.

Page 4.9-13, Section 4.9.2.1 (Los Angeles County Code), Exemptions

Explain why these exemptions are identified. Because drilling is required for the proposed project, these exemptions would not apply.

Section 4.9.3 Significance Criteria

Page 4.9-14, Significance Criteria

Explain why there is no discussion regarding construction noise in the significant criteria. Section 4.9.3 of the Draft EIR only identifies operation significance criteria. The County of Los Angeles Noise Ordinance specifies construction noise thresholds, and both the County of Los Angeles and Culver City Noise Regulations specify prohibited hours to conduct construction activities. The omission of these construction related thresholds has resulted in inadequate significance criteria to determine noise impacts.

Page 4.9-14, Significance Criteria, 3rd paragraph

Please explain the rationale or cite the reference used to determine "pure tone" and the included logarithmic quantification contained within this paragraph. Several terms and the logic used in this paragraph are not explained adequately in Draft EIR Section 4.9.1.1 (The Characteristics of Noise).

Page 4.9-15, Significance Criteria Rationale

Please explain how the significance criteria adequately address Chapter 9.07 of the Culver City Municipal Code and not just the County of Los Angeles requirements.

Section 4.9.4 Analysis of Potential Future Oil Field Development

Pages 4.9-18 and 4.9-19

Second paragraph states: "the height of the noise sources associated with the drilling process varies." Explain why the drilling activities of a new injector well at Vapor Recovery Unit 294 are used as a comparison analysis for projected noise levels expected for proposed project drilling. No data is provided as to similarities between the two projects and drilling techniques and parameters that make drilling noise vary to such a degree.

Pages 4.9-17 through 4.9-20, Impact N-1

There is no quantitative justification that drilling activities would result in a less than significant impact with mitigation incorporated (Class II). As stated on Draft EIR pages 4.9-3 and 4.9-4, noise barriers are expected to "reduce noise levels by approximately 5 dBA." As stated on page 4.9-17, "During drilling of new wells, potential impacts are exacerbated because drilling continues day and night." The expected noise levels presented for drilling activities, as identified in Table 4.9-6, when reduced by 5 dBA through the use of noise barriers (proposed as Draft EIR Mitigation Measure N.1-1) would be substantially higher than ambient L_{eq} noise conditions identified at sensitive receptors in Table 4.9-3. No minimum distances are identified between the nearest possible drilling activity and sensitive receptors, and no quantitative analysis is presented as to how drilling will not result in a 5 dBA increase over existing ambient 24-hour L_{eq} noise conditions at receptor sites, as identified as the threshold of significance for noise impacts in the Draft EIR. As stated on page 4.9-18, "the results of the analysis indicate that drilling noise would be considered significant depending upon the location of the drill rig within the oil field." No discussion of distance is included in the analysis and noise impacts are concluded to be less than significant with mitigation incorporated. Furthermore, based on this information provided in the Draft EIR, drilling noise would likely exceed the County of Los Angeles Noise Standards 1 through 5 as identified on pages 4.9-12 and 4.9-13. Based on the information presented, a quantitative comparison analysis is required to show drilling noise would not result in a 5 dBA increase. Without this analysis, drilling activities should be stated to result in a significant unavoidable (Class I) noise impact.

Pages 4.9-17 through 4.9-20, Impact N-1

The analysis is void of discussion of noise impacts of new truck trips associated with the proposed project. No discussion of estimated noise levels from these vehicles is identified. However, Mitigation Measures N.1-3 through N.1-5, are proposed to mitigate vehicle related impacts associated with drilling. No mention as to potential noise impacts on local roadway routes are discussed either.

Pages 4.9-20 through 4.9-21, Impact N-2

The analysis is void of quantitative analysis to determine that workover of future oil wells would not result in an increase of 5 dBA over existing ambient noise conditions at nearby receptors. Without this analysis, drilling activities should be stated to result in a significant unavoidable (Class I) noise impact.

Pages 4.9-21 through 4.9-22, Impact N-3

The analysis is void of quantitative analysis to determine that well pumps would not result in an increase of 5 dBA over existing ambient noise conditions at nearby receptors. The noise levels shown in Table 4.9-7 are greater than 5 dBA than those shown in Table 4.9-3 representing ambient conditions at nearby receptors. While the noise measurements shown in Table 4.9-7 were taken only 10 feet from the well pump, without stating what the nearest potential receptor distance could be and performing a quantitative analysis, these activities should be stated to result in a significant unavoidable (Class I) noise impact.

Pages 4.9-24 through 4.9-25, Impact N-5

Explain why the drilling activities of a new injector well at Vapor Recovery Unit 294 are used as a comparison analysis for projected vibration levels expected for proposed project drilling. No data is provided as to similarities between the two projects and drilling techniques and parameters that could make drilling vibration vary. Furthermore, this analysis is completely void of any analysis of vibration impacts from truck trips associated with the proposed project on nearby receptors and receptors along roadways.

Pages 4.9-25 through 4.9-29, Table 4.9-11

The Recommended Modifications to the Proposed CSD based on the analysis do not include any quantitative basis or details as to how the measures would reduce any impact to a Class II level and not exceed established thresholds of significance.

Section 4.9.7 Mitigation Monitoring Plan

Pages 4.9-28 through 4.9-29,

Mitigation Measure N.1-1 and Impact N.2 plan requirements rely on a field monitor to record noise levels during drilling and well workover activities at receptor locations within 1,000 feet of the oilfield perimeter to ensure that “required noise limits” are not exceeded. This measure should include the logic of a 5 dBA increase over existing ambient conditions, should state how and what the assumed ambient condition levels are, state when the noise monitoring will occur (times of day), and state what will happen when/if they are exceeded. Without a quantitative noise analysis in the Draft EIR, it should be assumed a 5 dBA increase will occur, resulting in significant and unavoidable (Class I) noise impacts.

Section 4.10 Recreation⁶

Page 4.10-1, Paragraph 1, Sentence 4

As addressed in comments related to the Draft EIR’s Land Use Section (Section 4.8), the land use analysis does not contain an assessment of impacts to planned recreational facilities (e.g., the planned Baldwin Hills Park) in terms of direct physical impacts or potential incompatibilities, as referenced in this sentence. Recommendations have been made for the Land Use Section to correct these omissions.

Section 4.10.1 Environmental Setting

Page 4.10-2, Figure 4.10-1, Existing Park and Recreation Facilities (and associated text)

It is noted that West Los Angeles College contains outdoor recreational facilities (tennis courts and a football field) immediately adjacent to Freshman and Sophomore Drives; the football field is immediately adjacent to the proposed project site (Google Earth, 2008). These should be noted in the description of existing recreational facilities, and information on their availability for public use should be added.

Section 4.10.2 Regulatory Setting (Recreation), Section 4.8.2 Regulatory Setting (Land Use), and Section 4.8.5 Planning and Zoning Consistency Analysis (Land Use)

Page 4.10.3, Section 4.10.2 Regulatory Setting

The discussion references a requirement from the 2008 Los Angeles County Draft General Plan, which is not an adopted plan and is inconsistent with the reference to the general plan in the Land Use Section (Subsections 4.8.2 and 4.8.5), which addresses the adopted 1980 Los Angeles County General Plan. Although not adopted, the 2008 Draft General Plan is far enough along in its development and review processes to be germane to the proposed project (County of Los Angeles, 2008). To make the Draft EIR

⁶ 2008. County of Los Angeles (Department of Regional Planning). County General Plan Update Program. July 2008. [Online] <http://planning.co.la.ca.us/spGPMMain.htm>. Accessed July 20, 2008.

2008. Google Earth. Aerial Photography of the proposed project area. (Aspen Environmental Group license agreement). July 20, 2008.

internally consistent, and to provide the reader with an understanding of the proposed project's consistency with both the existing and planned applicable goals and policies, it is recommended that Sections 4.8 (Land Use) and 4.10 (Recreation) address and analyze both the 1980 Final and 2008 Draft General Plans.

Section 4.10.4 Analysis of Potential Future Oil Development

Page 4.10-4, Section 4.10.3 Significance Criteria

The discussion states that one of the significance criteria addressed in the impact analysis is "Conflicts with planning efforts to protect recreational resources of the project area." However, the impact analysis (Subsection 4.10.4, Analysis of Potential Future Oil Field Development) only addresses impacts related to noise (Impact Rec. 1), visual and aesthetic resources (Impact Rec. 2), and air quality (odors) (Impact Rec. 3). The recreation impact analysis fails to address planning efforts associated with the Baldwin Hills Park Master Plan (Plan), which is a recreation planning document of both local and regional importance (see comment on Subsection 4.8.5, Land Use, Planning and Zoning Consistency Analysis). An analysis of the Plan should be included in Section 4.10.4 to conform to the significance criteria referenced above (e.g., "Conflicts with planning efforts to protect recreational resources of the project area").

Section 4.11 Fire Protection and Emergency Response

Section 4.11.1 Environmental Setting

Page 4.11-3, Paragraph 3 and sentence 3, Response Capabilities

CCFD also permits and inspects aboveground tanks as a Participating Agency through LA County CUPA (Certified Unified Agency Program).

Page 4.11-4, 2nd Paragraph, last sentence

The last sentence states that each of the previously referenced response times of environmental service providers is estimated to be within one hour, however it is not clear on what this statement is based. Is this the author's estimate or that of the referenced service providers?

Page 4.11-4, Table 4.11.1 Fire Stations Available to Respond to an Emergency

Table does not include Culver City Fire Department (CCFD) Station One or Station Three.

Section 4.11.2 Regulatory Setting.

Page 4.11-5, Paragraph #2, sentence #2

Delete specific 'LA County FD' reference and replace with generic 'Fire Department' Criteria and Guidelines. Replace 'Uniform Fire Code' with 'California Fire Code'.

Page 4.11-6, Table 4.11.2 Applicable Standards and Codes

Correct 'UFC Articles' to current code as follows:

- UFC Article 04 – CFC Section 105 Permits
- UFC Article 09 – CFC Chapter 2 Definitions
- UFC Article 10 – CFC Chapter 9 – Fire Protection Systems
- UFC Article 11 – CFC Chapter 3 – General Precautions Against Fire
- UFC Article 12 – CFC Chapter 10 – Means of Egress
- UFC Article 13 – included in Chapter 3
- UFC Article 14 – included in Chapter 9
- UFC Article 49 – CFC Chapter 26 – Welding and Other Hot Work
- UFC Article 79 – CFC Chapter 34 Flammable and Combustible Liquids
- UFC Article 80 – CFC Chapter 27 Hazardous Materials
- UFC Article 85 – CFC Chapter 6 Building Services and Systems

Add:

CCFD Fire Prevention Regulations, Guidelines, & Procedures

Section 4.11.3 Significance Criteria

Page 4.11-7, 1st Paragraph under Section 4.11.3

This paragraph states that a set of criteria has been developed but does not provide any background or rationale as to how these criteria were developed or why they are appropriate.

Page 4.11-9, 1st Bullet under Table 4.11.3

Significance criterion states that a significant impact would occur if: the project site is located more than 10 miles (15 min) from an emergency response location with both HazMat (spill response) or fire fighting capabilities (i.e., a fire station or facility with fire fighting and emergency response capabilities) or accessibility to the site is difficult or limited causing issues in terms of evacuations and response.

This criterion should say "...both Hazmat (spill response) and fire fighting capabilities..."

Section 4.11.4 Analysis of Potential Future Oil Field Development

Page 4.11-9, 2nd Paragraph under Section 4.11.4, Impact conclusions not supported by analysis

Analysis for this threshold provides one sentence that simply states spacing requirements "appear to be adequate" as per listed requirements, however the analysis does not present any background information or hypothetical situation to analyze.

The Draft EIR and CSD should require that future development adhere to API, NFPA, and IRI recommendations including a mitigation measure requiring all future development be designed in accordance with these recommendations for equipment spacing. The oil field operator should be required to identify any potential scenarios in which recommendations may be infeasible.

Page 4.11-10, 1st Paragraph, Incomplete analysis of Significance Criterion 4

The fourth significance criterion presented in Section 4.11.3 states that a significant impact would occur if: Project site is located more than 10 miles (15 min) from an emergency response location with both HazMat (spill response) or fire fighting capabilities (i.e., a fire station or facility with fire fighting and emergency response capabilities) or accessibility to the site is difficult or limited causing issues in terms of evacuations and response.

The analysis on page 4.11-10 identifies the closest fire department (located one block from Inglewood Oil Field) but does not identify response capabilities of that fire department or provide any information about site accessibility. This analysis also does not address the second part of this criterion regarding accessibility.

Please include discussion of the response capabilities of LA County Fire Station #58 as well as the accessibility of the site to response vehicles and personnel (onsite roadways, gates, onsite emergency protocols, etc). The CSD shall state that all future development must be designed to ensure adequate access for emergency vehicles and/or that the facility design would be subject to review and approval by the fire department.

Page 4.11-10, 2nd Paragraph, Incomplete analysis of Significance Criterion 5

Analysis states that applicant has a SPCC (Spill Prevention Control and Countermeasure) Plan that was reviewed in 2003 but that the current status of that plan's compliance is unknown. Discussion proposes a mitigation measure to review compliance status, but it is unclear if the SPCC would be included in such a review. Please discuss whether the existing SPCC would apply to and/or would be appropriate for future development. If not appropriate, or if such analysis is inconclusive, provide mitigation measures that would ensure an adequate SPCC is developed for all future development.

Page 4.11-10, 3rd Paragraph, Incomplete analysis of Significance Criterion 1

Discussion states Inglewood Oil Field is “not required to comply with most recent fire code requirements” and that site does not “appear” to have fire water storage capacity. Analysis concludes that new development would increase potential for fires to occur and that lack of “appropriate fire fighting capabilities” would be a significant impact. There is no discussion indicating whether new development is also grandfathered or must comply with requirements. The impact analysis should provide some sort of basis for a conclusion and the CSD should require all future development to be designed to comply with all fire codes and that designs of all future development should be approved by the fire department prior to implementation.

Page 4.11-10, 4th Paragraph, Incomplete analysis of Significance Criterion 3

Analysis provides no discussion regarding early fire detection. Analysis states evacuation plans are in place to ensure employee safety--however, it is unclear whether these are existing plans for the Inglewood Oil Field or if plans would apply to or be developed specifically for future development.

Please discuss fire detection capabilities of future development and how they would compare to NFPA requirements. At a minimum discuss whether NFPA requirements would be considered during the design of future facilities and the CSD should require that all future development to include fire detection capability.

Page 4.11-10, Mitigation Measures

Mitigation Measure FP.1-1 should identify when such an audit should be completed — e.g., prior to construction of future development. Additionally, the last two sentences of this measure should form the basis of a second measure. The intent of Mitigation Measure FP.1-1 is to identify existing and potential deficiencies and inadequacies of fire fighting capabilities. Another measure to implement any recommendations of the audit that would expand and improve fire-fighting capabilities should also be included. Specify timing of third-party review and audit.

Mitigation Measure FP.1-2 requires implementation of a community alert system, but does not provide any information on how such a system would be developed or what specific measures should be included. Specify timing of development of community alert notification system, including necessary equipment installation.

Mitigation Measure FP.1-3 should be revised to clearly identify who is responsible for developing the response training and equipment plan (such as a qualified engineer, industrial hygienist, etc.) and should specify when the training will occur.

Mitigation Measure FP.2-1. Measure does not specify that SPCCP is the mechanism to address spill containment response training and equipment (see Table 6.1).

Section 4.11.6 Cumulative Analysis

Page 4.11-12, 1st Paragraph

The first sentence states that “Cumulative projects that could impact the fire protection analysis....” is incorrect. Cumulative projects would impact area fire fighting capabilities, not fire protection analysis.

Page 4.11-12, 2nd Paragraph

The first sentence states that future oil development at the Inglewood Oil field would not be expected to increase the demand for fire protection services, however, the third paragraph on page 4.11-10 states that “With new development at the site, fire fighting requirements and the potential for fires would increase.” While there is a difference between the demand for fire protection services and fire fighting requirements, the cumulative analysis does not clearly explain why increased fire fighting requirements and potential for fires would not result in a commensurate increase in fire protection services. Additionally, it is unclear what “baseline fire protection services” specifically refers to.

Section 4.12 Cultural Resources

Section 4.12.1.2 Presence of Cultural Resources within the Project Area

Page 4.12-3, Paragraphs 2 to 5 [following first full paragraph], Historic Archaeological Sites and Architectural Resource

This section lists two historic archaeological sites (PXP-1H, PXP-2H) and one historic architectural resource (the Cone Trust House) that were identified in the northern portion of the project area. It is not clear where these sites are located relative to the proposed CSD boundary or the Culver City drilling area. A better description of the location of the archaeological sites in relation to the CSD and affected jurisdictions should be provided and, if appropriate, a map should be included that illustrates the location of the known historic structure (Cone Trust House).

Section 4.12.4 Analysis of Potential Future Oil Field Development

Page 4.12-6, Mitigation Measure CR.1-1

In order to ensure that drilling activities do not impact the Cone Trust House, Mitigation Measure CR.1-1 should specify the maximum distance from the Cone Trust House at which drilling activities may be safely located.

Pages 4.12-6 to 4.12-7, Mitigation Measure CR.1-3

In order to ensure that any disturbances to the Cone Trust House are repaired or restored following its potential relocation, Mitigation Measure CR.1-3 should specify a timeframe within which PXP must complete these repairs (e.g., within three months following the relocation of the Cone Trust House).

Section 4.12.6 Cumulative Analysis

Page 4.12-9, Cumulative Analysis

Section 15130(b)(1) of the CEQA Guidelines (CCR, Title 14, Division 6, Chapter 3) describes the elements that are necessary for an adequate discussion of significant cumulative impacts, which include either:

- (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or
- (B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

The cumulative analysis addressed in Section 2.5 of the Draft EIR uses a list approach. According to Section 2.5, the cumulative projects list includes all approved or pending projects located in the study area. Past projects, such as past drilling operations in the project area, are not included in the cumulative projects list.

In Section 4.12.6, there is no discussion of the combined effect of past and current drilling operations with potential future operations. Consequently, this section does not adequately discuss cumulative impacts to cultural resources.

Comments on Mitigation Measures

CR.1-2 & CR.1-3: Who determines if the Cone Trust House has to move or not? CR.1-1 specifies that future oil development shall be located to avoid disturbances to the Cone Trust House.

CR.2-1: As written, this measure is impractical since facility construction and well development will occur over many years. As a result a series of workshops will be required as additional or new crew members are brought on board.

Section 4.13 Visual Resources and Aesthetics

Section 4.13.1 Environmental Setting

Page 4.13-4 Section 4.13.1.4 Public Views of the Proposed CSD Area

The assessment of public views does not include areas that are outside of the active field boundary but are within the CSD boundary (i.e., south of SCE facilities). Views from these areas (i.e., Culver Crest) should be evaluated in the visual assessment because they are potential view sites. In addition, the Draft EIR should evaluate residential areas such as Raintree town homes and the Blair Hills neighborhood in Culver City because of their proximity to the active field boundary.

Section 4.13.4 Analysis of Potential Future Oil Field Development

Page 4.13-27, Paragraph 2 [following Impact V.5], Sentence 2, Nighttime Lighting

This discussion concludes that Impact V.5 (Future oil field development could increase nighttime lighting and glare) would be temporary, since drilling operations for new wells are of short duration. However, the analysis should include a discussion of the long-term nighttime lighting effects from drilling new oil wells over a 20-year period, which was identified in Section D of the Executive Summary and Section 3 of the Project Description, as the timeframe for the analysis of future oil field development.

Page 4.13-23 Public Views

Mitigation Measures V.1-1 and V.1-3 require the preparation of a Landscaping Plan and re-vegetation and screening plans. However, Mitigation Measures V.1-1 and V.1-3 should be modified to:

- Require the use of mature plants in revegetation and screening
- Require a timeframe during which revegetation must be completed

Please make the following modifications to the mitigation measures; text additions are shown in **bold italic**, while suggested deletions are reflected in ~~striketrough~~.

Modified Mitigation Measure V.1-1. Landscaping shall be planted **and maintained** at the periphery of the property for the specific purpose to beautify and screen the operations from adjoining residential, recreational, institutional areas or adjacent public streets or highways. A Landscaping Plan shall be prepared addressing screening, irrigation and planting protocols. Drip irrigation and drought tolerant plants **that are mature in size** shall be used for landscaping. The Landscaping Plan shall be prepared **prior to the approval of a Site Plan Review**, and its implementation and compliance monitored by a certified landscape architect. **The plan shall be reviewed and approved by the County of Los Angeles and adjacent and affected agencies.**

Modified Mitigation Measure V.1-3. A revegetation and screening plan for new or deepened well sites shall be submitted to and approved by the Director. The revegetation and visual screening plans shall ensure that, **within three months of** ~~upon~~ completion of the drilling of a new or deepened well, disturbed/graded terrain surfaces at the drill site shall be placed in a clean condition and shall be landscaped with appropriate vegetation **that is mature in size** so as to screen the sites from public view, the tanks and any other permanent equipment that may be installed. Further, such landscaping shall be routinely inspected and be maintained in good condition.

In addition, the Draft EIR should have considered the use of low-profile drilling rigs and pumpers as a way to reduce visual impacts to the surrounding communities. A comparison should be provided of existing facilities and potential low-profile equipment/pumpers. The Draft EIR should include visual simulations to clearly demonstrate and support the significance determination. An electronic data search identified one corporation that specializes in low profile residential wells. Hydraulic Rod Pumps, International (HRPI) utilizes subsurface hydraulic cylinders in place of conventional and mechanical rod pumping units at locations that have surface and/or visual restrictions (Source: <http://www.hrpi.net/>). HRPI has installed low profile wells at the following locations:

- Kaufman and Broad Homebuilders development that surround wells operated by Signal Hill Petroleum.
- Yorba Linda (Coyote Hills) oil field fee land (operated by Unocal Company of California) that was sold to residential and real estate developers.
- City of Fullerton oil well that is operated by Unocal Company of California.
- Beverly Hills oil wells that are operated by Hillcrest Beverly Oil Corporation. These wells are across the street from 20th Century Fox Studios, and are surrounded by a private country club and golf course.

In the EIR, please evaluate the potential for using low-profile rigs and pumpers to reduce visual impacts in the surrounding community. The following mitigation measure shall be applied field-wide to minimize visual resource impacts resulting from the presence of aboveground equipment at new production sites:

- V.1-6** Prior to construction, the oil field operator shall identify and document how it will use low-profile equipment and pumpers to reduce visual impacts to the surrounding community. The operator shall submit a proposed equipment list that identifies construction techniques and equipment, which will minimize: (1) the height of new wells and drilling equipment, and (2) the aboveground footprint of new well production sites. The equipment list shall be reviewed and approved by the Director and incorporated in the plan. The plan shall include visual simulations that demonstrate how use of low-profile equipment and pumpers, and/or vegetation and screening (as required by Mitigation Measure V.1-1) reduce visual impacts to the surrounding communities and public facilities. If vegetation is primarily used to reduce visual impacts then the plan must include long-term provisions for maintaining the vegetation to effectively screen equipment and pumpers.

Section 4.13.6 Cumulative Analysis

Page 4.13-29, Cumulative Analysis

In Section 4.13.6, there is no discussion of the combined effect of past and current drilling operations with potential future operations. Consequently, this section does not adequately discuss cumulative impacts to visual resources. (See description of CEQA Guidelines for cumulative impacts in Section 4.12 Cultural Resources.)

Comments on Mitigation Measures

V.5-1: Does not specify preparation of a Plan (see Table 6.1). Specify timing of plan preparation and implementation. Remove “to the extent feasible” and add specific descriptive information such as “shall not spill onto adjacent properties.”

V.5-2: Recommend combining Mitigation Measures V.5-1 and V.5-2.

Section 4.14 Public Services and Utilities

Sections 4.14.1 through 4.14.6

Analysis of Public Services

Neither the environmental setting nor the impact analysis for Section 4.14 includes any discussion of public services (e.g., police, schools, parks). The expansion of drilling activities within the project area may require additional police protection from local jurisdictions, and impacts should be addressed accordingly. The CSD would also be located adjacent to educational facilities (West Los Angeles College) and parks (Kenneth Hahn State Recreation Area, Culver City Park), which should be included in the analysis for public services. At the very minimum, this section should include a discussion of impacts that pertains to the significance criteria for public services from the CEQA Guidelines (Appendix G, Environmental Checklist Form, Section XIII).

Section 4.14.4 Analysis of Potential Future Oil Field Development

Page 4.14-7, Impact PS.1

The discussion of solid waste impacts to utilities focuses solely on the effects of drilling operations. There is no analysis of the solid waste impacts associated with the construction and operation of new facilities, which may include: well slot manifolds and automatic well test units; oil cleaning plant; water treating facility; water injection wells; and a vapor recovery skid. Future development of the project area may also include a steam drive facility, which would necessitate the following equipment installations: new wells and oil treatment plant; new gas treatment plant; new water treatment plant and water softening plant; and new steam generation plant.

The solid waste impacts of new facilities that may be associated with the development of the project area should be included in this analysis.

Page 4.14-8, Impact PS.2

The discussion of wastewater impacts to utilities focuses solely on the effects of drilling operations. There is no analysis of the wastewater impacts associated with the construction and operation of new water-related facilities, which may include: water treating facility; water injection wells; and a vapor recovery skid. Future development of the project area may also include a steam drive facility, which would necessitate the following equipment installations: new water treatment plant and water softening plant; and new steam generation plant.

The wastewater impacts of new facilities that may be associated with the development of the project area should be included in this analysis.

Page 4.14-9, Impact PS.3

The impact analysis for potable water focuses solely on the effects of drilling operations. There is no analysis of water supply impacts associated with the construction and operation of new water-related facilities, which may include: water treating facility; water injection wells; and a vapor recovery skid. Future development of the project area may also include a steam drive facility, which would necessitate the following equipment installations: new water treatment plant and water softening plant; and new steam generation plant.

Impacts to the water supply from the construction and operation of new facilities that may be associated with the development of the project area should be included in this analysis.

Section 4.14.6 Cumulative Analysis

Page 4.14-10, Cumulative Analysis

In Section 4.14.6, there is no discussion of the combined effect of past and current drilling operations with potential future operations. Consequently, this section does not adequately discuss cumulative impacts to public services and utilities. (See description of CEQA Guidelines for cumulative impacts in Section 4.12 Cultural Resources.)

Comment on Mitigation Measure

PS.1-1: Specify timing of Recycle Plan preparation and implementation.

Section 4.15 Energy and Mineral Resources

Subsection 4.15.1 Environmental Setting

Page 4.15-2, 4th full paragraph, last sentence

The last sentence states that the area currently has adequate supply of electricity and natural gas and is anticipated to have adequate supplies for future development but provides no basis for these conclusions.

Subsection 4.15.1.1 Energy and Mineral Resources Consumption by the Inglewood Oil Field Facilities

Page 4.15-3, 1st and 3rd Paragraphs

This section of the Draft EIR does not site reference sources for the consumption data presented.

Section 4.15.4 Analysis of Potential Future Development

General Comments

Significance Criterion #2 (conflict with the adopted California energy conservation plans) has not been addressed. Please include discussion of how the project would comply with requirements of California energy conservation plans.

Page 4.15-6, 1st and 2nd Paragraphs

Impact ER.1 states that future development would double the current electrical consumption and that new transformers would not be required, however no basis is provided for this conclusion. The analysis states that this increase in electricity consumption is small compared to overall consumption in Los Angeles County and the State of California and would therefore not require modifications to the current electrical facilities, however it is not clear to what facilities this statement refers (e.g., onsite, local, county, or state). Additionally, the fact that electrical demand of future development would represent a small proportion of county or state consumption does not provide enough basis to determine whether onsite electrical facilities would require modification.

Additionally, natural gas is not addressed under Impact ER.1 (although it is addressed under Impact ER.2). It appears that the 4th significance criterion presented in Section 4.15.3 has been divided into two separate impacts. It also appears that Impact ER.1 is intended to address both the 4th and 5th significance criteria presented in Section 4.15.3. This makes it difficult for the reader to clearly determine whether each significance criterion has been addressed.

Page 4.15-6, last Paragraph, Significance Criterion 1

Discussion under Impact ER.2 indicates that the project would result in a net increase of petroleum and natural gas. Minerals are not addressed in the analysis, however, they are addressed in the environmental setting. Please include discussion in the analysis section addressing minerals and associated impacts from the project.

Pages 4.15-6 and 4.15-7, Significance Criterion 3

Although discussion under Impact ER.2 indicates that future development would result in net increases of non-renewable energy resources, Significance Criterion 3 (Use of non-renewable energy resources in a wasteful and inefficient manner) is not addressed. Please include discussion of how these resources would be used, if at all.

Section 4.15.5 Analysis of Proposed CSD

Page 4.15-7, Last Paragraph

At minimum, the CSD should include measures to ensure future projects would not conflict with conservation plans as well as measures to promote efficient energy use during construction and operation of future projects.

Section 4.16 Environmental Justice

Section 4.16.1 Environmental Setting

Page 4.16-2, Paragraph 5, Sentence 1 (and throughout text)

All references to the minority population "Black" (or "black") should be replaced with "Black or African American," consistent with the minority classification system used by the U.S. Census Bureau.

Page 4.16-4, Table 4.16-1, Study Area Race Characteristics

To better help the reader understand the distribution of minority populations within the Study Area, please provide the percentages of each minority category as well as their total number.

Page 4.16-5, Figure 4.16-2, Distribution of Poverty in the Study Area

Several block groups contain a below poverty level population of greater than 15 percent; however, no indication is provided as to whether these areas contain a below poverty level of greater than 50 percent, which is the threshold for analysis of Environmental Justice. Consistent with Figure 4.16-1, this figure (4.16-2) should reflect population percentages between 0 and 100.

Section 4.16.3 Significance Criteria

The first impact significance criterion used for this analysis follows the same significance criterion applied by the California State Lands Commission (CLSC) (e.g., "Have the potential to disproportionately impact minority and/or low income populations at levels exceeding the corresponding medians for the county in which the Project is located"). However, as defined by the "Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis," minority and low-income populations may also be defined as being any minority or low income population that is greater than 50 percent of a project area's general population. The threshold of 50 percent or greater of the affected area is the impact criteria applied by several State agencies, including the California Energy Commission (CEC); typically, a radius ranging between one to six miles of a proposed project is used by the CEC. Based on the data provided in Figure 4.16-1, Table 4.16.1 and Figure 4.16-2, it appears that if the impact criterion of 50 percent or greater for minority and low income populations was applied to the study area, potentially significant Environmental Justice impacts could occur.

Section 4.16.4 Analysis of Potential Future Oil Field Development

As noted under the comment for Section 4.16.3 (Significance Criteria), above, if the following impact criterion was used in the Environmental Justice impact analysis, a potentially significant impact could occur:

"The minority or low-income population of the affected area is greater than 50 percent of the affected area's general population."

For the EIR to fully disclose any potentially significant Environmental Justice impacts, the above criterion should be applied to the impact analysis.

Section 5.0 Alternatives

Section 5 evaluates action alternatives that relate to other permit process scenarios such as a Conditional Use Permit process and Site Plan Review with Director Approval. While these are valid permit alternatives, the discussion did not present a reasonable range of alternatives as required by CEQA. In order "to reduce the environmental effects of future oil development" (as stated on page 5-2 paragraph 5), the analysis must consider a reasonable range of alternatives. Alternatives that should be addressed in the analysis are listed below, however, other alternatives should also be identified and considered to meet the intent of CEQA.

- The analysis should have considered changes to the regulations of the CSD to consolidate surface facilities and activities within designated areas of the field to reduce public health and environmental impacts to the neighboring communities and public facilities (school and park). As a separate alternative or part of this alternative, phasing out of existing facilities or the limited operation of existing facilities to reduce impacts should be evaluated.
- The No Project Alternative should have also included consideration of ongoing energy conservation measures to replace the oil and gas production with projects such as solar energy, energy conservation

and alternative energy sources, making automobiles more fuel efficient, replacing equivalent fuel with ethanol, and making existing power generation facilities more efficient.

Section 6.0 Mitigation Monitoring Program

In addition to the changes suggested in the individual issue area sections, please also add the following to Table 6.1 of the Mitigation Monitoring Program:

- Add a method of verification (MOV) to all mitigation measures (i.e., review and approval of development plans and inspection of site).
- Add timing for completion of mitigation measures to all measures (i.e., prior to construction or prior to agency approval).
- PH.2-1: Add “Review and approval of HRA and any proposed buffer zone decreases by the County of Los Angeles and adjacent and affected agencies.”
- BR.1-1: Monitoring/Reporting Action and MOV address site surveys, not preparation and implementation of Plan (see mitigation measure). Under Responsible Agency add USFWS and CDFG as plan review and approval agencies.
- BR.1-2: Monitoring/Reporting Action addresses mitigation ratios only and not plan preparation and implementation (see mitigation measure).
- BR.1-3: Monitoring/Reporting Action: “BR.1-1” should be corrected to “BR.1-2.”
- BR.2-1 a, b: Amend to state “Review surveys and Restoration Plan implementation.” Responsible Agency: Add USFWS and CDFG coordination for special status species.
- N.1-2 and N.5-1: Monitoring/Reporting Action: Define “periodic.”
- N.2: Monitoring/Reporting Action: Add reference to Mitigation Measures N.1-1 and N.1-2.
- N.5-2: add “Test vibration or low-frequency noise levels at the oil field perimeter as specified by the County.”
- V.1-1: Monitoring/Reporting Action: “Landscape, Revegetation and Screening Plan” specified, not “Landscaping Plan” as specified by Mitigation Measure V.1-1.
- V.1-4: Monitoring/Reporting Action: Specify “within 30 days of installation: as noted by the mitigation measure.
- V.1-5: Monitoring/Reporting Action: Specify “within 120 days of CSD approval” as noted by the mitigation measure. Under MOV specify “Review and approval of plan...”

Section 7.0 Other CEQA Considerations

Section 7 needs substantially more detail to address direct and indirect growth-inducing impacts and irreversible commitment of resources. For irreversible commitment of resources, CEQA Section 15126.2 states that resources should be evaluated to “assure that such current consumption is justified.” CEQA also states that analysis should consider both primary and secondary impacts from the commitment of resources. Additional detail is necessary to adequately address the commitment of resources and growth-inducing impacts. The discussion does not discuss indirect impacts and does not address impacts to open space areas such as the park and the Baldwin Hills Master Plan. In addition, the discussion includes consideration of the development of open space but does not address encroachment as identified in the criteria identified in the section. Further, the discussion of Precedent Setting Action does not provide

sufficient detail on why the adoption of the CSD, which will facilitate the approval of well permits, would not be precedent setting. This section needs substantially more detail to meet the intent of CEQA.

Table of H₂S Exposure Standards and Physiological Responses

Level, PPM	Effect	Source
0.003–0.11	24-hour exposure criteria	World Health Organization, Environmental Health Criteria, 1982
0.003	Odor Threshold	Environment Canada, 1984
0.005	30 minute averaging time, level to avoid complaints due to odor annoyance	World Health Organization, 1984
0.007	30 minute averaging time, Level to not produce odor nuisance	Task Force on International program on Chemical Safety, 1981
0.007	Proposed inhalation reference exposure level (REL), Chronic toxicity	OEHHA Proposed REL, 1999, 0.66 ppm with 100 factor of safety
0.008	Geometric mean odor threshold based on odor detections ranging from 0.0007 to 1.8 ppm	Amoore, 1985
0.012–0.069	Range of odor thresholds for study group, geometric mean of 0.029	California State Department of Health, 1969
0.03	1-hour averaging time	California Ambient Air Quality Standard
0.03	Chronic and Acute toxicity value	CAPCOA Health Risk Assessment, AB2588 chronic and acute REL
0.03	Estimated 40% of population would find objectionable. Some reported headaches and other symptoms	Amoore, 1985, Reynolds and Kemper, 1985
0.09	Minimal Risk Level, Intermediate Exposure (15–364 days)	ATSDR, 1997
0.1	60 minute exposure, no objectionable odor	ERPG-1, AIHA, 1990
0.1	Mild adverse effects	OEHHA, Jappinen et al. (1990)
0.3	Distinct odor	Environment Canada, 1984
0.3	Complaints of nausea, headaches, eye and throat irritation.	Terra Haute, Indiana, US Health Service, 1964
0.6	2-month average, 20-month-old child symptoms included deviation of the eyes, motor skills failures. Complete resolution when exposure ceased	Department of Surgical Neurology, Edinburgh, 1986
0.66	Extrathoracic respiratory effects, based on mouse studies, human equivalent	OEHHA Proposed REL study, 1999
1	24 hr/day for 90 days continuous exposure guideline level	NAS/NRC, 1985
10	8 hr exposure (time weighted average, TWA)	ACGIH
10	8 hr TWA permissible exposure limit (PEL)	OSHA
10	10 minute allowable maximum value (ceiling)	NIOSH
10	24 hr emergency exposure guideline level (EEGL)	NAS/NRC, 1985
10–14	4 – 7 hr exposure, Conjunctivitis	Nesswetha, 1969
15	15 minute TWA short term exposure limit (STEL)	ACGIH
15	15 minute TWA STEL	OSHA
30	60 minutes, no irreversible or serious health effects	ERPG-2, AIHA, 1990
50	10 minute EEGL	NAS/NRC, 1985
50	Level at which evacuation is required	NIOSH
50–100	Olfactory paralysis after 3 to 15 minutes	ACGIH, 1986, Beauchamp, 1984
100	60 minutes, no life threatening health effects	ERPG-3, AIHA, 1990
100	30 minutes, no life threatening health effects	IDLH
200	Almost immediate olfactory paralysis, stings eyes and throat	Beauchamp, 1984
300–500	Pulmonary edema, imminent threat to life	Beauchamp, 1984
500	30 minute to 1 hour exposure, headache, dizziness, staggering followed by unconsciousness and respiratory failure	Beauchamp, 1984
700	Unconscious quickly, death if not rescued promptly	Beauchamp, 1984
1000	Rapidly produces unconsciousness, respiratory failure and death	Beauchamp, 1984
5000	Imminent death	Beauchamp, 1984

* 0.001 ppm is equivalent to 1 ppb (part per billion)

Source: Arthur D. Little (now Marine Research Specialists), 2000. VENOCO Quantitative Risk Assessment. Prepared for Santa Barbara County Fire Department.

1. Qualifications and Experience

Aspen Environmental Group is a leader in the provision of professional environmental and engineering services to local, state, and federal agencies responsible for building or reviewing large energy, water, and infrastructure projects. Aspen currently serves as prime contractor to the California Energy Commission, California Public Utilities Commission, Western Area Power Administration, Los Angeles Department of Water and Power (LADWP), California Department of Water Resources, Ventura County Watershed Protection District, and US Army Corps of Engineers. In addition, Aspen has worked for the California State Lands Commission and the Department of Conservation's Division of Oil, Gas, and Geothermal Resources (DOGGR) in the CEQA evaluation of petroleum projects.

1.1 Oil and Gas Experience

Aspen focuses on the analysis of infrastructure projects for public agencies, with a particular emphasis on energy projects, including pipelines, power plants, marine terminals, transmission lines, and renewable energy projects. Aspen also has a long history of conducting analysis of oil and gas projects, including exploration, transportation, refining, and storage. Listed below is a summary of Aspen's experience related to oil and gas.

- PXP Tranquillon Ridge Oil & Gas Development Project EIR, County of Santa Barbara
- Kinder Morgan Concord-to-Sacramento Pipeline EIR, California State Lands Commission
- Environmental Information Document and Coastal Consistency Determinations for Federal Oil and Gas Leases Offshore Santa Barbara, Ventura, and San Luis Obispo Counties, Minerals Management Service, U.S. Department of the Interior
- Cabrillo Port LNG Deepwater Port EIS/EIR review, City of Oxnard
- Kirby Hills Natural Gas Storage Facility MND, California Public Utilities Commission
- City of Long Beach LNG Import Project EIS/EIR review, City of Long Beach
- Kinder Morgan Carson-to-Norwalk Pipeline EIR
- Yellowstone Pipeline Reroute EIS, USDA Forest Service, Lolo National Forest
- Pacific Pipeline Project EIR and Supplemental EIS/SEIR
- Gaviota Interim Marine Terminal/Chevron Tankering Supplemental EIR/EIS, County of Santa Barbara
- Exxon Tankering Application from Gaviota (proposal withdrawn) Subsequent EIR, County of Santa Barbara
- Hermosa Beach Urban Oil/Gas Development (CEQA Process Consultant), City of Hermosa Beach
- Kern County Oil and Gas Well Permitting Environmental Compliance and Permitting Process (CEQA Process Consultant), Division of Oil, Gas, and Geothermal Resources
- Molino Gas Project EIR (air quality, land use, public policy, and recreation analyses), Arthur D. Little
- Alpine Gas Transmission Line, Mitigation Monitoring Services, California Public Utilities Commission
- San Joaquin Refinery Health Risk Assessment, San Joaquin Refining Company

1.2 Experience Reviewing EIRs Prepared by Others

Since its inception, Aspen has served as prime contractor for some of California's largest environmental review efforts and continues to serve in this role on major CEQA and NEPA projects, as well as similar large environmental assessment efforts, such as the California Energy Commission's CEQA-equivalent process for reviewing proposed thermal power plant projects. In its role as prime contractor, Aspen continually reviews environmental and technical documents produced by others, including the work products of subcontractor teams. Aspen must also regularly review environmental and technical documents submitted by applicants to regulatory agencies and, on behalf of those agencies, provide comments on the adequacy and completeness of those submittals. This includes Proponent's Environmental Assessments

submitted to the California Public Utilities Commission and Applications for Certification submitted to the California Energy Commission, as well as other supporting documentation.

Aspen is trusted by resource and regulatory agencies to provide objective independent reviews of environmental documents and has been contracted by multiple agencies specifically to review EIR and EIS documents and technical reports prepared by others. Aspen is recognized not only for objective judgment, but also for our technical knowledge of environmental issues and in-depth working knowledge of environmental regulations and procedures. Summarized below are three examples of Aspen's role reviewing environmental documents produced by others:

- Aspen was hired by the California Department of Fish and Game (CDFG) to participate in a multi-year process to develop and review a large EIR/EIS being prepared for the **Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan**. Aspen is providing CEQA compliance guidance to CDFG, which is serving as the CEQA lead agency. Newhall Ranch is a major land development project in the Santa Clara Valley, encompassing 11,999 acres and approved for the development of 21,308 dwelling units and 982 acres of non-residential uses. The developer is seeking a master Streambed Alteration Agreement and Section 2081 Incidental Take Permits for the project, as well as a master Section 404 permit from the Army Corps of Engineers. The applicant is preparing the EIR/EIS under guidance from CDFG and the Army Corps of Engineers. Aspen has been involved in all aspects of the EIR/EIS development, including selection of alternatives, and is reviewing and editing the administrative draft EIR/EIS document on behalf of CDFG.
- Aspen was retained by the City of Oxnard to review the Draft EIR/EIS for the **Cabrillo Port LNG Deepwater Port EIR/EIS**. Cabrillo Port is a highly controversial proposal to construct a liquefied natural gas (LNG) port off the coast of Oxnard and Malibu. Because the City of Oxnard and its citizens were concerned about the project, the City asked Aspen to review the Draft EIR/EIS and present comments to the City Council. The City used Aspen's input to provide comments on the Draft EIR/EIS to the lead agencies. The City also hired Aspen to review the re-circulated Draft EIR/EIS and participate in public workshops on the project.
- Aspen was hired by the City of Long Beach to review the Draft EIR/EIS for a proposed **Sound Energy Solutions Long Beach LNG Import Project** at the Port of Long Beach. Aspen was approached by the City because of its reputation conducting environmental analysis of major energy projects. Aspen conducted a review of the document for CEQA and NEPA adequacy and technical accuracy. Aspen provided comments to the City, which then utilized Aspen's input to provide comments on the Draft EIR/EIS to the lead agencies.

2. Project Management and Key Personnel

Aspen's team members are comprised of a broad cross-section of experienced professionals in engineering and the physical, earth, life, and social sciences, which is complemented by the expertise of specialized subcontractors with appropriate capabilities in data collection and analyses for environmental impact assessment documents and supporting environmental documentation. The following is a brief biography of the Aspen Team members and subcontractors who contributed to the review and evaluation of the Baldwin Hills CSD and Draft EIR. Please refer to the attached resumes for further detail on individual project management and CEQA/NEPA experience.

Aspen Team Members

Sandra Alarcón-Lopez is serving as Aspen's Project Manager for the review of the Draft EIR and CSD. Ms. Sandra Alarcón-Lopez has been with Aspen since 1999 and has **over 24 years of experience** managing environmental projects and programs including experience conducting environmental impact analysis pursuant to CEQA and NEPA. Ms. Alarcón-Lopez has significant experience as a project manager for local and regional government projects. She has managed the preparation of and effectively completed technical evaluations for major transmission line projects proposed in California and Arizona and has managed the preparation of energy-related reports for the California Energy Commission. Ms. Alarcón-Lopez has significant oil and gas experience through her work as a land use planner for the Energy Division of the County of Santa Barbara. She has recently completed technical evaluations for several major transmission line projects, and has managed the following energy and/or utility projects: LNG EIR/EIS Document

Review for the City of Oxnard; Assessment of Well Permitting Compliance for DOGGR; and the Lower Reach and Upper Reach Water Pipeline Project EIRs for LADWP.

William Walters, PE, is a chemical engineer with **19 years of experience** conducting air quality assessment for infrastructure projects under CEQA and NEPA. He is an expert in developing emissions inventories (criteria and air toxic pollutants), dispersion modeling, regulatory compliance review, and development and implementation of technically feasible mitigation measures. Mr. Walters prepared the Air Quality section of the Environmental Information Document in support of the Coastal Consistency Determinations for the suspension of operation requests for undeveloped units and leases off the central California coast. Mr. Walters characterized and quantified air emissions for offshore oil and gas development activities associated with federal oil and gas Lease Sale 95 for the US Minerals Management Service. In addition, he prepared comments on the Air Quality, Alternatives, Marine Traffic, Public Safety, and Noise section of the Cabrillo Port Liquefied Natural Gas Deepwater Port Draft EIS/EIR for the City of Oxnard.

Chris Huntley has **15 years of experience** conducting and managing biological assessments, large-scale construction and restoration projects, comprehensive vegetation mapping, sensitive species surveys, and revegetation plans for projects throughout southern California. Mr. Huntley understands the regulatory environment and is familiar with the mechanisms involved in compliance with both the federal and California Endangered Species Acts. With extensive experience in managing large construction projects, Mr. Huntley has unique experience in resolving conflicts and ensuring compliance with environmental regulations. Supported by a solid background in biological resources, experience in completing CEQA analysis, and over a decade of construction management experience, he works closely with resource agency personnel, contractors and affected jurisdictions to ensure that projects are conducted in compliance with applicable laws, regulations, and standards.

Sue Walker is a land use planner with **over 18 years of experience** in preparing environmental impact assessments for compliance with CEQA and NEPA, which has included analysis of several oil and gas development projects. She served as the Project Manager for the MMS Environmental Information Document for Post-Suspension Activities of the Nine Federal Undeveloped Units and Lease OCS-P0409 Offshore Santa Barbara, Ventura, and San Luis Obispo Counties. In addition she was the Assistant Project Manager for the California Off-shore Oil and Gas Energy Resources study and prepared the Santa Barbara North County Siting Study for the County's Energy Division.

Jason Ricks has over **10 years** of professional environmental science and health and safety experience. He specializes in NEPA and CEQA project management and documentation with particular expertise in traffic and transportation, environmental contamination, and hydrology analysis. Mr. Ricks currently serves as Project Manager for the Port of Los Angeles Channel Deepening Project EIS/EIR and the LADWP Distribution Station No. 144 Project IS/MND. He has performed environmental analyses for several transmission and solar energy projects.

Vida Strong has **21 years of experience** managing and preparing environmental documents for numerous industrial projects, including pipeline, transmission line, and fiber optic networks, which required the critical application of alternatives development and screening criteria, knowledge of a broad range of issue areas, and extensive local, state, and federal agency coordination. She recently managed the preparation of an EIR evaluating PXP's proposed Tranquillon Ridge oil and gas development project in Santa Barbara County. Prior to joining Aspen, Ms. Strong was an Energy Specialist for Santa Barbara County's Energy Division, where she oversaw the permitting and environmental review of major oil and gas development projects and proposals, and oversaw the implementation of mitigation monitoring plans. Additional project experience includes the Chevron's Pt. Arguello oil and gas processing facility; Mobil Clearview Project; and Mobil Ellwood Oil and Gas Processing Plant/Marine Terminal.

Scott Debauche has **10 years of experience** as an environmental planner, and specializes in the analysis of land use, socioeconomics, and public policy for large-scale infrastructure and development projects. His experience in conducting environmental impact assessments for energy and/or utility projects include the

following: PG&E's Proposed Divestiture of Hydroelectric Assets Draft EIR; Looking Glass Networks Fiber Optic Cable Project IS/MND; SDG&E Miguel Mission Substation Draft EIR; as well as several Staff Assessments for the California Energy Commission.

Philip Lowe, PE, is a senior engineer and project manager with **28 years experience** in the hydrologic analysis of watersheds; surface water hydraulic analysis; channel erosion and sedimentation analysis; design of flood control and erosion control structures; plan formulation and feasibility including benefit/cost analysis; environmental impact analysis; US Army Corps of Engineers 404 Permitting; and habitat restoration and enhancement. Mr. Lowe prepared the water resources analyses for numerous energy-related projects, which include: Crude Oil Pipeline Investigations and Hydraulic and Hydrologic Analyses of Oil Spill Sites for Counties in the States of Missouri, Kansas, and Texas; Kinder Morgan Concord to Sacramento Pipeline EIR; Pacific Pipeline EIS/SEIR; Yellowstone Pipeline EIS; San Vicente Reservoir Pipeline EIR; Sunrise Powerlink Transmission Line EIR; Devers/Palo Verde Transmission Line EIR; SONGS/Diablo Canyon Steam Generator Replacement Project EIR; Viejo System Project Transmission Line EIR; as well as Final Staff Assessments for the California Energy Commission.

Aspen Team Subcontractors

James Thurber, RG, CEG, CHG, of Geotechnical Consultants, Inc., is a geotechnical engineer with over **25 years of experience** and an in-depth knowledge of the development, protection, and management of municipal groundwater resources. Mr. Thurber is actively involved in the engineering geology, hydrogeology and hazardous material assessments for numerous local and regional environmental impact reports. Mr. Thurber's EIR experience includes long linear pipelines, new power plants, highways, and large redevelopment projects. He is experienced with hazardous waste investigations and site characterization for leaking underground fuel tanks, industrial facilities and solid waste landfills.

Jay Sheth, PE, of Robert Brown Engineers, is a chemical engineer with **over 36 years experience** in process risk assessment and evaluation, project management, process design, facilities revamp, plant construction, start-up and environmental permit management. He has provided safety review of oil and gas projects for the County of Santa Barbara since 1984, and his work has included reviewing process and mechanical design; HAZOPS; risk assessments; corrosion control, monitoring, inspection and maintenance; EIRs; relief system; startup and commissioning procedures; operating procedures; electrical area classifications; handling of hazardous and toxic chemicals; safety regulations; emergency shutdown systems and other safety related systems. Specific county projects include: PXP's (formerly Chevron) Pt. Arguello Project; Phillips' Tajiguas Gas Plant Modification; Shell Molino Gas Plant Expansion; PXP's (formerly Unocal) Pt. Pedernales Project; ExxonMobil Santa Ynez Project; All American Pipeline Project; Texaco Gaviota Marine Terminal; E&B Natural Resources' (Formerly ARCO) South Cuyama Project; POPCO's Gas Plant Expansion; Venoco's (formerly ARCO/Mobil) Ellwood Oil & Gas Treating Facility, Ellwood Marine Terminal and Platform Holly; Unocal/Nuevo's (now PXP) Gas Plant; Molino Energy's Gas Plant Project; Greka's (formerly Conoco) Santa Maria Asphalt Refinery; and ConocoPhillips' (formerly Unocal) Pipelines and Pump Stations.



SANDRA ALARCÓN-LOPEZ
Senior Associate

ACADEMIC BACKGROUND

M.A., Architecture & Urban Planning, University of California, Los Angeles, 1982

B.A., Speech and Hearing Sciences, University of California, Santa Barbara, 1980

PROFESSIONAL EXPERIENCE

Ms. Alarcón-Lopez has over 24 years of experience managing environmental projects and programs including experience conducting environmental impact analysis pursuant to California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). She has effectively managed small and large projects ranging from environmental studies to major public involvement programs to environmental restoration programs. She prepared, adopted, and implemented general plans and elements for the City of Whittier, County of San Bernardino, and County of Santa Barbara. Ms. Alarcón-Lopez has significant experience as a project manager for local and regional government projects and in managing and carrying out public participation activities. Ms. Alarcón-Lopez has managed the preparation of and effectively completed technical evaluations for major transmission line projects proposed in California and Arizona and has managed the preparation of energy-related reports for the California Energy Commission. She also has significant oil and gas experience through her work as a land use planner for the Energy Division of the County of Santa Barbara.

Aspen Environmental Group

1999 to present

At Aspen Environmental Group, Ms. Alarcón-Lopez is a project manager responsible for working with in-house and contract personnel to complete environmental analyses on federal, state, and local government projects. Her projects include:

- **Project Manager for LNG EIR/EIS Document Review, City of Oxnard.** Managed the technical and procedural review of the Cabrillo Port Liquefied Natural Gas Deepwater Port Project draft environmental report. The review included the 2004 Draft EIR/EIS and a second review in April 2006 of the revised draft. The scope of work involved reviewing all issue areas addressed in the draft documents and preparing comments regarding the adequacy of the document for the City of Oxnard. Aspen's senior technical staff provided input to this review. All comments for each review (one in 2004 and the second in 2006) were consolidated into a review/comment white paper. The City used the review/comments as part of their formal comments submitted on the Draft EIR/EIS and Revised Draft EIR (the EIS was not recirculated).
- **Project Manager for Assessment of Well Permitting Compliance.** Project Manager for the preparation of an assessment report that analyzed the Department of Conservation, Division of Oil, Gas, and Geothermal Resources' (Division) compliance with the CEQA. The assessment considered lead and responsible agency roles, applicable regulatory processes, environmental compliance, and oil and gas well permitting processes in Kern County. The report provided program options to the Division regarding measures that could be taken to bring their existing well permitting practices into compliance with CEQA. This assessment included consideration of over 37 plans, regulatory

documents, and reports; contact with industry groups, environmental organizations, and other interested parties; and five workshop-type meetings with interested parties to obtain input into the report and its conclusions. This was a highly controversial project with significant concern from interest groups and the oil and gas industry. Phase II included an evaluation of regulatory changes needed to bring the Division's program into compliance with CEQA and preliminary environmental assessment to determine how changes were evaluated with regard to CEQA.

- **Project Manager for the Lower Reach and the Upper Reach Water Pipeline Projects EIRs for the Los Angeles Department of Water and Power (LADWP).** Project Manager for preparation of two EIRs for the LADWP's Lower Reach River Supply Conduit Pipeline project and the River Supply Conduit Improvement – Upper Reach project. The original linear project covered a 13.3-mile alignment that crossed the City of Los Angeles and City of Burbank jurisdictions. After completion of the Administrative Draft EIR, the project was changed to address the Lower and Upper Reaches separately, therefore the first EIR dealt with only 7 miles of the original route. The revised project only covered property within the City of Los Angeles. The project involved the replacement of an existing pipeline with a new pipeline in a new alignment. The project involves the construction of 48-, 60-, 66-, 72-, 84-, and 96-inch diameter welded steel underground pipeline. The Lower Reach Initial Study and the Notice of Preparation were completed and released in August 2004. The Draft EIR was released in May 2005 and the Final EIR was released in December 2005. Also, as part of the Lower Reach project, Ms. Alarcón-Lopez managed the preparation of a specialized noise study to determine the impact of the regulator station noise on an adjacent cemetery property and prepared a tree survey that identified more than 1,500 trees in Griffith Park (a major regional park in the City of Los Angeles) that had the potential to be impacted by the project. Ms. Alarcón-Lopez has completed the focused EIR for the Upper Reach, which involves the placement of a 78-inch diameter water pipeline in the cities of Los Angeles and Burbank. The NOP/IS was released for public review on January 25, 2007 and the Draft EIR in March 2008.
- **Public Involvement Manager for Sunrise Powerlink Project (EIR/EIS) for the California Public Utilities Commission (CPUC).** Ms. Alarcón-Lopez is responsible for managing the work of in-house and subcontractor staff to complete the extensive public involvement effort for the Sunrise Powerlink Environmental Impact Report/Environmental Impact Statement (EIR/EIS). This project, proposed by San Diego Gas & Electric Company, includes the construction and operation of a highly controversial 150-mile 500-kV and 230-kV transmission line from Imperial County near El Centro to the City of San Diego. For public scoping, over 200 comment letters were received, reviewed, and summarized; seven public scoping meetings were carried out; and eight newspaper advertisements were placed for this project. She managed the preparation of an 800-page scoping report that outlined all verbal and written comments submitted on the project during the public scoping process, and documented all notices and advertisements. Ms. Alarcón-Lopez also completed a second scoping report to document the written and oral comments presented during the second phase of public meetings to gather input on the project alternatives. For this second phase, eight public meetings were noticed in eleven newspapers. For the Draft EIR/EIS, nine public meetings were held over a one-week period to take public comments on the conclusions of the Draft EIR/EIS.
- **Public Involvement Manager for Tehachapi Renewable Transmission Project (TRTP) (EIR/EIS) for the CPUC.** Ms. Alarcón-Lopez is responsible for managing the work of in-house and subcontractor staff to complete the extensive public involvement effort for the TRTP EIR/EIS. This project, proposed by Southern California Edison, includes the construction and operation of a major transmission line that would cross the counties of Kern, Los Angeles, and San Bernardino as well as 17 cities and the Angeles National Forest. For public scoping, Ms. Alarcón-Lopez managed subcontract staff to identify and schedule the public scoping meetings. She also worked with in-house and contract staff in preparing a scoping report for this project. As part of the scoping report, Ms. Alarcón-Lopez prepared a comment analysis using the Forest Service approach in consolidating,

categorizing, and assessing all of the comments received on the project. The comment analysis considered 249 written comment letters and oral comments from 53 individuals received at the nine public scoping meetings. In addition, she prepared newspaper notices that were placed in 15 newspapers including Spanish, Korean, and Chinese language newspapers. She prepared a Notice of Preparation that was mailed to about 15,000 property owners, agencies, and other interested parties. She prepared a post card notice that was sent to contacts on the mailing list and a poster notice that was placed in over 100 locations along the proposed project route.

- **Public Involvement for El Casco System Project (EIR) for the CPUC.** Ms. Alarcón-Lopez worked on the public involvement effort for this electric subtransmission line and associated telecommunications systems project proposed by Southern California Edison in San Bernardino and Riverside Counties. She coordinated the scheduling, set up, and noticing of the public scoping meetings. In addition, she prepared the scoping report that documented the public and agency comments received on the project, and she coordinated the public meetings for the Draft EIR as well as all noticing.
- **Land Use Analyst and Public Involvement Manager for Antelope Pardee 500-kV Transmission Project (EIR/EIS) for the CPUC.** Ms. Alarcón-Lopez prepared the land use impact analysis for the evaluation of the 25-mile transmission project proposed by Southern California Edison in Los Angeles County. The land use analysis was prepared as part of the EIR/EIS for the project and covered local jurisdictions and federal land under the jurisdiction of the U.S Forest Service. Ms. Alarcón-Lopez prepared the public participation plan for the project and managed the preparation of an extensive mailing list for the project, coordinated the logistics of public meetings for scoping and the Draft EIR/EIS, coordinated all noticing efforts, and managed the preparation of the scoping report that outlined all verbal and written comments submitted on the project during the public scoping process.
- **Public Involvement Manager for the Antelope Transmission Project (EIR), Segments 2 and 3 for the CPUC.** Ms. Alarcón-Lopez was responsible for coordinating the public involvement associated with the Antelope Transmission Project EIR. The project included construction and operation of a new 56.7 mile 220-kV and 500-kV transmission line in Kern and Los Angeles County. She managed the preparation of an extensive mailing list for the project, coordinated the logistics of public meetings for scoping and the Draft EIR, coordinated all noticing efforts, and managed the preparation of the scoping report to document the scoping process, and managed the text write ups of public involvement efforts in the Draft and Final EIR.
- **Land Use Analyst and Public Involvement Manager for Devers Palo Verde 500-kV Transmission Project (EIR/EIS) for the CPUC.** Ms. Alarcón-Lopez prepared the land use impact analysis for the evaluation of the 230-mile transmission project proposed by Southern California Edison in Southern California and Arizona. The land use analysis was prepared as part of the EIR/EIS for the project and covered local jurisdictions and federal land under the jurisdiction of the U.S Bureau of Land Management. She also reviewed and managed the preparation of the wilderness and recreation and agricultural sections of the report. Ms. Alarcón-Lopez prepared the Policy Screening Report that evaluated the project's consistency with over 33 land use or resource management plans. The Policy Screening Report was a major appendix report in the EIR/EIS. She was also responsible for planning and carrying out the public notification and involvement effort on the project. As part of this role, she prepared the Public Involvement Plan, two Scoping Reports, and coordinated the conduct and noticing of eight public scoping meetings for the NOP as well as four informational workshops and three public participation hearings for the Draft EIR/EIS.
- **Principal Author of Imported Electricity Report for the California Energy Commission (CEC).** Ms. Alarcón-Lopez was the principal author of A Preliminary Environmental Profile of California's Imported Electricity, June 2005. This report was prepared in support of the 2005 Environmental Performance and 2005 Integrated Energy Policy Report (Docket 04-IEP-1). Ms. Alarcón-Lopez conducted extensive website and agency research regarding coal generated electricity and worked with

CEC staff to develop the out-of-state Designated Coal power plant profiles. She also worked closely with other contributing authors to obtain information on out-of-state hydropower, gas, nuclear and renewable energy resources. The report addressed air quality, biological resources, and hydrological resource impacts from out-of-state energy. The report included information on electricity capacity and generation for the ten US western states considered in the report and provided electricity trends for the US western states, western Canada, and northern Mexico. She worked with CEC staff to finalize the report and participated in hearings to present the report to the Commission.

- **Project Manager for Environmental Assessment/Biological Assessment/Mitigation Plan for Proposed Border Patrol Facilities in San Diego.** Project manager for this U.S. Army Corps of Engineers and U.S. Immigration and Naturalization Service (INS) project. For the Environmental Assessment/Biological Assessment, Aspen conducted a field biological survey to confirm plant and animal species on the project and alternative sites. Soil samples were collected and analyzed to assess the potential for contamination prior to development of vehicle maintenance facilities for the INS. A Mitigation Plan was also prepared to outline the mitigation measures associated with the project, the options with regard to mitigation fee potential, and to identify responsible agencies and the overall implementation strategy.
- **Project Manager for Comparative Evaluation Report and Environmental Assessment for the Tucson Drainage Area Detention Basin Complex in Tucson, Arizona.** Project Manager for the preparation of both the Comparative Evaluation Report and the Environmental Assessment. The Comparative Evaluation addressed two proposed designs for the basin complex. The report included an assessment of environmental outputs (mitigation and restoration), grading plan differences, and the incremental costs associated with the proposed changes to an approved plan. The evaluation of the habitat value of each plan was a key component in this evaluation. This assessment was considered in a Habitat Evaluation Procedure Plan, which was part of the comparative report and then revised as part of the Environmental Assessment. An Environmental Assessment was also prepared to document the environmental impacts associated with the two detention basin plans. The report included analysis of groundwater and soil contamination that resulted from an adjacent dry cleaning facility.
- **Project Manager for Ecosystem Restoration Report/Environmental Assessment of Old San Jose Creek, Santa Barbara County.** Project Manager for the preparation of the Ecosystem Restoration Report and Environmental Assessment. This project included vegetation mapping and soil sampling to assess the suitability of soil for restoration of the creek, and an historical evaluation of how the creek has changed over time through the use of aerial photography. A creek restoration plan was developed for this project that included three alternative scenarios. A Habitat Evaluation Procedure Plan was prepared to compare the habitat value of each restoration alternative and was evaluated by the U.S. Fish and Wildlife Service. This project also required a real estate evaluation for all properties along the creek and the development of landscape costs for the implementation of each restoration alternative. Hydrological, geotechnical, and economic evaluations of the project area prepared by the U.S. Army Corps of Engineers were used in the preparation of the Ecosystem Restoration Report and the Environmental Assessment (EA). The Draft EA of the Recommended Plan addressed the environmental impacts associated with the restoration project. The EA, part of the Detailed Project Report, was prepared to describe the costs and benefits associated with the restoration project.
- **Project Manager for the Visalia Landfill Facility EIR.** Project Manager for the preparation of an Environmental Impact Report for the proposed expansion of the Visalia Landfill Facility in Tulare County. The EIR covered the replacement of an existing unlined waste management unit (WMU) with the construction and operation of a new lined WMU that would meet all State and federal regulations. The EIR considered the environmental impacts associated with the project and included a monitoring program to address the implementation of mitigation measures. Some of the key issues considered in the EIR included the evaluation of traffic impacts associated with the transporting of waste to the site,

the potential for impacting the San Joaquin kit fox in the development of the WMU, the potential to impact cultural resources, and the impact of the WMU on the adjacent agricultural facilities.

- **Project Manager for Los Angeles Unified School District New School Sites Environmental Reports (EIRS and MNDs).** Project Manager for school projects in the City of Los Angeles. Ms. Alarcón-Lopez participated in the consultant panel established by the LAUSD to develop a template for environmental reports on new schools. In addition, the Program EIR that was managed by Ms. Alarcón-Lopez received the **2006 Environmental award** from the Los Angeles Section of the American Planning Association. Projects are summarized below:
- **LAUSD Phase II Projects.** Project Manager for new schools construction under Phase II of the LAUSD's New School Construction Program. She managed the *South Region Elementary School No.1* and *Central Region Middle School No.7* projects. For both of these projects, Ms Alarcón-Lopez completed Mitigated Negative Declarations (MNDs). Both projects required traffic impact studies, air quality modeling, and assessment of other environmental issue areas. The Central Region Middle School No. 7 Project also included the preparation of a Rail Safety Study to address abandoned railroad tracks south of the proposed project site. Ms. Alarcón-Lopez also prepared a draft and final MND for the *Valley Region Montague Charter Academy Addition Project*. The MND was prepared for a 16-classroom addition proposed on an existing elementary school campus. She completed the Final MND in May 2007, but the document was not released to the public in May. (In December 2007, the Final MND was sent to LAUSD for their distribution as our contract terminated in December 31, 2007.)
- **LAUSD Central Region Middle School #14 EIR.** Project Manager for this controversial new school project; the original MND prepared for this project was challenged. Working under a court order, the LAUSD prepared and distributed the NOP for this school. Ms Alarcón-Lopez prepared an EIR work plan to layout the strategy for addressing the court order and prepared an updated mailing list. She managed the preparation of an EIR that addressed transportation/traffic, pedestrian safety, historical resources, land use and planning, population and housing, and fire protection. The Draft EIR was released for public review in March 2007. She participated in a public meeting held to take comments on the draft document. She prepared a Final EIR that addressed over 56 written comment letters and oral comments made during the public meeting. This was a highly controversial project with significant and complex issues that were addressed in the Final EIR. She worked extensively with LAUSD attorneys in preparing the Final EIR for this project. The Final EIR was released in June 2007 and the document was certified at a public meeting held before the LAUSD Board of Education on June 26, 2007.
- **LAUSD New School Construction Program EIR.** Project Manager for the preparation of a Program EIR that assessed the program-wide impacts of implementing the district's new school construction program. The Program EIR managed by Ms Alarcón-Lopez addressed 125,000 of the total 200,000 new seats to be provided by the district through the construction of new schools and the expansion of existing schools. Ms. Alarcón-Lopez managed the preparation of the Notice of Preparation (NOP) and Initial Study (IS), which was published in May 2003. Aspen conducted the community outreach during the public scoping. The public scoping included eight public meetings throughout the district to solicit public comment on the NOP/IS, advertisement in 22 local newspapers, distribution of public notices to approximately 2,100 interested parties, distribution of over 100 documents, placement of reports in 29 public repository sites, and the preparation of a scoping report. Ms Alarcón-Lopez managed the preparation of the Draft Program EIR report, which was published in March 2004. The Program EIR addressed all environmental issues areas and documented site selection, design, construction, and operation measures that the LAUSD agreed to implement, as applicable, on all projects. The report evaluated environmental impacts associated with projects before specific sites were identified. It provides information on applicable regulations that will be implemented by the LAUSD in carrying out its program and documents how traffic, cultural resources, air quality, noise, and other environmental resource area assessments will be carried out and evaluated when specific sites are selected and new schools or school additions are designed and constructed. Six public meetings were held to take comments on the Draft Program EIR. Over 100 copies of the document were distributed; two separate mailings were conducted to notify the public about the release of the draft document and the six public meetings (approximately 2,100 notices for each noticing event); documents were distributed to the 29 public repositories; and two separate advertisements were placed in 22 newspapers regarding the release of the document and the public meetings. Comments made at the public

meetings and provided in written letters during the 45-day public review period, were addressed in the Final EIR. The Final EIR was published on May 11, 2004. The Board of Education certified the Program EIR on June 8, 2004. The public notification for the certification meetings were at the same level as those conducted for the Draft Program EIR. In addition, all public information materials were made available in four languages (English, Spanish, Armenian, and Korean). For public scoping, public information materials were also translated into Japanese, Chinese, and Russian.

- **Kennedy High School Portable Classroom Additions (Revised) Initial Study/Mitigated Negative Declaration (IS/MND).** Ms. Alarcón-Lopez revised the IS/MND for portable classroom additions proposed at Kennedy High School. This project was redesigned by the LAUSD to include the development of on-campus parking.
- **Pio Pico School Playground Expansion EIR.** Ms. Alarcón-Lopez completed a Notice of Preparation, Initial Study, and Administrative Draft EIR for the expansion of a playground at the existing Pio Pico School in the LAUSD. The playground was proposed on five residential properties. One of the residences is a potentially significant historical resource because of its association with an African American woman journalist, Fay M. Jackson. This project was cancelled by the LAUSD after completion of the administrative draft report.
- **Narbonne, Cleveland, Wilson, and Kennedy High Schools Portable Classroom Additions IS/MND.** Ms. Alarcón-Lopez completed four ISS/MNDs for portable classroom additions at Narbonne, Cleveland, Wilson, and Kennedy High Schools in the LAUSD. These reports were all fast-track and the Notice of Preparations and Administrative Draft reports were completed concurrently. Ms. Alarcón-Lopez completed a Final IS/MND and response to agency and public comments for Narbonne, Cleveland, and Wilson High Schools. The Kennedy High School report was put on hold by the LAUSD to address parking concerns.
- **Valley New High School No. 1 (CSUN) EIR.** This new high school was proposed on the campus of the California State University Northridge (CSUN) as an academy high school which would share athletic facilities with CSUN. This project was highly controversial with the neighboring community and required extensive interaction with the Los Angeles Department of Transportation to address concerns with traffic. Ms. Alarcón-Lopez participated in the public scoping meeting and public hearing on the Draft EIR. A revised traffic study was needed to address the public comments on traffic and to explore additional traffic mitigation; traffic was a significant unavoidable impact after mitigation. The report was certified by the Board of Education and was not challenged by the public despite significant controversy regarding traffic impacts.
- **East Valley High School No. 2 (Gemco) EIR.** This new high school was proposed on a commercial lot, which was the previous location of a Gemco retail store. Ms. Alarcón-Lopez worked with a traffic consultant to address concerns with traffic and parking and with the LAUSD and the City of Los Angeles Department of Transportation in addressing potential mitigation measures. This project was a fast-track project that required quick turnaround in order to secure needed funding. She worked closely with the LAUSD and was able to meet the funding deadline. The report was certified on time and the project was executed on schedule. In addition, portions of the EIR were used to update the EIR template for future LAUSD projects.
- **Project Manager for Meeting Facilitation and Report for the California Energy Commission (CEC).** Ms. Alarcón-Lopez facilitated the meetings of the Elkhorn Slough Advisory Team. The advisory team was responsible for selecting projects that could be funded through the mitigation fees imposed on an adjacent energy facility project. The team was composed of State agency representatives and local technical experts. The meetings resulted in a plan that identified project priorities, project stewardship, a process for selection and ranking of projects, and timelines. At the request of the Foundation, Ms. Alarcón-Lopez assisted the Elkhorn Slough Foundation in preparing the report that documented the results of the Team meetings and established the project selection and ranking process. This plan was adopted by the Regional Water Quality Control Board and the CEC without any revisions.

Jacobs Engineering Group Inc.

1990 to 1999

In close to ten years at Jacobs Engineering, Ms. Alarcón-Lopez worked on a variety of large complex projects and managed a wide range of environmental restoration projects. Ms. Alarcón-Lopez's major project activities included the following:

- **ARCO CES Nationwide Contract** (\$8.7 million). Program Manager for the ARCO CES contract. Managed seven project managers in six Jacobs offices. Served as primary point of contact to ARCO for all contractual and personnel related issues. Selected project activities included:
 - Managed investigation of three properties in Kansas City, Kansas. Prepared focused site investigation for determining baseline contaminant levels, four cost estimates for remediation alternatives, and managed a risk-based analysis to quantify the environmental risks associated with a vacant property, which was part of the old refinery. Completed a due diligence review of one of the properties that was purchased by ARCO.
 - Managed the site characterization of a former foundry property in Kewanee, Illinois. Managed the site investigation that included soil and groundwater sampling and the human health risk assessment. Prepared a comprehensive sampling work plan that received approval within a 45-day time frame by the state and prepared a site characterization report that documented the sampling results and presented a recommendation for no further action. These documents provided the basis for an expedited site closure.
- **RAILCYCLE solid waste management project** for Waste Management of North America Inc (\$3 million). Managed the work of in-house and contract staff in preparation of technical documents, monitored the project budget, and served as primary interface with the client. Activities included:
 - Managed technical and administrative activities. Oversaw a major geologic investigation of the landfill site that included the drilling of 21 wells, soil and groundwater testing, and geophysical surveys. Also managed air quality, biological, cultural resource, paleontological, and land use studies of the landfill site in the Mojave Desert
 - Provided support to the environmental impact report/statement document and prepared a scoping document for this project
 - Managed the preparation of a surface and groundwater compliance plan.
- **U.S. Navy Comprehensive Long-Term Environmental Action Navy (CLEAN) Program.** Activities included:
 - Managed the preparation of the proposed plan for one of the operable units at the Marine Corps Logistics Base (MCLB) at Barstow
 - Managed the preparation of fact sheets, brochures, and other informational materials for Naval Air Station North Island, Naval Amphibious Base Coronado, and San Pedro Defense Field Support Point
 - Managed the preparation of a major public involvement effort for MCLB Barstow. This involved the development of an historical aerial display, two three-panel displays on base activities, four single panels on topics regarding base cleanup and public participation, a fact sheet, and other public involvement materials as well as meeting logistics.
- **Vandenberg Air Force Base (AFB), California, part of Jacobs Air Force Installation Restoration Program (IRP) contract.** Activities included:
 - Oversaw community relations activities for restoration projects at Vandenberg AFB
 - Managed the preparation of preliminary endangerment assessments (PEA), and brought to closure EPA sites that could not be closed (or considered "no action" sites by the regulators) by previous attempts. Completed 11 PEA reports as part of this effort
 - Managed the preparation of a public involvement effort. This involved preparation of a community relations plan that included approximately 90 interviews, and the layout and production of two fact sheets for the base.

City of Whittier

1990 to 1998

Ms. Alarcón-Lopez served two four-year terms as a Planning Commissioner with the City of Whittier (appointed by the City Council). She made decisions on controversial projects, assessed the long-term impacts of project developments, and ensured that mitigation reduced or eliminated any project impacts. In addition, she was involved in the development and approval of the revised general plan for the City of Whittier. She served as the Chair of the Commission from 1993 through 1995.

Planning Consultants Research

1989 to 1990

As the Manager of Waste Management Services for **Planning Consultants Research**, Ms. Alarcón-Lopez worked on several planning and environmental projects including the following projects:

- Managed a permitting and environmental review effort for the Lopez Canyon landfill in the city of Los Angeles
- Prepared a hazardous material management plan for the Lockheed Company in Burbank
- Completed a site feasibility study that evaluated three candidate sites for an autoclave facility for Waste Management of North America.

Independent Consultant

1988 to 1989

As an independent consultant, Ms. Alarcón-Lopez was the primary author of the draft county Hazardous Waste Management Plan (HWMP) for the County of San Bernardino. As primary author of the San Bernardino County HWMP, work involved analyzing and writing about issues regarding hazardous waste management such as siting hazardous waste facilities, transportation, summary of legislation, policy development, and preparation of other documents related to the plan, as well as taking the plan before public bodies for their review and consideration

- Oversaw for the County of San Bernardino the public involvement component for HWMP development including the coordination of informational materials and workshops
- Prepared a consistency evaluation, which compared a county HWMP to the county's general plan for the County of San Bernardino.

County of Santa Barbara

1983 to 1988

As a Land Use Planner for the County of Santa Barbara Resource Management Department, Ms. Alarcón-Lopez prepared the county's Draft Hazardous Waste Management Plan. Her work involved analyzing and writing about issues regarding hazardous waste management such as siting hazardous waste facilities, transportation, summary of legislation, policy development, and preparation of other documents related to the plan, as well as taking the plan before public bodies for their review and consideration.

She prepared, managed, and/or contributed to several major NEPA and CEQA documents including off-shore oil and gas projects, hazardous waste management plans/facilities, and other industrial, commercial, and recreational projects. She participated in:

- Application review and environmental documentation (EIR/EIS) for complex offshore oil and gas development and related facilities, and the review and permitting of projects in the coastal areas of Santa Barbara County
- Represented the local jurisdiction on panels with State and federal agencies for the joint preparation of environmental documents as an employee of Santa Barbara County Resource Management Department
- Presented project information and recommendations to decision-making bodies and the public.



SCOTT DEBAUCHE
Environmental Planner

ACADEMIC BACKGROUND

M.S. Candidate, Urban & Regional Planning, University of Minnesota
B.S., Urban & Regional Planning, University of Minnesota, 1994

PROFESSIONAL EXPERIENCE

Mr. Debauche is an environmental planner with six years of experience preparing a variety of federal and State of California environmental, planning, and analytical documents for large-scale infrastructure and development projects. Mr. Debauche brings the experience of being both a public and private sector planner, specializing in the integration and completion of NEPA and CEQA documentation, joint documentation, land use, socioeconomic, and public policy analysis, environmental justice analysis, and public and community involvement programs.

Aspen Environmental Group

2001 to present

California Public Utilities Commission (CPUC). Under Aspen's environmental services contract with the CPUC, Mr. Debauche has prepared environmental analysis sections of environmental reports analyzing large-scale infrastructure projects. His project experience with the CPUC includes the following:

- **PG&E's Proposed Divestiture of Hydroelectric Assets Draft EIR.** Mr. Debauche prepared several key sections of the Draft EIR, including Socioeconomics and Hazardous Materials analysis.
- **Looking Glass Networks Fiber Optic Cable Project IS/MND, northern and southern California.** As part of Aspen's ongoing contract with the CPUC for review of Telecommunications projects, this document encompasses and evaluation of project impacts and network upgrades in the San Francisco Bay Area and the Los Angeles Basin Area. Prepared the socioeconomic analysis for this comprehensive CEQA document reviewing the potential impacts of hundreds of miles of newly proposed fiber optic lines throughout northern and southern California, including Los Angeles and Orange Counties.
- **SDG&E Miguel Mission Substation Draft EIR.** The major part of the Proposed Project would include the installation of a new, bundled 230 kV circuit between Miguel and Mission Substations, which would be located entirely within SDG&E's existing 35-mile ROW. Mr. Debauche prepared social science analysis for the Initial Study, as well as the Draft EIR Project Description and several key environmental sections.

California Energy Commission (CEC), Technical Assistance in Application for Certification Review. In response to California's power shortage, Aspen is assisting the California Energy Commission in evaluating the environmental and engineering aspects of new power plant applications throughout the State. As part of this effort, Mr. Debauche works as a technical specialist for socioeconomic and environmental justice, and alternatives analyses for the following power plant projects:

- **Valero Cogeneration Project, Benicia, CA.** Assisted in the preparation of the Socioeconomics Staff Assessment for a proposed cogeneration facility at the Valero Refinery in Benicia. Issues addressed

included impacts on public services and other project-related population impacts such as school impact fees.

- **Rio Linda/Elverta Power Project, Sacramento, CA.** Assisted in the preparation of the Socioeconomics Staff Assessment for a 560-megawatt natural gas power plant in the northern Sacramento County. Issues of importance included environmental justice and impacts on property values.
- **Magnolia Power Project, Burbank, CA.** Assisted in the preparation of the Socioeconomics Staff Assessment for this nominal 250-megawatt natural gas combined-cycle fired electrical generating facility to be located at the site of the existing City of Burbank power plant. Environmental justice issues and potential impacts on local economy and employment were evaluated.
- **Avenal Energy Project, Kings County, CA.** Assisted in the preparation of the Socioeconomics Staff Assessment for this 600-megawatt combined cycle electrical generating facility, and associated linear facilities.
- **Inland Empire Energy Center, Riverside County, CA.** Assisted in the preparation of the Socioeconomic Staff Assessment for a 670-megawatt natural gas-fired, combined-cycle electric generating facility and associated linear facilities including, a new 18-inch, 4.7-mile pipeline for the disposal of non-reclaimable wastewater, and a new 20-inch natural gas pipeline. The project would be located on approximately 46-acres near Romoland, within Riverside County.
- **Coastal Plant Study.** Socioeconomic specialist for this special study being conducted as part of Aspen's contract with the California Energy Commission (CEC). The study includes identification and evaluation of potential issues associated with the possible modernization, re-tooling, or expansion of California's 25 coastal power plants including the Encina Power Plant and the San Onofre Nuclear Power Plant.

U.S. Army Corps of Engineers, Los Angeles District. Responsible for conducting the analyses of the social science issue areas for a variety of EISs and EAs as part of two environmental services contracts. Delivery orders have included:

- **Northeast Phoenix Drainage Area Alternatives Analysis Report, Phoenix and Scottsdale, AZ.** Worked with preparation of an alternatives analysis report that evaluated the potential environmental impacts associated with channel and detention basin alternatives to control flooding problems resulting from fast rate of development in the northeast Phoenix area.
- **Murrieta Creek Flood Control and Environmental Restoration Project.** Mr. Debauche served as a technical writer of an Environmental Assessment and Mitigation Monitoring plan for Phase 1 of a flood control and restoration project in Riverside County.

California Department of Water Resources. Responsible for conducting the environmental analyses for CEQA compliance as part of two environmental services contracts. Delivery orders have included:

- **Piru Creek Stabilization and Restoration Project.** The California Department of Water Resources (CDWR) proposes to repair erosion damage at a series of three locations downstream of Pyramid Dam and seismically retrofit the Pyramid Dam access bridge that crosses Piru Creek. Mr Debauche served as technical writer of the Initial Study for this project.

Los Angeles Unified School District (LAUSD), Los Angeles County, CA. Deputy Program manager and Technical writer for several CEQA documents (EIRs and IS/MNDs) being prepared as part of Aspen's ongoing services contract with the LAUSD to help approve school projects that would meet existing overcrowded conditions in the greater Los Angeles area. Projects have included:

- **East Valley Middle School No. 2 EIR.** Served as a key technical writer for this middle school project proposed to be located at the previous Van Nuys Drive-In site. The EIR focused on impacts associated with air quality, hazards and hazardous materials, noise, land use and planning, and traffic and transportation. Major issues of concern included traffic and noise generated by school operation activities. The EIR included LAUSD design standards and measures employed to minimize environmental impacts.
- **Mt. Washington Elementary School Multi-Purpose Room Addition Project IS/MND.** Served as Deputy Program Manager for this project proposed the development of a multi-purpose room facility, including a library, auditorium, and theater, to the existing Mt. Washington Elementary School campus located in Los Angeles. The surrounding residential community had concerns regarding the proposed project's impacts on aesthetics, traffic, air quality, and noise. Of particular concern, was impacts generated due to the after-hours use of the multi-purpose room facility by civic and community groups.
- **Canoga Park New Elementary School IS/MND.** Served as technical writer for this elementary school project proposed to be developed on a parcel of land owned by the non-profit organization, New Economics For Women (NEW). This "Turn-Key" project consisted of a Charter Elementary School to be developed by NEW and sold to the LAUSD for operation. It was later decided that NEW would lease the school back and run it as a charter school. Issues of concern included, pedestrian safety, traffic, air quality, noise, and land use.
- **New School Construction Program EIR.** Serves as a technical writer for social science issues, including socioeconomics, and population and housing for this Program EIR being prepared for the LAUSD. The LAUSD 2020 Program would provide student seats throughout the LAUSD via a combination of the addition of portable classrooms to existing campuses, modernization and reconfiguration of existing campuses, and the construction of new schools. Mr. Debauche prepared the socioeconomic, population, and housing sections of this EIR.
- **Hughes Magnet Span School IS/MND.** Served as a technical writer for socioeconomics, hydrology, public services and utilities, and recreational impacts for the proposed re-opening of the existing Hughes Middle School as a Magnet Span School serving up to 1,620 District 6th through 12th grade students. The re-opening of the Hughes Middle School would require the relocation of the existing uses of the campus. The existing Enadia Way Elementary School and Platt Ranch Elementary School would be re-opened for the relocation of these uses.
- **Wonderland Elementary School Portable Classroom Additions IS/MND.** Served as the technical writer of an IS/MND for a proposed addition to the Wonderland Avenue Elementary School, located in the City of Los Angeles. Ms. Walker is responsible for overall coordination and scheduling of the project's environmental review, communications with the LAUSD, senior technical review of all documents produced, presentation during the project's public scoping meetings and hearings, and assurance of public noticing. Served as technical writer of the IS/MND.
- **Pio Pico Elementary School Playground Expansion IS/MND.** Completed a Notice of Preparation, Initial Study, and Administrative Draft EIR for the expansion of a playground at the existing Pio Pico School in the LAUSD. The playground was proposed on five residential properties. One of the residences is a potentially significant historical resource because of its association with an African American woman journalist, Fay M. Jackson. This project was cancelled by the LAUSD after completion of the administrative draft report. Served as technical writer of the IS/MND.
- **Fairfax Senior High School Portable Classroom Addition IS/MND.** Served as technical writer of the IS/MND for the addition of portable classrooms at the school. Major issue areas covered were noise, hydrology, and geotechnical analysis.

- **Polytechnic Senior High School Portable Classroom Addition IS/MND.** Served as technical writer of the IS/MND for the addition of portable classrooms at the school. Major issue areas covered were noise, hydrology, and geotechnical analysis.
- **Washington Senior High School Portable Classroom Addition IS/MND.** Served as technical writer of the IS/MND for the addition of portable classrooms at the school. Major issue areas covered were noise, hydrology, and geotechnical analysis.

EIP Associates

1998 to 2001

MTA Mid Cities/Westside Transit Corridor Study EIS/EIR. Was a key writer of the EIS/EIR for this 3-phase (including prepared the Major Investment Study (MIS), the Environmental Impact Statement (EIS), and an evaluation of the urban design implications of transit interventions on selected routes) study intended to address current and long range traffic congestion in the central and westside areas of the Los Angeles Basin. Three east/west corridors and a range of transit alternatives ranging including Rapid Bus, light rail, and heavy rail are being evaluated. In addition to preparing several issue area chapters of this comprehensive joint EIS/EIR, Mr. Debauche assisted with the Environmental Justice Analysis (per Executive Order 12898), the Section 4(f) Parklands discussion, and the land use and socioeconomics sections of the EIS/EIR.

Wes Thompson Ranch Development Project EIR. Served as project writer for this hillside residential development in the City of Santa Clarita. Issues of concern included seismic and air quality impacts associated with the excavation of 2 million cubic yards of soil, the project's non-compliance with the City's hillside ordinance for innovative design, and traffic generated by project-related population growth in the area. Four different site configuration alternatives were developed as part of the EIR analysis. Other issues of concern included sensitive biological resources, the potential for hydrological impacts due to disturbance of the hillside, and cultural resources. As the technical writer for socioeconomics, noise, hazardous materials, air quality, and public services, Mr. Debauche conducted analysis and prepared these environmental sections as well as the project description, alternatives screening and development, traffic assistance, and cumulative scenario for:

City of Santa Monica Environmental Assessments. Was key writer of several environmental assessment documents for housing, commercial, institutional, and mixed-use developments in compliance with CEQA. As the technical writer for socioeconomics, noise, hazardous materials, air quality, and public services, Mr. Debauche conducted analysis and prepared these environmental sections as well as the project description, alternatives screening and development, traffic assistance, and cumulative scenario for:

- **Seaview Court Condominiums IS/MND.** This comprehensive Initial Study/Mitigated Negative Declaration included six technical reports including traffic, cultural resources, parking survey, shade and shadow analysis, and a geotechnical assessment to evaluate the level of severity of this development in the waterfront area of Santa Monica. Major issues of concern were; parking and project-generated traffic on adjacent narrow residential streets; visual obstruction and shading impacts of the proposed structure; liquefaction and seismic impacts to adjacent properties as result of the project's excavation for a subterranean parking garage; and the potential impacts of the project to impact the integrity of a historic district and the historic Seaview Walkway to the beachfront.
- **Four-Story Hotel IS/MND.** A comprehensive Initial Study/Mitigated Negative Declaration was prepared for this four-story hotel adjacent to St. John's Hospital in Santa Monica. Major issues of concern included project-generated traffic on surrounding multi-family residential uses and emergency access to the hospital.

- **Santa Monica College Parking Structure B Replacement EIR.** This focused EIR addressed issues related to traffic and neighborhood land use impacts associated with the addition of a 3-story parking structure in the center of the SMC campus. Major issues of concern included the potential for project-generated traffic to cause congestion at the school's main entrance on Pico Boulevard, and the potential for overflow traffic to impact the Sunset Community of single-family homes adjacent to the school.
- **North Main St. Mixed-Use Development Project EIR.** This EIR included evaluation of impacts resulting from the development of a mixed-use development in Santa Monica's "Commercial Corridor" on Main Street, with ground-floor residences and boutique commercial uses. Major issues of concern included traffic and parking impacts to Main Street and surrounding residential land uses, shade and shadow impacts, and neighborhood impacts.

Specific Plans and Redevelopment Projects. As the technical writer for socioeconomics, noise, hazardous materials, air quality, and public services, Mr. Debauche conducted analysis and prepared these environmental sections as well as the project description, alternatives screening and development, traffic assistance, and cumulative scenario for:

- **Cabrillo Plaza Specific Plan EIR in Santa Barbara.** This project consisted a mixed-use commercial development on Santa Barbara's waterfront on Cabrillo Boulevard. On-site uses included an aquarium, specialty retail, restaurants, and office space.
- **Culver City Redevelopment Plan and Merger EIR.** This programmatic EIR evaluated the impacts of the City's redevelopment of its redevelopment zones. A major land use survey and calculation of acreage of redevelopment lands was conducted as part of the EIR.
- **Dana Point Headlands Specific Plan EIR.** This EIR evaluated the development of coastal bluff in the City with hotel, single- and multi-family residential, and commercial uses. Major issues of concern included ground disturbance as a result of excavation, impacts to terrestrial and wildlife biology, recreation impacts to beachgoers, and project-generate population inducement.
- **Triangle Gateway Redevelopment Project EIR in Beverly Hills, CA.** This EIR evaluated the development of a supermarket, retail shops, and office space in the triangle gateway portion of downtown Beverly Hills. Issues of concern evaluated by Mr. Debauche included traffic, land use, and impacts to on-site historic structures.
- **UCLA Campus Housing Expansion.** This EIR evaluated the development and expansion of campus housing within the UCLA campus. Issues of concern evaluated by Mr. Debauche included hazardous materials and population/housing.

CH2M Hill - Minneapolis, MN

1995 to 1998

APRIL 1998 TO MARCH 2001

Minneapolis/St. Paul International Airport Expansion EIS: Was a key writer of the EIS for this \$4 million technical and environmental study, including the preparation of an Environmental Impact Statement (EIS), and an evaluation of the urban design implications of a proposed \$800 million expansion of the existing MSP International airport, including transit and terminal modifications and the inclusion of a new perpendicular runway. The studies included alternatives to the project and the long-term effects on the cities of Minneapolis and St. Paul. In addition to preparing several issue area chapters of this comprehensive EIS, Mr. Debauch assisted with the Environmental Justice Analysis (per Executive Order 12898), the Section 4(f) Parklands discussion, and the socioeconomics sections of the EIS. In addition, Mr. Debauche assisted with preparation of a technical report on airport noise effects on nearby housing and mitigation programs for the impacts of the proposed runway.

Minneapolis/St. Paul Wastewater Treatment Facility Expansion EIS: Was a key writer of the EIS for expansion of the existing wastewater treatment facility serving the twin cities area. The studies included alternatives to the project and the long-term effects on the cities of Minneapolis and St. Paul. Mr. Debauche prepared several issue area chapters of this comprehensive EIS, including the Environmental Justice Analysis (per Executive Order 12898), and the socioeconomics sections of the EIS.

PROFESSIONAL ASSOCIATIONS

- American Planning Association (APA), Chapter Member



CHRISTIAN S. HUNTLEY
Senior Associate/Senior Biologist

ACADEMIC BACKGROUND

Graduate Studies, Biology, California State University Northridge
B.A., Biology, University of California at Santa Cruz, 1992

PROFESSIONAL EXPERIENCE

Mr. Huntley has over nine years of experience with Aspen supporting and managing Task Order Contracts in support of CEQA/NEPA projects including EIR/EIS, IS/MND, EA, BE/BA, and BA. In addition, Mr. Huntley has extensive experience conducting biological assessments, managing large-scale construction and restoration projects, and supporting agency clients through the Section 7 process. With over 14 years experience as a biologist, Mr. Huntley also has proven experience working with the sensitive biological resources that occur in southern California including rare plants, arroyo toads, two-striped garter snakes, and southwestern pond turtles. Mr. Huntley has also completed comprehensive vegetation mapping, sensitive species surveys, and revegetation plans for projects throughout southern California. With extensive experience in managing large scale construction projects, Mr. Huntley has unique experience in resolving conflicts and ensuring compliance with environmental regulations. Supported by a solid background in biological resources, experience in completing CEQA, NEPA, USDA Forest Service Biological Assessments, sensitive species consultation, and over a decade of construction management experience, he works closely with resource agency personnel, contractors and affected jurisdictions to ensure that projects are constructed on time and in compliance with applicable laws, ordinances, regulations and standards.

Aspen Environmental Group

1998 to present

- **Tehachapi Renewable Transmission Line Project California Public Utilities Commission/US Forest Service (2007-2008), Issue Area Coordinator/Biologist.** Mr. Huntley is acting as the issue area coordinator for biological resources on this 500 kV transmission line proposed by Southern California Edison in support of wind energy projects. This transmission line is over 100 miles in length and two separate lines cross the Angeles National Forest Key. Some of the key issues on this project include potential impacts to Mojave ground squirrel, arroyo toads, California Condors, spotted owl, and a host of forest sensitive plant species. Other key issues involve the coordination with State Park, Forest, and resource agency staff.
- **Antelope/Pardee Transmission Line Project Segments 2-3 EIR, California Public Utilities Commission/US Forest Service (2006-2008), Issue Area Coordinator/Biologist.** Mr. Huntley acted as the issue area coordinator for biological resources on this 500 kV transmission line proposed by Southern California Edison in support of wind energy projects. Key issues on this project include potential impacts to Mojave ground squirrel, California red-legged frogs, burrowing owl, and rare plants. As part of this project Mr. Huntley conducted focused surveys for arroyo toads and coordinated ESA compliance with the USFS and USFWS. As part of the project Mr. Huntley completed the BE/BA to comply with the provisions of the ESA and the Management Indicator Species Report for ANF compliance.
- **El Casco Sub-Transmission Line Project EIR, California Public Utilities Commission (2006-2007), Issue Area Coordinator/Biologist** Mr. Huntley acted as the issue area coordinator for

biological resources and completed the impact analysis section of the EIR for this 17 mile sub-transmission line upgrade to be completed by Southern California Edison. This line is located in the Western Riverside Multiple Species Conservation Area and crosses areas supporting several federally protected species including the least Bell's vireo, southwestern willow flycatcher, and Stephens's kangaroo rat.

- **Vista Del Lago Visitor Center Slope and Waterline Repair Biological Evaluation/Biological Assessment, California Department of Water Resources (2006-2008), Project Manager/Biologist.** Mr. Huntley is managing the preparation of the Biological Evaluation/Biological Assessment in compliance with the USFS to conduct repairs to a failed slope at the Vista Del Lago Visitor Center at Pyramid Lake. Mr. Huntley is also acting as the USFS and CDFG liaison for this project and is managing the preparation of regulatory permits for compliance with CDFG, USACE, and Regional Board requirements.
- **Antelope/Pardee Transmission Line Project EIR/EIS-BE/BA, California Public Utilities Commission/US Forest Service (2005-2007) Issue Area Coordinator/Biologist.** Mr. Huntley acted as the issue area coordinator for biological resources on this 500 kV transmission line upgrade to be completed by Southern California Edison. Key issues on this project included compliance with the USFS Forest Plan and sensitive species including California condor, burrowing owl, and rare plants. Mr. Huntley reviewed and prepared the Biological Resource Section for the EIR/EIS, developed project alternatives, coordinated with USFS staff, and conducted sensitive species surveys for arroyo toad in support of this project.
- **Devers/Harquahuala Transmission Line Project 2 EIR/EIS, California Public Utilities Commission/Bureau of Land Management (2005/2006), Issue Area Coordinator/Biologist** Mr. Huntley acted as the issue area coordinator for biological resources on this 230 mile 500 kV transmission line upgrade to be completed by Southern California Edison. This project crosses key wildlife areas including the KOFA Wildlife Sanctuary, the San Bernardino National Forest, the Mojave and Sonoran Desert habitat, and sections of the Riverside Multiple Species Conservation Area. Mr. Huntley reviewed and re-structured the Biological Resource Section for the EIR/EIS.
- **March Air Reserve Base Cactus and Heacock Channels Environmental Assessment and Biological Technical Report US Army Corps of Engineers (2005-2007), Project Manager/Biologist.** Mr. Huntley conducted and managed the preparation of a Biological Technical Report for two channels located along the perimeter of the March Air Reserve Base in Riverside California. Mr. Huntley and a team of biologists conducted burrowing owl surveys, vegetation and vernal pool mapping, and documented existing biological conditions at the two channels. As part of this project detailed GIS maps were created to assist the Corps in preparing environmental documents for the area. Currently, Mr. Huntley is managing the completion of an Environmental Assessment to evaluate impacts of construction of approximately three miles of flood control channel located at Cactus and Heacock Drainages.
- **Patriot Integrated Air Defense Exercise Project Environmental Assessment and Environmental Baseline Survey, Nellis Air Force Base Nevada (2006-2008), Project Manager/Biologist.** Mr. Huntley is currently managing the preparation of a new EA for ongoing military activities to be conducted on Bureau of Land Management (BLM) lands surrounding Nellis Air Force Base in Lincoln and Nye County, Nevada. Mr. Huntley is coordinating with the USAF regarding field surveys of the proposed anti-aircraft sites, the assessment of biological and cultural resources, and will prepare the DR/FONSI and Right-Of-Way document for the USAF. Mr. Huntley will also prepare sections and manage the completion of an Environmental Baseline Report for each of the proposed artillery sites.
- **Pyramid Dam Emergency Access Road IS/MND and Biological Evaluation/Biological Assessment, California Department of Water Resources (2005-2007), Project Manager/**

Biologist. Mr. Huntley is preparing the biology section of the IS/MND and the Biological Evaluation/ Biological Assessment in compliance with the USFS to construct an emergency access road from Interstate 5 to the Pyramid Lake Dam. Mr. Huntley is also acting as the USFS and CDFG liaison for this project and is managing the sensitive species surveys for the proposed project.

- **Horsethief Creek Road Repairs Project, IS/MND and Biological Assessment, California Department of Water Resources (2005-2007), Biologist/Project Manager.** Mr. Huntley prepared the biological resource section and managed the completion of the IS/MND and the BA for construction of an all weather road at Horsethief Creek located near Lake Silverwood in San Bernardino County. Mr. Huntley is also assisting DWR through formal consultation with the USFWS. The proposed project is intended to provide an all-weather access to DWR facilities while avoiding impacts to federally endangered arroyo toads. Mr. Huntley also managed and conducted the sensitive species surveys required for this project including arroyo toad, two-striped garter snake, and southwestern pond turtles. Currently, Mr. Huntley is directing the monitoring efforts at the site to avoid impacts to arroyo toads a federally listed species.
- **Sunset Substation IS/MND and Biological Site Assessment, City of Banning (2006-2007), Biologist.** Mr. Huntley is prepared the biology section of the IS/MND as a sub-contractor to R.W. Beck. In addition, Mr. Huntley conducted burrowing owl surveys and managed surveys for Los Angeles Pocket Mouse at select locations along the proposed right-of-way.
- **Littlerock Dam and Reservoir Restoration Project EIR/EIS-BE/BA, Palmdale Water District/US Forest Service (2004-2008), Deputy Project Manager/Biologist.** Mr. Huntley is currently acting as deputy project manager and project biologist for the sediment removal activities associated with the Littlerock Dam and Reservoir in the Angeles National Forest. Mr. Huntley is working to develop project alternatives for sediment disposal while avoiding impacts to federally endangered arroyo toads. Mr. Huntley will also be managing the sensitive species surveys for this project and completing the biological resources section of the EIR/EIS and BE/BA.
- **Salton Sea Debris Removal Project, Los Angeles Department of Water and Power (2007-2008), Project Manager/Biologist.** Mr. Huntley conducted Phase I, II, and III burrowing owl surveys at several sites scheduled for clean up in the Imperial Valley. Mr. Huntley managed the monitoring of clean up activities and developed mitigation strategies to comply with State and local permit requirements regarding the protection of this species.
- **Castaic Lake Biotic Assessment, Los Angeles Department of Water and Power (2007), Project Manager/Biologist.** Mr. Huntley conducted focused surveys for arroyo toad and other sensitive plant and wildlife species to update the existing conditions present at the Castaic Power plant located at Castaic Creek. This area is known to support a variety of sensitive plant and wildlife species.
- **Lake Canyon IS/EIR, Ventura, Ventura County Flood Control District, Biologist (2006-2007).** Mr. Huntley conducted biological surveys of this proposed detention basin and prepared the biological resource section of the Initial Study. Based on the assessment of potential impacts from this project the County intends to prepare an Environmental Impact Report.
- **California Energy Commission Emergency Siting Team, Power Plant Development, Compliance Project Manager.** For two years, Mr. Huntley's duties included management of technical staff for the completion of CEQA equivalent environmental permitting for over nine new emergency power plants, review of applicant submittals, drafting of Memoranda of Understanding with Chief Building Officials, conducting audits of building officials, and coordinating with affected agencies to resolve concerns with potential resource impacts. Other duties included maintaining contractor construction milestones, detailed compliance monitoring and reporting, development of mitigation measures and conflict resolution for power plants.

- **Monterey Bay Accelerated Research System Cabled Observatory (MARS) EIR/EIS, California State Lands Commission/Monterey Bay National Marine Sanctuary (2004-2006), Deputy Project Manager.** The MARS project is an advanced cabled observatory in Monterey Bay that would provide a continuous monitoring presence in the MBNMS as well as serve as the test bed for a state-of-the-art regional ocean observatory, currently one component of the National Science Foundation (NSF) Ocean Observatories Initiative (OOI). Mr. Huntley acted as the deputy project manager for this project. In addition his duties involved review of technical data, development of the project description and alternatives, and coordination with state and federal agencies.
- **Lower Colorado Flood Control Project EIR/EIS, US Army Corps of Engineers (2003-2004), Deputy Project Manager/Biologist.** Mr. Huntley conducted reconnaissance surveys and vegetation mapping along a 23 mile section of the Lower Colorado River in Yuma Arizona. In addition, Mr. Huntley updated the biological resource section of the current baseline conditions and is working with a team of State and federal agencies in an effort to determine the future alignment of the Lower Colorado River in this location. As part of this process Mr. Huntley developed project alternatives that met the criteria identified by the United States Boundary Water Commission and State and federal resources agencies.
- **Piru Creek Restoration of Natural Flows Project EIR, California Department of Water Resources (2004-2005), Biologist.** Mr. Huntley managed resource specialists for completion of sensitive bird surveys along Piru Creek. In addition, he conducted sensitive species surveys for aquatic resources including two-striped garter snake and southwestern pond turtle, and coordinated with technical experts during reconnaissance surveys for arroyo toad. Mr. Huntley completed engineering cross sections of Piru Creek and prepared a comprehensive State jurisdictional riparian delineation for an 18-mile section of middle Piru Creek between Pyramid dam and Lake Piru. Currently, Mr. Huntley is preparing the biological resources section and developing environmentally sound alternatives to address impacts associated with restoring natural flows to Piru Creek. Discussions of biological resources focus on the potential beneficial impacts that may occur to southwestern arroyo toad, southwestern pond turtle, red-legged frog and two-striped garter snake.
- **Murrieta Creek Flood Control Project Phase II-IV Revegetation Plan and Sensitive Species Surveys, US Army Corps of Engineers (2006-2007), Project Manager/Biologist.** Mr. Huntley is preparing the comprehensive vegetation maps and detailed restoration plan for over six miles of riparian habitat located at Murrieta Creek in Riverside California. As part of this task Mr. Huntley conducted and managed a team of resource experts in completing sensitive plant and animal species within the Murrieta Creek. Prepared detailed vegetation maps, site assessment and impact analysis for the Environmental Assessment, comprehensive revegetation and restoration plan to address project impacts, and developed mitigation for sensitive plant and wildlife species. In addition, Mr. Huntley worked closely with local resource agencies and managed sensitive wildlife surveys and the trapping and relocation of southwestern pond turtles from the project area. Currently Mr. Huntley is providing technical assistance to the Corps regarding this project.
- **Murrieta Creek Flood Control Project Supplemental EA, US Army Corps of Engineers (2003-2006), Deputy Project Manager/Biologist.** Mr. Huntley conducted site surveys for sensitive plant and animal species within the Murrieta Creek. Prepared detailed vegetation maps, site assessment and impact analysis for the Environmental Assessment, comprehensive revegetation and restoration plan to address project impacts, and developed mitigation for sensitive plant and wildlife species. In addition, Mr. Huntley worked closely with local resource agencies and managed sensitive wildlife surveys and the trapping and relocation of southwestern pond turtles from the project area. Currently Mr. Huntley is providing technical assistance to the Corps regarding this project.
- **East Branch Extension Project Phase II, California Department of Water Resources (2006), Project Manager/Biologist.** Mr. Huntley managed and conducted sensitive species surveys for DWR

in support of the EIR for this aqueduct extension project. In addition, Mr. Huntley provided expert testimony to the San Bernardino Superior Court to allow access to key areas in support of the surveys. Focused surveys included the slender horned spineflower, Santa Ana River wooly star, California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher.

- **Emergency Storm Repairs Biological Assessment, California Department of Water Resources (2005), Project Manager/Biologist.** Mr. Huntley prepared the Biological Assessment to evaluate potential impacts to sensitive species from emergency storm repairs at two locations at Piru Creek. The BA documented site conditions, identified potential sensitive species habitat and presence in the project area, and addressed specific USFWS requirements associated with arroyo toads.
- **Fort Irwin Environmental Baseline Survey Reports US Army Corps of Engineers (2005), Project Manager/Biologist.** Mr. Huntley managed the preparation of two Environmental Baseline Survey reports near Fort Irwin, San Bernardino County, California to support the land acquisition of over 95 parcels by the US Army for the Fort Irwin National Training Center. Mr. Huntley conducted site investigations, documented existing biological conditions and managed the preparation of the report.
- **Joint Red Flag '05 Exercise Environmental Assessment, US Army Corps of Engineers/Bureau of Land Management, Nellis Air Force Base Nevada (2004-2005), Project Manager/Biologist.** Mr. Huntley managed and coordinated the EA process for the ground component of the Joint Red Flag '05 Exercise which was conducted Bureau of Land Management (BLM) lands surrounding Nellis Air Force Base in Lincoln County, Nevada. Mr. Huntley conducted extensive field surveys of the proposed anti-aircraft sites, completed the assessment for biological and visual resources, prepared the DR/FONSI, managed sensitive species surveys, identified and flagged populations of noxious weeds, and prepared of military training guides for the soldiers in the field.
- **South Adit Access Road Repair Project Biological Evaluation/Biological Assessment, California Department of Water Resources (2005/2006), Project Manager/Biologist.** Mr. Huntley prepared the Biological Evaluation/Biological Assessment in compliance with the USFS to repair storm damage to the existing asphalt road surface and to stabilize the adjacent hillside to maintain access to the South Adit; a Department of Water Resources facility located along the West Branch of the California Aqueduct. Mr. Huntley managed sensitive resource surveys for rare plants and wildlife, conducted pre-construction surveys, and coordinated with the USFS personnel. As part of ongoing construction activities at the site Mr. Huntley provided environmental training and materials, monitored construction at the site, relocated wildlife from the construction area, developed a stream diversion plan and tree removal plan for CDFG review, reviewed the SWPPP, and conducted restoration activities at the site.
- **Creel Census Surveys, California Department of Water Resources (2004-2005), Project Manager/Biologist.** In an effort to obtain information on species composition and angler usage on DWR waterways, Mr. Huntley managed creel census surveys at three locations in southern California. These included Castaic Lake, Pyramid, Lake and Piru Creek. Piru Creek is located in the Angeles National Forest and contains habitat for the endangered arroyo toad. Creel surveys are supporting analysis currently underway to restore natural flows on Middle Piru Creek to benefit populations of arroyo toad in the National Forest.
- **Rare Plant Surveys and Tree Report for the Lower Reach River Supply Conduit, Los Angeles Department of Water and Power (2006), Biologist.** Mr. Huntley managed and conducted rare plant surveys and a comprehensive tree inventory along a 14 mile water pipeline corridor.
- **Owens Gorge Re-watering Project IS/MND, Los Angeles Department of Water and Power (2006), Biologist.** Mr. Huntley prepared the biology section of the IS/MND to address potential

impacts to sensitive plants and wildlife along the Owens Gorge near Bishop, California. This project involves the restoration of flows to a previously de-watered section of the Owens Gorge.

- **Sunset Substation IS/MND and Biological Site Assessment, City of Banning (2006), Biologist.** Mr. Huntley is providing technical assistance and preparing the biology section of the IS/MND as a sub-contractor to R.W. Beck. In addition, Mr. Huntley conducted burrowing owl surveys and managed surveys for Los Angeles Pocket Mouse at select locations along the proposed right-of-way.
- **Perris Lake Permit Support, California Department of Water Resources (2005/2006), Biologist.** Mr. Huntley prepared a biological technical report to support permitting activities at Perris Lake in Riverside California. Mr. Huntley also reviewed and prepared the Storm Water Pollution Prevention Plan in compliance with Regional Board requirements.
- **Angeles National Forest Fuels Reduction Project, Biological Evaluation/Biological Assessment, United States Department of Agriculture Forest Service (2005/2006), Biologist.** Mr. Huntley reviewed existing documents and assisted staff in responding to comments from USFS staff. Mr. Huntley met with USFS staff and conducted site inspections at several plantation and natural stands.
- **Focused Surveys for least Bell's vireo and southwestern willow flycatchers at the Hansen Dam, Los Angeles River, and San Gabriel River, US Army Corps of Engineers (2005), Project Manager.** Mr. Huntley managed the focused surveys and report preparation for this task.
- **Tortoise Monitoring at Las Vegas Wash Las Vegas, NV, US Army Corps of Engineers (2005-2006), Project Manager.** Mr. Huntley managed the survey and report preparation for monitoring activities associated with this task. Monitoring crews conducted work within the Tropicana, Flamingo, and Blue Diamond tributaries as part of the ongoing flood control activities.
- **Newhall Ranch Project, California Department of Fish and Game (2005-2008), Biological Coordinator.** Mr. Huntley is assisting CDFG staff in reviewing environmental documents, scheduling and coordinating meetings with resource professionals and agency staff, and providing technical review of the Newhall Development Plan EIR/EIS in Santa Clarita, California. Mr.
- **Line 401 PG&E Redwood Expansion Project, CPUC, Lead Environmental Monitor.** Under contract to the California Public Utilities Commission (CPUC), Mr. Huntley served as Lead Environmental Monitor and supervised two environmental monitors in the field on the implementation of the CPUC's conditions of approval for construction of this 14-mile natural gas pipeline. Responsibilities included: supervision, guidance and development of environmental monitors, onsite field monitoring, compliance review and mitigation development of pre-construction plans, and mitigation compliance documentation. Other duties included review of variance and temporary extra work space (TEWS) requests; recommendations for CPUC issuance of Notices to Proceed with construction and variance approvals; approval of TEWS requests; preparation of weekly reports for all monitoring activity; and coordination with PG&E, construction managers and subcontractors, local municipalities, affected and interested agencies and the public.
- **Level 3 Fiber Optics Network Construction Monitoring and Supplemental Environmental Review Program, CPUC, Environmental Monitor.** Mr. Huntley's duties included inspection of several southern California segments including Santa Barbara to Burbank, San Bernardino, Corona to Atwood and San Diego to the California/Arizona State line. Environmental compliance during construction addressed biological and cultural resource, air and water quality, traffic control, and public utilities. Other tasks included maintaining daily documentation, review of pre-construction mitigation measures, weekly reporting of compliance activities, and coordination with Level 3 personnel and subcontractors, and affected agencies.

- **California Energy Commission (CEC) Coastal Power Plant Study, Deputy Project Manager/Biologist.** Conducted biological surveys at 21 coastal power plants as part of the CEC's coastal power plant study. Site visits characterized habitat within the footprint of the power plant, landscaping, and identified potential environmental and permitting issues associated with potential expansion of the power plants.
- **CEC Hydroelectric Power Plant Inventory Study, Deputy Project Manager/Natural Resources Analyst.** Mr. Huntley coordinated a team that collected power and environmental data on over 200 hydroelectric power plants located in California. Physical power data included electrical output, system upgrades, water storage capacity and peaking availability. Environmental information included developing a data base addressing sensitive species issues, fish screens and ladders, monitoring parameters and a map of known hydroelectric facilities and barriers to anadromous fish passage. Mr. Huntley also obtained water use information on thermal power plants in support of the CEC's bi-annual environmental performance report.
- **Arundel Barranca Habitat Restoration Plan, Ventura County Flood Control District (2005), Biologist.** Mr. Huntley developed a planting schematic for a 3000-foot section of existing flood control channel as part of the proposed Arundel Barranca flood control channel plan.
- **Pacific Pipeline Project EIR/EIS for the US Forest Service, Angeles National Forest, and the California Public Utilities Commission, Environmental Monitor.** Served as an Environmental Monitor and supervised mitigation monitoring for all sensitive resources for a construction segment along a 132-mile crude oil pipeline within southern California.
- **SCE Valley-Auld Power Line Project, CPUC, Environmental Monitor.** Conducted inspections of construction of this 11-mile long power line upgrade for compliance with the project's Mitigated Negative Declaration mitigation measures and compliance plans. Other tasks included review of pre-construction compliance materials, maintaining inspection documentation, and coordination with SCE and its subcontractors.
- **Matilija Dam Ecosystem Restoration Project EIR/EIS, US Army Corps of Engineers, Biologist.** Mr. Huntley conducted biological surveys and assisted in the completion of the EIS/EIR to assess impacts to sensitive biological resources located on Matilija Creek and the Ventura River downstream of the of the Matilija Dam. The analysis focused on potential impacts associated with dam removal on sensitive species known to occur on the Ventura River and the beneficial impacts of the restoration of spawning territory for the endangered Evolutionary Significant Unit of Southern Steelhead.
- **Piru Creek Repairs Project IS/MND, California Department of Water Resources, Biologist.** Mr. Huntley completed sections of the US Forest Service Biological Assessment/Biological Evaluation, and biological technical report for the Piru Creek Repairs Project. In addition, Mr. Huntley has conducted sensitive species surveys and coordinated with CDFG, USFS and RWQCB regarding permits and sensitive species issues.
- **Viejo System Project IS/MND, California Public Utilities Commission, Biologist.** Conducted biological surveys and completed the biological section of the Initial Study and Mitigated Negative Declaration for the SCE's transmission line upgrade project.
- **Compliance and Mitigation Development, California Public Utilities Commission, State Lands Commission, California Department of Water Resources, Biologist.** Working with technical experts Mr. Huntley developed mitigation measures for a number of State and federal projects including the Kinder Morgan pipeline, Santa Ana pipeline and Viejo transmission line project.
- **Hollywood Reservoir Pump Station Upgrade IS/MND, Los Angeles Department of Water and Power Biologist.** Conducted biological surveys of the lower Hollywood Hills pump station as part of

a planned upgrade of the Los Angeles water system and completed the biological resource section of the Initial Study and Mitigated Negative Declaration.

- **Lake Skinner Filtration Plant, Metropolitan Water District, Biologist.** Mr. Huntley conducted biological surveys and completed a biological assessment at the Lake Skinner Filtration Plant to assist Metropolitan in obtaining streambed alteration, regional water, and US Army Corps of Engineers permits.
- **Compliance and Mitigation Development, California Public Utilities Commission, State Lands Commission, California Department of Water Resources, Biologist.** Working with technical experts Mr. Huntley developed mitigation measures for a number of State and federal projects including the Kinder Morgan pipeline, Santa Ana pipeline and Viejo transmission line project.
- **San Antonio Creek Erosion Repairs Project BA/EA, US Army Corps of Engineers, Biologist.** Mr. Huntley conducted botanical surveys and prepared detailed vegetation maps within San Antonio Creek. Mr. Huntley also prepared the Biological and Environmental Assessments for the project and developed mitigation for sensitive plant and wildlife species.
- **Santa Fe Pacific Pipeline, CPUC, Environmental Monitor.** Inspected construction of three petroleum distribution station sites for compliance with approved project mitigation measures and compliance plans.
- **LACDA, US Army Corps of Engineers, Environmental Monitor & Biological Assessment.** Conducted inspections of Los Angeles County Drainage Area levee wall expansions for improved flood control. Also conducted Biological Assessments for proposed project changes.
- **Las Virgenes Municipal Water District IS/MND, Biologist.** Conducted site surveys for sensitive plants and animal species for potential water pipeline expansion. Prepared detailed vegetation maps and site assessment documenting site botany and reviewed Biological Assessment for the site.
- **Dent Drain Permit Support, Ventura River, Ventura County Flood Control District, Biologist.** Conducted site surveys for sensitive plants and animals and prepared Biological Assessment for proposed construction along the Ventura River.
- **Honda Barranca Permit Support, Ventura County Flood Control District, Biologist.** Conducted site surveys for sensitive plants and animals and prepared Biological Assessment for two locations proposed for repairs along the Honda Barranca.
- **Arundel Barranca Permit Support, Ventura County Flood Control District, Biologist.** Conducted site surveys for sensitive species and prepared Biological Assessment for proposed modification to 3000-feet of existing flood control channel.
- **Looking Glass Networks, CPUC, Mitigation Review and Development.** Mr. Huntley's duties included review and development of mitigation measures for installation of a proposed fiber optic interconnects located across California. Technical areas addressed included biology, soil and water, air quality, and cultural resources.
- **Spine Flower Survey, US Army Corps of Engineers, Biologist.** Mr. Huntley conducted sensitive species surveys for the slender-horned spine flower covering approximately 5,300 acres in the Santa Ana River Wash, below the Seven Oaks Dam in San Bernardino County, to assess species impact from changes in hydrology once the Seven Oaks Dam is operational. The survey and mapping required extensive use of GPS equipment for the mapping of transects surveyed and the location of spine flower Populations.

- **INS Air Station, Otay Mesa Biological Assessment, US Army Corps of Engineers, Biologist.** Conducted sensitive plant and animal surveys and prepared biological assessment for proposed and alternative station sites, including preparation of detailed vegetation maps.
- **Visalia Land Fill Biological Assessment, Biologist.** Surveyed potential expansion sites for sensitive biological species including San Joaquin kit fox, burrowing owls, and several endangered plant species. Prepared Biological Assessment for sensitive and plant and wildlife species.
- **Rancho Cucamonga, Biologist.** Conducted site surveys for sensitive plants species for site suitable for future wetland revegetation. Prepared detailed vegetation maps and site assessment documenting site botany.

SELECTED TECHNICAL EXPERIENCE/TRAINING AND CERTIFICATIONS

SWPPP trained 2006

California Energy Commission Outstanding Performance Award, 2001

CDFG Scientific Collecting Permit for pond turtle and garter snake.

Certified Caltrans Horizontal Directional Drilling Inspector 2001

Desert Tortoise Handling Workshop, Ridgecrest California 2001

CEC Expert Witness Training 2001

Railroad Right-of-Way Safety Training 2002

Small boat handling, licensed and certified since 1993

Research Scuba-diving certification and training since 1989