



APPLICATIONS:

APPEAL APPLICATION

Instructions and Checklist

Related Code Section: Refer to the City Planning case determination to identify the Zone Code section for the entitlement and the appeal procedure.

Purpose: This application is for the appeal of Department of City Planning determinations authorized by the Los Angeles Municipal Code (LAMC).

A. APPELLATE BODY/CASE INFORMATION

1. APPELLATE BODY

- ☐ Area Planning Commission ☐ City Planning Commission ☐ City Council ☐ Director of Planning
☐ Zoning Administrator

Regarding Case Number: _____

Project Address: _____

Final Date to Appeal: _____

2. APPELLANT

Appellant Identity:
(check all that apply)

- ☐ Representative ☐ Property Owner
☐ Applicant ☐ Operator of the Use/Site

- ☐ Person, other than the Applicant, Owner or Operator claiming to be aggrieved

- ☐ Person affected by the determination made by the **Department of Building and Safety**

- ☐ Representative ☐ Owner ☐ Aggrieved Party
☐ Applicant ☐ Operator

3. APPELLANT INFORMATION

Appellant's Name: _____

Company/Organization: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____ E-mail: _____

a. Is the appeal being filed on your behalf or on behalf of another party, organization or company?

- ☐ Self ☐ Other: _____

b. Is the appeal being filed to support the original applicant's position? ☐ Yes ☐ No

4. REPRESENTATIVE/AGENT INFORMATION

Representative/Agent name (if applicable): _____

Company: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____ E-mail: _____

5. JUSTIFICATION/REASON FOR APPEAL

a. Is the entire decision, or only parts of it being appealed? ☐ Entire ☐ Part

b. Are specific conditions of approval being appealed? ☐ Yes ☐ No

If Yes, list the condition number(s) here: _____

Attach a separate sheet providing your reasons for the appeal. Your reason must state:

- ☐ The reason for the appeal ☐ How you are aggrieved by the decision
☐ Specifically the points at issue ☐ Why you believe the decision-maker erred or abused their discretion

6. APPLICANT'S AFFIDAVIT

I certify that the statements contained in this application are complete and true:

Appellant Signature: _____ Date: August 8, 2022

GENERAL APPEAL FILING REQUIREMENTS

B. ALL CASES REQUIRE THE FOLLOWING ITEMS - SEE THE ADDITIONAL INSTRUCTIONS FOR SPECIFIC CASE TYPES

1. Appeal Documents

a. **Three (3) sets** - The following documents are required for each appeal filed (1 original and 2 duplicates)
Each case being appealed is required to provide three (3) sets of the listed documents.

- ☐ Appeal Application (form CP-7769)
☐ Justification/Reason for Appeal
☐ Copies of Original Determination Letter

b. Electronic Copy

- ☐ Provide an electronic copy of your appeal documents on a flash drive (planning staff will upload materials during filing and return the flash drive to you) or a CD (which will remain in the file). The following items must be saved as individual PDFs and labeled accordingly (e.g. "Appeal Form.pdf", "Justification/Reason Statement.pdf", or "Original Determination Letter.pdf" etc.). No file should exceed 9.8 MB in size.

c. Appeal Fee

- ☐ Original Applicant - A fee equal to 85% of the original application fee, provide a copy of the original application receipt(s) to calculate the fee per LAMC Section 19.01B 1.
☐ Aggrieved Party - The fee charged shall be in accordance with the LAMC Section 19.01B 1.

d. Notice Requirement

- ☐ Mailing List - All appeals require noticing per the applicable LAMC section(s). Original Applicants must provide noticing per the LAMC
☐ Mailing Fee - The appeal notice mailing fee is paid by the project applicant, payment is made to the City Planning's mailing contractor (BTC), a copy of the receipt must be submitted as proof of payment.

SPECIFIC CASE TYPES - APPEAL FILING INFORMATION
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C. DENSITY BONUS / TRANSIT ORIENTED COMMUNITES (TOC)**1. Density Bonus/TOC**

Appeal procedures for Density Bonus/TOC per LAMC Section 12.22.A 25 (g) f.

NOTE:

- Density Bonus/TOC cases, only the *on menu or additional incentives* items can be appealed.
- Appeals of Density Bonus/TOC cases can only be filed by adjacent owners or tenants (must have documentation), and always only appealable to the Citywide Planning Commission.
- ☐ Provide documentation to confirm adjacent owner or tenant status, i.e., a lease agreement, rent receipt, utility bill, property tax bill, ZIMAS, drivers license, bill statement etc.

D. WAIVER OF DEDICATION AND OR IMPROVEMENT

Appeal procedure for Waiver of Dedication or Improvement per LAMC Section 12.37 I.

NOTE:

- Waivers for By-Right Projects, can only be appealed by the owner.
- When a Waiver is on appeal and is part of a master land use application request or subdivider's statement for a project, the applicant may appeal pursuant to the procedures that governs the entitlement.

E. TENTATIVE TRACT/VESTING**1. Tentative Tract/Vesting** - Appeal procedure for Tentative Tract / Vesting application per LAMC Section 17.54 A.

NOTE: Appeals to the City Council from a determination on a Tentative Tract (TT or VTT) by the Area or City Planning Commission must be filed within 10 days of the date of the written determination of said Commission.

- ☐ Provide a copy of the written determination letter from Commission.

F. BUILDING AND SAFETY DETERMINATION

- ☐ **1.** Appeal of the Department of Building and Safety determination, per LAMC 12.26 K 1, an appellant is considered the **Original Applicant** and must provide noticing and pay mailing fees.

a. Appeal Fee

- ☐ Original Applicant - The fee charged shall be in accordance with LAMC Section 19.01B 2, as stated in the Building and Safety determination letter, plus all surcharges. (the fee specified in Table 4-A, Section 98.0403.2 of the City of Los Angeles Building Code)

b. Notice Requirement

- ☐ Mailing Fee - The applicant must pay mailing fees to City Planning's mailing contractor (BTC) and submit a copy of receipt as proof of payment.

- ☐ **2.** Appeal of the Director of City Planning determination per LAMC Section 12.26 K 6, an applicant or any other aggrieved person may file an appeal, and is appealable to the Area Planning Commission or Citywide Planning Commission as noted in the determination.

a. Appeal Fee

- ☐ Original Applicant - The fee charged shall be in accordance with the LAMC Section 19.01 B 1 a.

b. Notice Requirement

- ☐ Mailing List - The appeal notification requirements per LAMC Section 12.26 K 7 apply.
- ☐ Mailing Fees - The appeal notice mailing fee is made to City Planning's mailing contractor (BTC), a copy of receipt must be submitted as proof of payment.

G. NUISANCE ABATEMENT

1. Nuisance Abatement - Appeal procedure for Nuisance Abatement per LAMC Section 12.27.1 C 4

NOTE:

- Nuisance Abatement is only appealable to the City Council.

a. Appeal Fee

- ☐ Aggrieved Party the fee charged shall be in accordance with the LAMC Section 19.01 B 1.

2. Plan Approval/Compliance Review

Appeal procedure for Nuisance Abatement Plan Approval/Compliance Review per LAMC Section 12.27.1 C 4.

a. Appeal Fee

- ☐ Compliance Review - The fee charged shall be in accordance with the LAMC Section 19.01 B.
- ☐ Modification - The fee shall be in accordance with the LAMC Section 19.01 B.

NOTES

A Certified Neighborhood Council (CNC) or a person identified as a member of a CNC or as representing the CNC may not file an appeal on behalf of the Neighborhood Council; persons affiliated with a CNC may only file as an individual on behalf of self.

Please note that the appellate body must act on your appeal within a time period specified in the Section(s) of the Los Angeles Municipal Code (LAMC) pertaining to the type of appeal being filed. The Department of City Planning will make its best efforts to have appeals scheduled prior to the appellate body's last day to act in order to provide due process to the appellant. If the appellate body is unable to come to a consensus or is unable to hear and consider the appeal prior to the last day to act, the appeal is automatically deemed denied, and the original decision will stand. The last day to act as defined in the LAMC may only be extended if formally agreed upon by the applicant.

This Section for City Planning Staff Use Only		
Base Fee:	Reviewed & Accepted by (DSC Planner):	Date:
Receipt No:	Deemed Complete by (Project Planner):	Date:
<input type="checkbox"/> Determination authority notified		<input type="checkbox"/> Original receipt and BTC receipt (if original applicant)

Justification/Reason for Appeal

656 South San Vicente Medical Office Project

CPC-2017-467-GPA-VZC-HD-SPR; ENV-2017-468-EIR; VTT-74865

I. REASON FOR THE APPEAL

The Environmental Impact Report (“EIR”) prepared for the 656 South San Vicente Medical Office Project (CPC-2017-467-GPA-VZC-HD-SPR; ENV-2017-468-EIR; VTT-74865) (“Project”) fails to comply with the California Environmental Quality Act (“CEQA”). Furthermore, the approval of the Site Plan Review entitlements (CPC-2017-467-GPA-VZC-HD-SPR) was in error because (1) the City of Los Angeles (“City”) must fully comply with CEQA prior to any approvals in furtherance of the Project and (2) the findings are not supported by substantial evidence. Therefore, the City of Los Angeles (“City”) must set aside the entitlements and circulate a revised EIR prior to considering approvals for the Project.

II. SPECIFICALLY THE POINTS AT ISSUE

The specific points at issue are set forth in the attached comment letters dated February 1, 2022 and June 21, 2022. A revised EIR must be prepared to remedy these issues. Furthermore, proper CEQA review must be complete *before* the City approves the Project’s entitlements. (*Orinda Ass’n. v. Bd. of Supervisors* (1986) 182 Cal.App.3d 1145, 1171 [“No agency may approve a project subject to CEQA until the entire CEQA process is completed and the overall project is lawfully approved.”].) The VTT approval was therefore premature and otherwise unsupported by substantial evidence.

III. HOW YOU ARE AGGRIEVED BY THE DECISION

Members of appellant Supporters Alliance for Environmental Responsibility (“SAFER”) live and/or work in the vicinity of the proposed Project. They breathe the air, suffer traffic congestion, and will suffer other environmental impacts of the Project unless it is properly mitigated.

IV. WHY YOU BELIEVE THE DECISION-MAKER ERRED OR ABUSED THEIR DISCRETION

The City Planning Commission certified the EIR and approved a Site Plan Review for the Project despite substantial evidence in the record that the EIR fails to adequately analyze the Project’s environmental impacts and fails to impose all feasible mitigation measures to reduce the Project’s impacts. The Department of City Planning should therefore have prepared a revised EIR and recirculated the revised document prior to consideration of approvals for the Project. The City is not permitted to approve the Project’s entitlements until the EIR’s deficiencies are remedied.



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February 1, 2022

VIA EMAIL

Paul Caporaso, Planning Assistant
Department of City Planning
City of Los Angeles
221 N. Figueroa Street, Suite 1350
Los Angeles, CA 90012
paul.caporaso@lacity.org

Re: Comment on Final Environmental Impact Report, 656 South San Vicente Medical Office Project (ENV-2017-468-EIR; SCH 2020010172)

Dear Mr. Caporaso,

I am writing on behalf of Supporters Alliance For Environmental Responsibility ("SAFER") regarding the Draft Environmental Impact Report ("DEIR") prepared for the Project known as 656 South San Vicente Medical Office Project (ENV-2017-468-EIR; SCH 2020010172), including all actions related or referring to the proposed development of a 12-story medical office and retail-commercial building with four above-ground parking levels, located at 650 – 675 South San Vicente Boulevard in Los Angeles ("Project").

After reviewing the EIR, we conclude that there are a number of significant omissions and flaws in the EIR's analysis of the Project's environmental impacts, and significant impacts remain unmitigated. In addition, the FEIR fails to respond to public comment suggesting additional feasible mitigation to further reduce the Project's significant and unavoidable noise impact. A revised EIR should be prepared prior to Project approval to analyze all impacts and require implementation of all feasible mitigation measures, as described more fully below.

I. PROJECT DESCRIPTION

The Project is the construction and operation of a 12-story building (230 feet in height) that would include seven floors of medical office uses over four floors of above-grade parking, and a ground floor containing a lobby for the medical office, and commercial uses. The building includes up to 145,305 square feet of floor area, comprised of 140,305 square feet of medical office space and 5,000 square feet of ground floor retail-commercial space, of which up to 4,000 square feet may be a restraint and 1,000 square feet may be other commercial uses, such as a pharmacy. (EIR at II-1.) The Project would provide full-valet services for 418 parking spaces, including 393 vehicle parking spaces for medical office uses and 25 vehicle parking spaces for retail-commercial uses. The Project would also provide full-valet service for bicycle parking and would include 716 bicycle parking spaces for short- and long-term use.

The Project site is currently occupied by a 5,738 square-foot, vacant educational building, and an 8,225 square foot Big 5 Sporting Goods store and associated surface parking. Directly northeast of the Project Site across the alley are two, two-story apartment buildings. Further to the north and east, along Orange Street and South Sweetzer Avenue, are low-rise multi-family and single-family residential uses. Low-rise single-family and multi-family residential uses are also located to the south, across from Wilshire Boulevard.

II. LEGAL BACKGROUND

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an EIR (except in certain limited circumstances). (See, e.g., Pub. Resources Code, § 21100.) The EIR is the very heart of CEQA. (*Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652.) “The ‘foremost principle’ in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.” (*Communities for a Better Environment v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 109 (“*CBE v. CRA*”).)

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. (14 Cal. Code Regs. (“CEQA Guidelines”) § 15002(a)(1).) “Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR ‘protects not only the environment but also informed self-government.’” (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564.) The EIR has been described as “an environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.” (*Berkeley Keep Jets Over the Bay v. Bd. of Port Comm’rs.* (2001) 91 Cal.App.4th 1344, 1354 (“*Berkeley Jets*”); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.)

Second, CEQA requires public agencies to avoid or reduce environmental damage when “feasible” by requiring “environmentally superior” alternatives and all feasible mitigation measures. (CEQA Guidelines, § 15002(a)(2) and (3); *See also Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564.) The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to “identify ways that environmental damage can be avoided or significantly reduced.” (CEQA Guidelines, § 15002(a)(2).) If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has “eliminated or substantially lessened all significant effects on the environment where feasible” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns.” (Pub. Resources Code, § 21081; CEQA Guidelines, § 15092(b)(2)(A) & (B).)

While the courts review an EIR using an “abuse of discretion” standard, “the reviewing court is not to ‘uncritically rely on every study or analysis presented by a project proponent in support of its position. A ‘clearly inadequate or unsupported study is entitled to no judicial deference.’” (*Berkeley Jets*, 91 Cal.App.4th at 1355 (emphasis added), quoting, *Laurel Heights*

Improvement Assn. v. Regents of University of California (1988) 47 Cal. 3d 376, 391 409, n. 12.) As the court stated in *Berkeley Jets*, 91 Cal.App.4th at 1355:

A prejudicial abuse of discretion occurs “if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process.” (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal. App. 4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal. App. 4th 931, 946.)

More recently, the California Supreme Court has emphasized that:

When reviewing whether a discussion is sufficient to satisfy CEQA, a court must be satisfied that the EIR (1) includes sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises [citation omitted]....

(*Sierra Club v. Cty. of Fresno* (2018) 6 Cal.5th 502, 510 (2018), citing *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405.) The Court in *Sierra Club v. Cty. of Fresno* also emphasized at another primary consideration of sufficiency is whether the EIR “makes a reasonable effort to substantively connect a project’s air quality impacts to likely health consequences.” (6 Cal.5th at 510.) “Whether or not the alleged inadequacy is the complete omission of a required discussion or a patently inadequate one-paragraph discussion devoid of analysis, the reviewing court must decide whether the EIR serves its purpose as an informational document.” (*Id.* at 516.) Although an agency has discretion to decide the manner of discussing potentially significant effects in an EIR, “a reviewing court must determine whether the discussion of a potentially significant effect is sufficient or insufficient, i.e., whether the EIR comports with its intended function of including ‘detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.’” (6 Cal.5th at 516, citing *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1197.) “The determination whether a discussion is sufficient is not solely a matter of discerning whether there is substantial evidence to support the agency’s factual conclusions.” (6 Cal.5th at 516.) As the Court emphasized:

[W]hether a description of an environmental impact is insufficient because it lacks analysis or omits the magnitude of the impact is not a substantial evidence question. A conclusory discussion of an environmental impact that an EIR deems significant can be determined by a court to be inadequate as an informational document without reference to substantial evidence.

(*Sierra Club v. Cty. of Fresno*, 6 Cal.5th at 514.)

In general, mitigation measures must be designed to minimize, reduce or avoid an identified environmental impact or to rectify or compensate for that impact. (CEQA Guidelines § 15370.) Where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. (*Id.* at § 15126.4(a)(1)(B).) A lead agency may not make the required CEQA findings unless the administrative record clearly shows that all uncertainties regarding the mitigation of significant environmental impacts have been resolved.

III. THE EIR IS INCONSISTENT WITH CEQA'S REQUIREMENTS.

A. The EIR's Conclusion that Construction Noise is Significant and Unavoidable is Not Supported by Substantial Evidence.

The EIR concludes that the Project will have a significant construction noise impact, and that it will remain significant even with mitigation. This conclusion is not supported by substantial evidence and violates CEQA.

When an EIR has identified significant environmental effects that have not been mitigated or avoided, the agency may not approve the project unless it first finds that “[s]pecific economic, legal, social, technological, or other considerations . . . make infeasible the mitigation measures or alternatives identified in the environmental impact report.” (PRC §21081(a)(3); *see* 14 CCR §15091(a)(3).) Rejected alternatives and mitigation measures must be “truly infeasible.” (*City of Marina v. Bd. of Trustees of Cal. State Univ.* (2006) 39 Cal.4th 341, 369.)

According to the expert comments of Derek Watry (Exhibit B to August 2, 2021 CREED LA Comment), additional feasible mitigation is available to further reduce the Project's significant noise impact.

Mitigation Measure NOI-MM-1 provides:

NOI-MM-1: The Project shall provide temporary ground-level construction noise barriers, with a minimum height of eight feet and up to a height of 15 feet along the alleyway along the northeast property line, equipped with noise blankets or equivalent noise reduction materials rated to achieve sound level reductions of at least 10 dBA between the Project Site and ground-level sensitive receptor locations. These temporary noise barriers shall be used to block the line-of-sight between the construction equipment and the noise-sensitive receptor(s) during the duration of construction activities. Prior to obtaining any permits, documentation prepared by a noise consultant verifying compliance with this measure shall be submitted to the Department of City Planning.

(DEIR at p. IV.G-49.)

According to this measure, the temporary noise barrier can be anywhere between 8 and 15 feet in height, and need only be placed along the alleyway along the northeast property line.

(*Id.*) Since the residences on the far side of the alleyway are two-stories, including multiple windows that face the Project site, NOI-MM-1 is inadequate. (Watry, p. 6.) Instead, the EIR should require the barrier be 15 feet in height, and require that the barrier extend for along the entire extent of the neighboring residential buildings. (*Id.*)

The FEIR fails to adequately respond to Mr. Watry's comment. The FEIR states that:

providing a noise barrier with a height to block the line-of-sight between the Project Site and receptors at second or higher-level building locations is not considered feasible, due to the potential need for the barrier height to reach 20 feet above ground or higher, which would likely require a barrier foundation that could interfere with internal construction activities, require partial or complete closure of the adjacent alleyway, and/or cause safety issues for workers and pedestrians.

(FEIR at 2-64.)

This response ignores Mr. Watry's suggestion that the barrier be 15 feet (rather than a minimum of 8 feet and maximum of 15 feet), and should run along the entire extent of the neighboring residential buildings.

This response violates CEQA for two reasons. First, there is no evidence that Mr. Watry's suggestions are not feasible. As a result, they must be adopted to further reduce the Project's significant noise impact. (*See Covington v. Great Basin Unified Air Pollution Control Dis.* (2019) 43 Cal.App.5th 867, 883.)

Second, FEIR did not adequately respond to Mr. Watry's comment. An agency's responses to comments must specifically explain the reasons for rejecting suggestions received in comments and for proceeding with a project despite its environmental impacts. (PRC § 21091(d); 14 CCR §§ 15088(a), 15132.) Such explanations must be supported with specific references to empirical information, scientific authority, and/or explanatory information. (*Cleary v. County of Stanislaus* (1981) 118 Cal.App.3d 348, 357.) The responses, moreover, must manifest a good faith, reasoned analysis; conclusory statements unsupported by factual information will not suffice. (*People v. County of Kern* (1974) 39 Cal.App.3d 830, 841.)

Here, the FEIR's response completely ignores the bulk of Mr. Watry's suggestion, which is to require noise barriers to run along the entire extent of the neighboring residential boundaries, and to require the barriers be 15 feet in height. There was no discussion of these suggestions or any evidence that they would be infeasible. Certifying the EIR without adequately responding to Mr. Watry's comments is an abuse of discretion and a violation of CEQA.

B. The EIR Relies on an Improper Historical Baseline.

Use of a proper baseline is critical to the meaningful assessment of a project's environmental impacts. (*Communities for a Better Env't. v. South Coast Air Quality Mgmt. Dist.*

(2010) 48 Cal.4th 310, 320; *Save Our Peninsula, supra*, 87 Cal.App.4th at 119.) Ordinarily, the environmental baseline is the physical environmental conditions that exist at the time the Notice of Publication (NOP) is published. (14 CCR §§ 15125(a)(1), 15126.2(a).) An agency is permitted to veer from this norm and rely on historic conditions or anticipated future conditions for the baseline, but only when “necessary to provide the most accurate picture practically possible of the project’s impacts.” (14 CCR §15125(a)(1).) An agency that elects *not* to provide an analysis based on conditions existing at the time the NOP is published must provide an adequate justification for doing so, supported by substantial evidence. (*POET, LLC v. State Air Resources Bd.* (2017) 12 Cal.App.5th 52, 80.)

The EIR relies on a historic baseline without justification. The NOP was published in January of 2020, and conditions at that time should form the baseline against which the Project’s impacts are measured. This did not occur. Despite ceasing operations in 2018 the Montessori School formerly operating at the Project site is included as part of the baseline, as if it were still operational in 2020. While an agency has some discretion to rely on a historical baseline, here, the City has provided no evidence that including the school in the baseline is “necessary to provide the most accurate picture practically possible of the project’s impacts.” (14 CCR §15125(a)(1).) The opposition is true. The effect of including the closed Montessori School in the baseline is that Project’s air quality, energy, and greenhouse gas impacts are artificially diminished.

These comments were raised in comments on the DEIR by CREED LA. In response, the FEIR dismisses the concerns and claims there is no need to revise the baseline because the emissions and energy use from the school were small, so even if it was not included in the baseline, the significance of the impacts would not change. This response is inadequate. The City cannot pick and choose which parts of CEQA it does and does not have to comply with. Failure to revise the EIR to accurately reflect the baseline is an abuse of discretion and violates CEQA.

C. The Project Does Not Warrant a Height Adjustment from 45 feet to 230 feet.

The Project is located in Height District 1VL meaning “Very Limited Height District, and no Building or Structure in Height District No. 1-VL shall exceed three Stories, nor shall it exceed 45 feet in height.” (Los Angeles Mun. Code sec. 12.21.1 (A)(1).) The Project requests a Height change to allow an increase in height for the Project from 45 feet to 230 feet. The massive height of the building will tower over neighboring single family and two-story apartment building. In comments on the DEIR, the Beverly-Wilshire Homes Association, Inc. took issue with the request for additional height, noting that “Density and height bonuses are given to residential projects because of the current affordable housing shortage. This medical office building does not fall into that category.” No justification for this substantial height change has been provided.

The City’s response to this comment improperly claims that the 12-story building “would be compatible” with the neighboring properties. It states:

the proposed 12-story medical office building would be compatible with development along South San Vicente Boulevard and Wilshire Boulevard, which is characterized by a mix of mid- to high-rise buildings, including a 10-story office building with ground floor commercial uses directly across from the Project Site, a 22-story medical office building fronting Wilshire Boulevard to the southeast of the Project Site, and a 12-story office building to the east of the Project Site.

(FEIR 2-14.)

What the FEIR fails to include in its response is that the DEIR states that the building directly north of the project is 5 stories with a 4-story parking structure, further north is a 3-story building. Directly across the street is a 10-story building, north of that is a 3-story building and 2 and 3 story buildings. (DEIR, II-3.) Moreover, the description of surrounding uses in the EIR makes no mention of the residential neighborhood directly to the northeast. See DEIR II-3 and image on II-4. In other words, the Project is by far the tallest building in the vicinity. The FEIR's attempt to minimize this is misleading and must be corrected.

IV. CONCLUSION

For the foregoing reasons, SAFER and its members urge the City to prepare and recirculate a revised EIR addressing the above shortcomings. Thank you for your attention to these comments. Please include this letter and all attachments hereto in the record of proceedings for this project.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Rebecca Davis', with a long horizontal flourish extending to the right.

Rebecca Davis
Lozeau Drury LLP



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June 21, 2022

VIA EMAIL

Samantha Millman, President
Caroline Choe, Vice President
Helen Campbell, Commissioner
Jenna Hornstock, Commissioner
Helen Leung, Commissioner
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Re: Agenda Item 8 - Appeal of VTT-74865-1A; ENV-2017-468-EIR; CPC-2017-467-GPA-VZC-HD-SPR and Final Environmental Impact Report for 656 South San Vicente Medical Office Project (SCH 2020010172)

Dear President Millman, Vice President Choe, and Honorable Commissioners:

I am writing on behalf of Supporters Alliance For Environmental Responsibility ("SAFER") regarding the Environmental Impact Report ("EIR") prepared for the Project known as 656 South San Vicente Medical Office Project (ENV-2017-468-EIR; SCH 2020010172), including all actions related or referring to the proposed development of a 12-story medical office and retail-commercial building with four above-ground parking levels, located at 650 – 675 South San Vicente Boulevard in Los Angeles ("Project").

These comments were prepared with the assistance of wildlife ecologist Dr. Shawn Smallwood. Dr. Smallwood's comments and CV are attached hereto as Exhibit A.

After reviewing the EIR, together with our experts, we conclude that there are a number of significant omissions and flaws in the EIR's analysis of the Project's environmental impacts, and significant impacts remain unmitigated. In addition, the FEIR fails to respond to public comment suggesting additional feasible mitigation to further reduce the Project's significant and unavoidable noise impact. A revised EIR should be prepared prior to Project approval to analyze all impacts and require implementation of all feasible mitigation measures, as described more fully below.

I. PROJECT DESCRIPTION

The Project consists of the construction and operation of a 12-story building (230 feet in height) that would include seven floors of medical office uses over four floors of above-grade parking, and a ground floor containing a lobby for the medical office, and commercial uses. The building includes up to 145,305 square feet of floor area, comprised of 140,305 square feet of medical office space and 5,000 square feet of ground floor retail-commercial space, of which up to 4,000 square feet may be a restraint and 1,000 square feet may be other commercial uses, such as a pharmacy. (EIR at II-1.) The Project would provide full-valet services for 418 parking spaces, including 393 vehicle parking spaces for medical office uses and 25 vehicle parking spaces for retail-commercial uses. The Project would also provide full-valet service for bicycle parking and would include 716 bicycle parking spaces for short- and long-term use.

The Project site is currently occupied by a 5,738 square-foot, vacant educational building, and an 8,225 square foot Big 5 Sporting Goods store and associated surface parking. Directly northeast of the Project Site across the alley are two, two-story apartment buildings. Further to the north and east, along Orange Street and South Sweetzer Avenue, are low-rise multi-family and single-family residential uses. Low-rise single-family and multi-family residential uses are also located to the south, across from Wilshire Boulevard.

II. LEGAL BACKGROUND

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an EIR (except in certain limited circumstances). (See, e.g., Pub. Resources Code, § 21100.) The EIR is the very heart of CEQA. (*Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652.) “The ‘foremost principle’ in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.” (*Communities for a Better Environment v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 109 (“*CBE v. CRA*”).)

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. (14 Cal. Code Regs. (“CEQA Guidelines”) § 15002(a)(1).) “Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR ‘protects not only the environment but also informed self-government.’” (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564.) The EIR has been described as “an environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.” (*Berkeley Keep Jets Over the Bay v. Bd. of Port Comm’rs.* (2001) 91 Cal.App.4th 1344, 1354 (“*Berkeley Jets*”); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.)

Second, CEQA requires public agencies to avoid or reduce environmental damage when “feasible” by requiring “environmentally superior” alternatives and all feasible mitigation measures. (CEQA Guidelines, § 15002(a)(2) and (3); *See also Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564.) The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to “identify ways that environmental damage can be avoided or significantly reduced.” (CEQA Guidelines, § 15002(a)(2).) If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has “eliminated or substantially lessened all significant effects on the environment where feasible” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns.” (Pub. Resources Code, § 21081; CEQA Guidelines, § 15092(b)(2)(A) & (B).)

While the courts review an EIR using an “abuse of discretion” standard, “the reviewing court is not to ‘uncritically rely on every study or analysis presented by a project proponent in support of its position. A ‘clearly inadequate or unsupported study is entitled to no judicial deference.’” (*Berkeley Jets*, 91 Cal.App.4th at 1355 (emphasis added), quoting, *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 391 409, n. 12.) As the court stated in *Berkeley Jets*, 91 Cal.App.4th at 1355:

A prejudicial abuse of discretion occurs “if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process.” (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal. App. 4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal. App. 4th 931, 946.)

More recently, the California Supreme Court has emphasized that:

When reviewing whether a discussion is sufficient to satisfy CEQA, a court must be satisfied that the EIR (1) includes sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises [citation omitted]....

(*Sierra Club v. Cty. of Fresno* (2018) 6 Cal.5th 502, 510 (2018), citing *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405.) The Court in *Sierra Club v. Cty. of Fresno* also emphasized at another primary consideration of sufficiency is whether the EIR “makes a reasonable effort to substantively connect a project’s air quality impacts to likely health consequences.” (6 Cal.5th at 510.) “Whether or not the alleged inadequacy is the complete omission of a required discussion or a patently inadequate one-paragraph discussion devoid of analysis, the reviewing court must decide whether the EIR serves its purpose as an informational document.” (*Id.* at 516.) Although an agency has discretion to decide the manner of discussing potentially significant effects in an EIR, “a reviewing court must determine whether the discussion of a potentially significant effect is sufficient or insufficient,

i.e., whether the EIR comports with its intended function of including ‘detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.’” (6 Cal.5th at 516, citing *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1197.) “The determination whether a discussion is sufficient is not solely a matter of discerning whether there is substantial evidence to support the agency’s factual conclusions.” (6 Cal.5th at 516.) As the Court emphasized:

[W]hether a description of an environmental impact is insufficient because it lacks analysis or omits the magnitude of the impact is not a substantial evidence question. A conclusory discussion of an environmental impact that an EIR deems significant can be determined by a court to be inadequate as an informational document without reference to substantial evidence.

(*Sierra Club v. Cty. of Fresno*, 6 Cal.5th at 514.)

In general, mitigation measures must be designed to minimize, reduce or avoid an identified environmental impact or to rectify or compensate for that impact. (CEQA Guidelines § 15370.) Where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. (*Id.* at § 15126.4(a)(1)(B).) A lead agency may not make the required CEQA findings unless the administrative record clearly shows that all uncertainties regarding the mitigation of significant environmental impacts have been resolved.

III. THE EIR IS INCONSISTENT WITH CEQA’S REQUIREMENTS.

A. The Project Will Have a Significant Impact on Birds that the EIR Failed to Analyze and Mitigate.

1. The EIR fails to disclose baseline conditions or adequately analyze impacts on biological resources.

Habitat is defined by a species’ use of the environment. Smallwood, p. 2. One example of habitat is the aerosphere, “where birds and bats and other volant animals with wings migrate, disperse, forage, perform courtship and where some of them mate.” Smallwood, p. 2. Yet the EIR improperly limits its assessment of impacts on biological resources to impacts resulting from loss of terrestrial habitat.

Dr. Smallwood reviewed eBird listings and determined that there are 68 special-status species of wildlife with the potential to use the Project’s aerosphere. Smallwood, p. 2. Of the bird species identified by Dr. Smallwood, 25% were documented because they died as a result of window collisions. Smallwood, pp. 2-3. As discussed below, the Project may significantly impact these species, yet the EIR failed to assess baseline conditions or to determine the impact of the Project compared to baseline conditions. The EIR must be revised to address this potentially significant impact.

2. The EIR failed to analyze the Project's impact on wildlife due to window collisions.

According to wildlife expert Dr. Shawn Smallwood, the Project will have a significant impact on birds as a result of window collisions. The City has not analyzed or mitigated these potential impacts to special-species birds. Analyzing the potential impact on wildlife of window collisions is especially important because “[w]indow collisions are often characterized as either the second or third largest source of human-caused bird mortality.” Smallwood, p. 6.

Dr. Smallwood explains, “birds are vulnerable to window collisions, especially where windows are built into structures without any care to the consequences to birds.” Smallwood, p. 2. Here, the EIR describes the proposed building facades as “floor-to-ceiling clear glass panels.” (ERI, II-16.) Glass curtain walls would be used, as well as glass rails on balconies. At night, the building would be lit internally, “thereby casting off light which attracts birds that fly at night on migration.” Smallwood, p. 6. Dr. Smallwood concludes that “[t]he project would introduce substantial collision hazards to an aerosphere that currently provides critically important habitat to birds, and which would act as lethal traps to flying birds.” Smallwood, p. 6. Nevertheless, the EIR makes no mention of the Project's potential to impact birds as a result of window collisions, or to mitigate those impacts.

Dr. Smallwood reviewed a number of studies in order to calculate the number of bird collisions per m² of glass windows per year. Smallwood, pp. 6-7. According to his calculations, each m² of glass would result in 0.073 bird deaths per year. (*Id.*) Based on the estimated 11,580 m² of glass windows and the 0.073 bird deaths per m² of glass windows, Dr. Smallwood estimates that the project would result in 847 bird deaths per year, which would continue until the building is either renovated to reduce bird collisions, or demolished. (*Id.*) Dr. Smallwood concludes, “[i]f the project moves forward as proposed, and annually kills 847 birds protected by state and federal laws, then the project would cause significant unmitigated impacts.” Smallwood, p. 7.

These bird deaths constitute a significant impact that must be analyzed. *Id.* The City must prepare a revised EIR to disclose, analyze, and mitigate the full scope of the Project's impact resulting from window collisions.

3. The City fails to mitigate the Project's adverse impact on bird species from window collisions.

In order to mitigate the impact of the window collisions on bird species, Dr. Smallwood has suggested a number of mitigation measures. As a starting point, before construction, “[a]ny new project should be informed by preconstruction surveys of daytime and nocturnal flight activity.” Smallwood, p. 11. Dr. Smallwood explains:

[Pre-construction surveys] can reveal the one or more façades facing the prevailing approach direction of birds, and these revelations can help prioritize where certain types of mitigation can be targeted. It is critical to formulate effective measures prior to construction, because post-construction options will be limited, likely more expensive, and probably less effective.

Smallwood, p. 11.

Dr. Smallwood also notes the importance of post-construction fatality monitoring, which he says “should be an essential feature of any new building project.” Smallwood, p. 11.

In addition, for mitigation measures involving the siting and design of the Project, Dr. Smallwood suggests: (1) deciding on the location of structures; (2) deciding on the façade and orientation of structures; (3) selecting types and sizes of windows; (4) minimizing transparency through two parallel façades; (5) minimizing views of interior plants; (6) landscaping so as to increase distance between windows and vegetation; (7) monitoring for fatalities to identify seasonal and spatial patterns; and (8) adjusted light management, window markings, and other measures as needed based on survey results. Smallwood, p. 11-12.

Dr. Smallwood also suggests adherence to available guidelines on building design intended to minimize collisions hazards to birds, such as those by the American Bird Conservancy (“ABC”). Smallwood, p. 15. ABC recommends: (1) minimizing use of glass; (2) placing glass behind some type of screening (grilles, shutters, exterior shades); (3) using glass with inherent properties to reduce collisions, such as patterns, window films, decals or tape; and (4) turning off lights during migration seasons. *Id.* Dr. Smallwood also suggests that the City look to the guidelines developed by the City of San Francisco, based on guidelines produced by the New York City Audubon Society, to minimize injuries and fatalities to bird species. (*Id.*)

Finally, Dr. Smallwood recommends compensatory mitigation including contributions to wildlife rehabilitation facilities to cover the costs of injured animals that may be delivered to these facilities for care from this Project or other projects. Smallwood, p. 16.

4. The EIR failed to analyze the Project’s impact on wildlife due to traffic collisions.

The EIR does not address the impacts on wildlife mortality from traffic generated by the Project. Smallwood, pp. 12-14. According to the EIR, the Project would result in 8,914,030 additional vehicle miles traveled (VMT) annually. After adjusting for the smaller amount of terrestrial wildlife given the urban landscape, Dr. Smallwood estimates **488 wildlife fatalities annually** as a result of collisions with vehicle miles generated by the Project. *Id.*, p. 14. Especially due to the special-status bird species likely to occur at or near the Project, these collisions represent a significant impact to wildlife that has not been addressed, discussed, or mitigated in the EIR. A revised EIR is necessary to disclose and mitigate this impact.

5. The EIR inadequately analyzed the Project's cumulative impacts on wildlife.

The EIR did not analyze cumulative impacts on biological resources based on the same claim made in the Initial Study's as to why the EIR did not need to analyze project-specific impacts. The IS claims that because the site is located in an urban landscape, it is not possible for wildlife to occur, and therefore there will be no impacts. As explained by Dr. Smallwood, "the IS neglected to consider the aerosphere as of any importance to volant wildlife." Smallwood, p. 15. As described in his letter, however, Dr. Smallwood provides evidence that the Project may have significant impacts on special status species, which must be addressed on a project-level and cumulatively in a revised EIR.

Because the EIR does not address impacts on wildlife and Dr. Smallwood's analysis provides substantial evidence of a fair argument that the Project will have a significant impact on special status birds, the City must prepare a revised EIR to analyze, disclose, and mitigate this impact.

B. The EIR's Conclusion that Construction Noise is Significant and Unavoidable is Not Supported by Substantial Evidence.

The EIR concludes that the Project will have a significant construction noise impact, and that it will remain significant even with mitigation. This conclusion is not supported by substantial evidence and violates CEQA.

When an EIR has identified significant environmental effects that have not been mitigated or avoided, the agency may not approve the project unless it first finds that "[s]pecific economic, legal, social, technological, or other considerations . . . make infeasible the mitigation measures or alternatives identified in the environmental impact report." (PRC §21081(a)(3); see 14 CCR §15091(a)(3).) Rejected alternatives and mitigation measures must be "truly infeasible." (*City of Marina v. Bd. of Trustees of Cal. State Univ.* (2006) 39 Cal.4th 341, 369.)

According to the expert comments of Derek Watry (Exhibit B to August 2, 2021 CREED LA Comment), additional feasible mitigation is available to further reduce the Project's significant noise impact.

Mitigation Measure NOI-MM-1 provides:

NOI-MM-1: The Project shall provide temporary ground-level construction noise barriers, with a minimum height of eight feet and up to a height of 15 feet along the alleyway along the northeast property line, equipped with noise blankets or equivalent noise reduction materials rated to achieve sound level reductions of at least 10 dBA between the Project Site and ground-level sensitive receptor locations. These temporary noise barriers shall be used to block the line-of-sight between the construction equipment and the noise-sensitive receptor(s) during the duration of construction activities. Prior to

obtaining any permits, documentation prepared by a noise consultant verifying compliance with this measure shall be submitted to the Department of City Planning.

(DEIR at p. IV.G-49.)

According to this measure, the temporary noise barrier can be anywhere between 8 and 15 feet in height, and need only be placed along the alleyway along the northeast property line. (*Id.*) Since the residences on the far side of the alleyway are two-stories, including multiple windows that face the Project site, NOI-MM-1 is inadequate. (Watry, p. 6.) Instead, the EIR should require the barrier be 15 feet in height, and require that the barrier extend for along the entire extent of the neighboring residential buildings. (*Id.*)

The FEIR fails to adequately respond to Mr. Watry's comment. The FEIR states that:

providing a noise barrier with a height to block the line-of-sight between the Project Site and receptors at second or higher-level building locations is not considered feasible, due to the potential need for the barrier height to reach 20 feet above ground or higher, which would likely require a barrier foundation that could interfere with internal construction activities, require partial or complete closure of the adjacent alleyway, and/or cause safety issues for workers and pedestrians.

(FEIR at 2-64.)

This response ignores Mr. Watry's suggestion that the barrier be 15 feet (rather than a minimum of 8 feet and maximum of 15 feet), and should run along the entire extent of the neighboring residential buildings.

This response violates CEQA for two reasons. First, there is no evidence that Mr. Watry's suggestions are not feasible. As a result, they must be adopted to further reduce the Project's significant noise impact. (*See Covington v. Great Basin Unified Air Pollution Control Dis.* (2019) 43 Cal.App.5th 867, 883.)

Second, FEIR did not adequately respond to Mr. Watry's comment. An agency's responses to comments must specifically explain the reasons for rejecting suggestions received in comments and for proceeding with a project despite its environmental impacts. (PRC § 21091(d); 14 CCR §§ 15088(a), 15132.) Such explanations must be supported with specific references to empirical information, scientific authority, and/or explanatory information. (*Cleary v. County of Stanislaus* (1981) 118 Cal.App.3d 348, 357.) The responses, moreover, must manifest a good faith, reasoned analysis; conclusory statements unsupported by factual information will not suffice. (*People v. County of Kern* (1974) 39 Cal.App.3d 830, 841.)

Here, the FEIR's response completely ignores the bulk of Mr. Watry's suggestion, which is to require noise barriers to run along the entire extent of the neighboring residential boundaries, and to require the barriers be 15 feet in height. There was no discussion of these

suggestions or any evidence that they would be infeasible. Certifying the EIR without adequately responding to Mr. Watry's comments is an abuse of discretion and a violation of CEQA.

C. The EIR Relies on an Improper Historical Baseline.

Use of a proper baseline is critical to the meaningful assessment of a project's environmental impacts. (*Communities for a Better Env't. v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 320; *Save Our Peninsula, supra*, 87 Cal.App.4th at 119.) Ordinarily, the environmental baseline is the physical environmental conditions that exist at the time the Notice of Publication (NOP) is published. (14 CCR §§ 15125(a)(1), 15126.2(a).) An agency is permitted to veer from this norm and rely on historic conditions or anticipated future conditions for the baseline, but only when "necessary to provide the most accurate picture practically possible of the project's impacts." (14 CCR §15125(a)(1).) An agency that elects *not* to provide an analysis based on conditions existing at the time the NOP is published must provide an adequate justification for doing so, supported by substantial evidence. (*POET, LLC v. State Air Resources Bd.* (2017) 12 Cal.App.5th 52, 80.)

The EIR relies on a historic baseline without justification. The NOP was published in January of 2020, and conditions at that time should form the baseline against which the Project's impacts are measured. This did not occur. Despite ceasing operations in 2018 the Montessori School formerly operating at the Project site is included as part of the baseline, as if it were still operational in 2020. While an agency has some discretion to rely on a historical baseline, here, the City has provided no evidence that including the school in the baseline is "necessary to provide the most accurate picture practically possible of the project's impacts." (14 CCR §15125(a)(1).) The opposition is true. The effect of including the closed Montessori School in the baseline is that Project's air quality, energy, and greenhouse gas impacts are artificially diminished.

These comments were raised in comments on the DEIR by CREED LA. In response, the FEIR dismisses the concerns and claims there is no need to revise the baseline because the emissions and energy use from the school were small, so even if it was not included in the baseline, the significance of the impacts would not change. This response is inadequate. The City cannot pick and choose which parts of CEQA it does and does not have to comply with. Failure to revise the EIR to accurately reflect the baseline is an abuse of discretion and violates CEQA.

D. The Project Does Not Warrant a Height Adjustment from 45 feet to 230 feet.

The Project is located in Height District 1VL meaning "Very Limited Height District, and no Building or Structure in Height District No. 1-VL shall exceed three Stories, nor shall it exceed 45 feet in height." (Los Angeles Mun. Code sec. 12.21.1 (A)(1).) The Project requests a Height change to allow an increase in height for the Project from 45 feet to 230 feet. The massive height of the building will tower over neighboring single family and two-story apartment building. In comments on the DEIR, the Beverly-Wilshire Homes Association, Inc.

took issue with the request for additional height, noting that “Density and height bonuses are given to residential projects because of the current affordable housing shortage. This medical office building does not fall into that category.” No justification for this substantial height change has been provided.

The City’s response to this comment improperly claims that the 12-story building “would be compatible” with the neighboring properties. It states:

the proposed 12-story medical office building would be compatible with development along South San Vicente Boulevard and Wilshire Boulevard, which is characterized by a mix of mid- to high- rise buildings, including a 10-story office building with ground floor commercial uses directly across from the Project Site, a 22-story medical office building fronting Wilshire Boulevard to the southeast of the Project Site, and a 12-story office building to the east of the Project Site.

(FEIR 2-14.)

What the FEIR fails to include in its response is that the DEIR states that the building directly north of the project is 5 stories with a 4-story parking structure, further north is a 3-story building. Directly across the street is a 10-story building, north of that is a 3-story building and 2 and 3 story buildings. (DEIR, II-3.) Moreover, the description of surrounding uses in the EIR makes no mention of the residential neighborhood directly to the northeast. See DEIR II-3 and image on II-4. In other words, the Project is by far the tallest building in the vicinity. The FEIR’s attempt to minimize this is misleading and must be corrected.

IV. CONCLUSION

For the foregoing reasons, SAFER and its members urge the City to prepare and recirculate a revised EIR addressing the above shortcomings. Thank you for your attention to these comments. Please include this letter and all attachments hereto in the record of proceedings for this project.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Rebecca Davis', with a long horizontal flourish extending to the right.

Rebecca Davis
Lozeau Drury LLP

EXHIBIT A

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Attn: Paul Caporaso
City of Los Angeles Department of City Planning
221 N. Figueroa St., Room 1350
Los Angeles, CA 90012

25 February 2022

RE: 656 South San Vicente Medical Office Project

Dear Mr. Caporaso,

I write to comment on the Draft and Final Environmental Impact Report (EIR) prepared for the proposed 656 South San Vicente Medical Office Project (City of Los Angeles 2021, 2022), which I understand would be a 12-story medical office/retail-commercial building with up to 145,305 square feet of floor space on 0.79 acres. Unfortunately, the analysis of baseline conditions is incomplete and flawed, and the impacts analysis neglects a potentially significant impact of glass windows on wildlife.

My qualifications for assessing habitat and identifying potential impacts to wildlife are the following. I hold a Ph.D. degree in Ecology from University of California at Davis, where I also did post-graduate research in the Department of Agronomy and Range Sciences. My research is on animal density and distribution, habitat selection, interactions between wildlife and human infrastructure/activities, and conservation of rare and endangered species. I authored numerous papers on special-status species issues. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and the Raptor Research Foundation, and I lectured part-time at California State University, Sacramento. I was Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, and of Biological Conservation, and I was on the Editorial Board of Environmental Management. I have performed wildlife surveys in California for 36 years. My CV is attached.

EXISTING ENVIRONMENTAL CONDITIONS

No survey for wildlife was performed at the site. The EIR does not analyze potential project impacts to biological resources, because as pointed out on page 43 of the Initial Study (IS), "The Project Site is entirely developed" and "The California Department of Fish and Wildlife and U.S Fish and Wildlife Service databases do not identify any candidate, sensitive or special status species critical habitat on or around the Project Site." The IS concludes, "the Project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service" and "No further analysis of this topic in the EIR is required." This conclusion is derived from the flawed premise that the aerosphere used by birds is not habitat.

The EIR considers potential impacts to biological resources to consist solely of loss of terrestrial habitat, where habitat is considered to consist of vegetation cover on natural substrate. However, impacts to birds can also be caused by constructing edifices that protrude into the aerosphere above the project's footprint. Additional impacts can be caused by constructing edifices that expose volant wildlife to many fatal traps posed by glass windows.

The EIR neglects a large portion of habitat that is essential to many species. To understand this part of their habitat, one must consider the very definition of habitat. Simply put, habitat is defined by a species' use of the environment (Hall et al. 1997, Morrison et al. 1998, Smallwood 2002). Every species on Earth is morphologically adapted through thousands of generations of life and death to exist within an environmental medium. The central medium for many species is life itself: mosses grown on trees, barnacles on whales, and tapeworms in gut. For many other species it is soil, including for many species of nematode, pocket gophers, and even California tiger salamander. For a vast number of species, it is water. Indeed, most people do not hesitate to characterize whales, fishes, squid, and shrimp as aquatic animals living in aquatic habitats. Less appreciated by some is the gaseous atmosphere as a medium of life (Davy et al. 2017, Diehl et al. 2017), but it is one of the most important habitat mediums of our planet. The aerosphere is where birds and bats and other volant animals with wings migrate, disperse, forage, perform courtship and where some of them mate. Birds are some of the many types of animals that evolved wings as a morphological adaptation to thrive by moving through the medium of the aerosphere. The aerosphere is habitat. Indeed, an entire discipline of ecology has emerged to study this essential aspect of habitat – the discipline of aeroecology (Kunz et al. 2008).

Many special-status species of birds have been recorded at or near the aerosphere of the project site. eBird (<https://eBird.org>) indicates there are 68 special-status species of wildlife with potential to use the site's aerosphere (Table 1). Of these, 1 has been recorded on site, 25 (37%) have been documented within 1.5 miles of the site ('Very close'), 8 (12%) within 1.5 and 3 miles ('Nearby'), and another 34 (50%) within 30 to 50 miles ('In region'). The birds reported within all these distance domains from the project site can quickly fly those distances. A bird reported 1 mile from the site can fly that 1 mile to the site in 2 minutes, and a bird reported 30 miles from the site can do so in 1 hour. All 68 species listed in Table 1 can encounter a new building inserted into their aerial habitat, and they can do so at night or in daylight. The site holds ample potential for supporting special-status species of wildlife.

Of the bird species in Table 1, 17 (25%) have been documented as window collision victims. Most of the others will likely be documented as window collision victims in the near future through better reporting. For a variety of reasons summarized below, birds are vulnerable to window collisions, especially where windows are built into structures without any care to the consequences to birds. In this case, the EIR (II-16) describes the facades of the proposed building as "floor-to-ceiling clear glass panels." One depiction (<https://urbanize.city/la/post/12-story-medical-office-tower-rise-wilshire-san-vicente>) spotlights the building as a nighttime beacon – a death trap for birds (see below).

Table 1. Occurrence likelihoods of special-status bird species at or near the proposed project site, according to eBird (<https://eBird.org>), where “very close” indicates within 1.5 miles of the site, “nearby” indicates within 1.5 and 3 miles of the site, and “in region” indicates within 30 miles or so.

Common name	Species name	Status ¹	eBird records	Known window deaths
Redhead	<i>Aythya americana</i>	SSC3	In region	
Common loon	<i>Gavia immer</i>	SSC	In region	
Brant	<i>Branta bernicla</i>	SSC2	In region	
Western grebe	<i>Aechmophorus clarkii</i>	BCC	Very close	
Clark’s grebe	<i>Aechmophorus occidentalis</i>	BCC	In region	
American white pelican	<i>Pelecanus erythrorhynchos</i>	SSC	Nearby	
Brown pelican	<i>Pelecanus occidentalis</i>	CFP	Nearby	
Double-crested cormorant	<i>Phalacrocorax auritus</i>	WL	Very close	
Willet	<i>Tringa semipalmata</i>	BCC	In region	
Turkey vulture	<i>Cathartes aura</i>	BOP	Very close	
Osprey	<i>Pandion haliaetus</i>	WL, BOP	Nearby	
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA, BCC, CFP	In region	
White-tailed kite	<i>Elanus luecurus</i>	CFP, WL, BOP	In region	
Sharp-shinned hawk	<i>Accipiter striatus</i>	WL, BOP	Very close	Yes
Cooper’s hawk	<i>Accipiter cooperii</i>	WL, BOP	On site	Yes
Northern harrier	<i>Circus cyaneus</i>	SSC3, BOP	Very close	
Swainson’s hawk	<i>Buteo swainsoni</i>	CT, BOP	In region	
Red-shouldered hawk	<i>Buteo lineatus</i>	BOP	Very close	Yes
Red-tailed hawk	<i>Buteo jamaicensis</i>	BOP	Very close	Yes
Ferruginous hawk	<i>Buteo regalis</i>	TWL, BOP	In region	
American kestrel	<i>Falco sparverius</i>	BOP	Very close	Yes
Merlin	<i>Falco columbarius</i>	WL, BOP	Very close	Yes
Peregrine falcon	<i>Falco peregrinus</i>	CFP, BOP, BCC	Very close	Yes
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT	In region	
Whimbrel	<i>Numenius phaeopus</i>	BCC	In region	
Long-billed curlew	<i>Numenius americanus</i>	BCC, WL	In region	
Marbled godwit	<i>Limosa fedoa</i>	BCC	In region	
Red knot	<i>Calidris canutus</i>	BCC	In region	

Common name	Species name	Status¹	eBird records	Known window deaths
Short-billed dowitcher	<i>Limnodromus griseus</i>	BCC	In region	
Heermann's gull	<i>Larus heermanni</i>	BCC	In region	
Western gull	<i>Larus occidentalis</i>	BCC	Very close	
California gull	<i>Larus californicus</i>	BCC, WL	Very close	
California least tern	<i>Sternula antillarum</i>	FE, CE	In region	
Elegant tern	<i>Thalasseus elegans</i>	WL	In region	
Caspian tern	<i>Hydroprogne caspia</i>	BCC	In region	
Black skimmer	<i>Rynchops niger</i>	BCC, SSC ₃	In region	
Xantus's murrelet	<i>Synthliboramphus hypoleucus</i>	CT, BCC	In region	
Rhinoceros auklet	<i>Cerorhinca monocerata</i>	WL	In region	
Barn owl	<i>Tyto alba</i>	BOP	Very close	Yes
Burrowing owl	<i>Athene cunicularia</i>	SSC ₂ , BOP, BCC	Nearby	Yes
Great horned owl	<i>Bubo virginianus</i>	BOP	Very close	Yes
Vaux's swift	<i>Chaetura vauxi</i>	SSC ₂	Very close	
Costa's hummingbird	<i>Calypte costae</i>	BCC	Very close	Yes
Rufous hummingbird	<i>Selasphorus rufus</i>	BCC	Very close	Yes
Allen's hummingbird	<i>Selasphorus sasin</i>	BCC	Very close	Yes
Lewis's woodpecker	<i>Melanerpes lewis</i>	BCC	Nearby	
Nuttall's woodpecker	<i>Picoides nuttallii</i>	BCC	Very close	
Bank swallow	<i>Riparia riparia</i>	CT	In region	Yes
Olive-sided flycatcher	<i>Contopus cooperi</i>	SSC ₂	Very close	
Vermilion flycatcher	<i>Pyrocephalus rubinus</i>	SSC ₂	In region	
Willow flycatcher	<i>Empidonax trailii</i>	CE	Nearby	
Loggerhead shrike	<i>Lanius ludovicianus</i>	BCC, SSC ₂	Nearby	
Least Bell's vireo	<i>Vireo bellii pusillus</i>	FE, CE	In region	
Oak titmouse	<i>Baeolophus inornatus</i>	BCC	Very close	Yes
Clark's marsh wren	<i>Cistothorus palustris clarkae</i>	SSC ₂	In region	
Wrentit	<i>Chamaea fasciata</i>	BCC	Very close	
California gnatcatcher	<i>Polioptila c. californica</i>	CT, SSC	In region	
Yellow warbler	<i>Dendroica petechia</i>	BCC, SSC ₂	Very close	Yes
Yellow-breasted chat	<i>Icteria virens</i>	SSC ₃	In region	Yes

Common name	Species name	Status¹	eBird records	Known window deaths
Summer tanager	<i>Piranga rubra</i>	SSC1	In region	
Southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	BCC, SSC	In region	
Oregon vesper sparrow	<i>Pooecetes gramineus affinis</i>	SSC2	In region	
Belding's savannah sparrow	<i>Passerculus sandwichensis beldingi</i>	CE	Very close	
Grasshopper sparrow	<i>Ammodramus savannarum</i>	SSC2	In region	
Yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>	SSC3	In region	
Tricolored blackbird	<i>Agelaius tricolor</i>	CT, BCC	In region	
Bullock's oriole	<i>Icterus bullockii</i>	BCC	Very close	
Lawrence's goldfinch	<i>Spinus lawrencei</i>	BCC	Nearby	

¹ Listed as FE = federal endangered, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, CE = California endangered, CT = California threatened, CFP = California Fully Protected (CDFG Code 3511), SSC = California species of special concern (not threatened with extinction, but rare, very restricted in range, declining throughout range, peripheral portion of species' range, associated with habitat that is declining in extent), SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively (Shuford and Gardali 2008), WL = Taxa to Watch List (Shuford and Gardali 2008), and BOP = California Department of Fish and Wildlife Code 3503.5 (Birds of Prey).

BIRD-WINDOW COLLISION MORTALITY

At 372 feet tall, the building would extend far upward into bird traffic. The facades of the building would be composed of extensive structural glass. In fact, glass curtain-walls would be used, as well as glass rails on balconies. Vegetation that could attract many species of birds would be grown on the building's balconies. As noted above, the building would be internally lit at night, thereby casting off abundant light which attracts birds that fly at night on migration. The project would introduce substantial collision hazards to an aerosphere that currently provides critically important habitat to birds, and which would act as lethal traps to flying birds.

Window collisions are often characterized as either the second or third largest source or human-caused bird mortality. The numbers behind these characterizations are often attributed to Klem's (1990) and Dunn's (1993) estimates of about 100 million to 1 billion bird fatalities in the USA, or more recently Loss et al.'s (2014) estimate of 365-988 million bird fatalities in the USA or Calvert et al.'s (2013) and Machtans et al.'s (2013) estimates of 22.4 million and 25 million bird fatalities in Canada, respectively. However, these estimates were likely biased too low, because they were based on opportunistic sampling, volunteer study participation, fatality monitoring by more inexperienced than experienced searchers, and usually no adjustments made for scavenger removals of carcasses before searchers could detect them (Bracey et al. 2016).

Hundreds of thousands of birds migrate along the Pacific Flyway. At least 68 special-status species of bird are known to the project area (Table 1). According to the scientific literature, many of the special-status species in Table 1 have been documented as window collision fatalities and are therefore susceptible to new structural glass installations (Supplemental Material to Basilio et al. 2020; Smallwood unpublished review). Many more species of migratory birds, newly protected by California's revised Fish and Game Code section 3513, have also been documented as window collision victims (Basilio et al. 2020).

Nowhere in the EIR is there any concern expressed for bird-window collision impacts, nor is there any mitigation proposed to avoid, minimize or compensate for such impacts. As I will show in the next section, many birds can be expected to be killed by windows of the proposed project. A fair argument can be made for the need to revise the EIR to adequately address this potential impact.

Project Impact Prediction

Predicting the impacts caused by loss of aerial habitat and the energetic costs of birds having to navigate around the buildings is possible, but I am unprepared to make such predictions. However, I am prepared to predict bird-window collision mortality. By the time of these comments I had reviewed and processed results of bird collision monitoring at 213 buildings and façades for which bird collisions per m² of glass per year could be calculated and averaged (Johnson and Hudson 1976, O'Connell 2001, Somerlot 2003, Hager et al. 2008, Borden et al. 2010, Hager et al. 2013, Porter and Huang 2015, Parkins et al. 2015, Kahle et al. 2016, Ocampo-Peñuela et al. 2016, Sabo et

al. 2016, Barton et al. 2017, Gomez-Moreno et al. 2018, Schneider et al. 2018, Loss et al. 2019, Brown et al. 2020, , City of Portland Bureau of Environmental Services and Portland Audubon 2020, Riding et al. 2020). These study results averaged 0.073 bird deaths per m² of glass per year (95% CI: 0.042-0.102). The EIR provides renderings of the building's facades, which I used to estimate the extent of glass that would be used. Based on renderings of the building in the EIR, I estimated the proposed project would include 11,580 m² of glass on its facades, which applied to the mean fatality rate would predict at least **847 bird deaths per year (95% CI: 503–1,190)**. The 100-year toll from this average annual fatality rate would be at least **84,650 bird deaths (95% CI: 50,257–119,042)**. These estimates would be perhaps 3 times higher after accounting for the proportions of fatalities removed by scavengers or missed by fatality searchers where studies have been performed. Collision fatalities would continue until the buildings are either renovated to reduce bird collisions or they come down. If the project moves forward as proposed, and annually kills 847 birds protected by state and federal laws, then the project would cause significant unmitigated impacts.

Bird-Window Collision Factors

Below is a list of collision factors I found in the scientific literature, and which I suggest ought to be used to draft Bird-Safe Guidelines for City of Los Angeles and which ought to be used to formulate a bird-safe plan for the proposed project. Following this list are specific notes and findings taken from the literature and my own experience.

- (1) Inherent hazard of a structure in the airspace used for nocturnal migration or other flights
- (2) Window transparency, falsely revealing passage through structure or to indoor plants
- (3) Window reflectance, falsely depicting vegetation, competitors, or open airspace
- (4) Black hole or passage effect
- (5) Window or façade extent, or proportion of façade consisting of window or other reflective surface
- (6) Size of window
- (7) Type of glass
- (8) Lighting, which is correlated with window extent and building operations
- (9) Height of structure (collision mechanisms shift with height above ground)
- (10) Orientation of façade with respect to winds and solar exposure
- (11) Structural layout causing confusion and entrapment
- (12) Context in terms of urban-rural gradient, or surrounding extent of impervious surface vs vegetation
- (13) Height, structure, and extent of vegetation grown near home or building
- (14) Presence of birdfeeders or other attractants
- (15) Relative abundance
- (16) Season of the year
- (17) Ecology, demography and behavior
- (18) Predatory attacks or cues provoking fear of attack
- (19) Aggressive social interactions

(1) Inherent hazard of structure in airspace.—Not all of a structure’s collision risk can be attributed to windows. Overing (1938) reported 576 birds collided with the Washington Monument in 90 minutes on one night, 12 September 1937. The average annual fatality count had been 328 birds from 1932 through 1936. Gelb and Delacretaz (2009) and Klem et al. (2009) also reported finding collision victims at buildings lacking windows, although many fewer than they found at buildings fitted with windows. The takeaway is that any building going up at the project site would likely kill birds, although mortality would increase with larger expanses of glass.

(2) Window transparency.—Widely believed as one of the two principal factors contributing to avian collisions with buildings is the transparency of glass used in windows on the buildings (Klem 1989). Gelb and Delacretaz (2009) felt that many of the collisions they detected occurred where transparent windows revealed interior vegetation.

(3) Window reflectance.—Widely believed as one of the two principal factors contributing to avian collisions with buildings is the reflectance of glass used in windows on the buildings (Klem 1989). Reflectance can deceptively depict open airspace, vegetation as habitat destination, or competitive rivals as self-images (Klem 1989). Gelb and Delacretaz (2009) felt that many of the collisions they detected occurred toward the lower parts of buildings where large glass exteriors reflected outdoor vegetation. Klem et al. (2009) and Borden et al. (2010) also found that reflected outdoor vegetation associated positively with collisions.

(4) Black hole or passage effect.—Although this factor was not often mentioned in the bird-window collision literature, it was suggested in Sheppard and Phillips (2015). The black hole or passage effect is the deceptive appearance of a cavity or darkened ledge that certain species of bird typically approach with speed when seeking roosting sites. The deception is achieved when shadows from awnings or the interior light conditions give the appearance of cavities or protected ledges. This factor appears potentially to be nuanced variations on transparency or reflectance or possibly an interaction effect of both of these factors. It might play a significant role in the proposed project, which includes extruded window frames of many windows.

(5) Window or façade extent.—Klem et al. (2009), Borden et al. (2010), Hager et al. (2013), Ocampo-Peñuela et al. (2016), Loss et al. (2019), Rebolo-Ifrán et al. (2019), and Riding et al. (2020) reported increased collision fatalities at buildings with larger reflective façades or higher proportions of façades composed of windows. However, Porter and Huang (2015) found a negative relationship between fatalities found and proportion of façade that was glazed.

(6) Size of window.—According to Kahle et al. (2016), collision rates were higher on large-pane windows compared to small-pane windows.

(7) Type of glass.—Klem et al. (2009) found that collision fatalities associated with the type of glass used on buildings. Otherwise, little attention has been directed towards the types of glass in buildings.

(8) Lighting.—Parkins et al. (2015) found that light emission from buildings correlated positively with percent glass on the façade, suggesting that lighting is linked to the extent of windows. Zink and Eckles (2010) reported fatality reductions, including an 80% reduction at a Chicago high-rise, upon the initiation of the Lights-out Program. However, Zink and Eckles (2010) provided no information on their search effort, such as the number of searches or search interval or search area around each building.

(9) Height of structure.—Except for Riding et al. (2020), I found little if any hypothesis-testing related to building height, including whether another suite of factors might relate to collision victims of high-rises. Are migrants more commonly the victims of high-rises or of smaller buildings? Some of the most notorious buildings are low-rise buildings.

(10) Orientation of façade.—Some studies tested façade orientation, but not convincingly. Some evidence that orientation affects collision rates was provided by Winton et al. (2018). Confounding factors such as the extent and types of windows would require large sample sizes of collision victims to parse out the variation so that some portion of it could be attributed to orientation of façade. Whether certain orientations cause disproportionately stronger or more realistic-appearing reflections ought to be testable through measurement, but counting dead birds under façades of different orientations would help.

(11) Structural layout.—Bird-safe building guidelines have illustrated examples of structural layouts associated with high rates of bird-window collisions, but little attention has been directed towards hazardous structural layouts in the scientific literature. An exception was Johnson and Hudson (1976), who found high collision rates at 3 stories of glassed-in walkways atop an open breezeway, located on a break in slope with trees on one side of the structure and open sky on the other, Washington State University.

(12) Context in urban-rural gradient.—Numbers of fatalities found in monitoring have associated negatively with increasing developed area surrounding the building (Hager et al. 2013), and positively with more rural settings (Kummer et al. 2016).

(13) Height, structure and extent of vegetation near building.—Correlations have sometimes been found between collision rates and the presence or extent of vegetation near windows (Hager et al. 2008, Borden et al. 2010, Kummer et al. 2016, Ocampo-Peñuela et al. 2016). However, Porter and Huang (2015) found a negative relationship between fatalities found and vegetation cover near the building. In my experience, what probably matters most is the distance from the building that vegetation occurs. If the vegetation that is used by birds is very close to a glass façade, then birds coming from that glass will be less likely to attain sufficient speed upon arrival at the façade to result in a fatal injury. Too far away and there is probably no relationship. But 30 to 50 m away, and birds alighting from vegetation can attain lethal speeds by the time they arrive at the windows.

(14) Presence of birdfeeders.—Dunn (1993) reported a weak correlation ($r = 0.13$, $P < 0.001$) between number of birds killed by home windows and the number of birds counted at feeders. However, Kummer and Bayne (2015) found that experimental installment of birdfeeders at homes increased bird collisions with windows 1.84-fold.

(15) Relative abundance.—Collision rates have often been assumed to increase with local density or relative abundance (Klem 1989), and positive correlations have been measured (Dunn 1993, Hager et al. 2008). However, Hager and Craig (2014) found a negative correlation between fatality rates and relative abundance near buildings.

(16) Season of the year.—Borden et al. (2010) found 90% of collision fatalities during spring and fall migration periods. The significance of this finding is magnified by 7-day carcass persistence rates of 0.45 and 0.35 in spring and fall, rates which were considerably lower than during winter and summer (Hager et al. 2012). In other words, the concentration of fatalities during migration seasons would increase after applying seasonally-explicit adjustments for carcass persistence. Fatalities caused by collisions into the glass façades of the project's building would likely be concentrated in fall and spring migration periods.

(17) Ecology, demography and behavior.—Klem (1989) noted that certain types of birds were not found as common window-caused fatalities, including soaring hawks and waterbirds. Cusa et al. (2015) found that species colliding with buildings surrounded by higher levels of urban greenery were foliage gleaners, and species colliding with buildings surrounded by higher levels of urbanization were ground foragers. Sabo et al. (2016) found no difference in age class, but did find that migrants are more susceptible to collision than resident birds.

(18) Predatory attacks.—Panic flights caused by raptors were mentioned in 16% of window strike reports in Dunn's (1993) study. I have witnessed Cooper's hawks chasing birds into windows, including house finches next door to my home and a northern mockingbird chased directly into my office window. Predatory birds likely to collide with the project's windows would include Peregrine falcon, red-shouldered hawk, Cooper's hawk, and sharp-shinned hawk.

(19) Aggressive social interactions.—I found no hypothesis-testing of the roles of aggressive social interactions in the literature other than the occasional anecdotal account of birds attacking their self-images reflected from windows. However, I have witnessed birds chasing each other and sometimes these chases resulting in one of the birds hitting a window.

For most of the known or suspected collision risk factors, the proposed project's design remains insufficiently described to determine the degree to which the project would contribute to relative collision risk. Focused study of birds in the area could reduce the uncertainty of potential project impacts. Such studies could make use of radar (Gauthreaux et al. 2008) or visual scan surveys (Smallwood 2017). Key information useful for impacts assessment and mitigation would include intensity and timing of bird traffic, heights above ground, travel trajectories, and specific behaviors of birds in flight.

Window Collision Solutions

Given the magnitude of bird-window collision impacts, there are obviously great opportunities for reducing and minimizing these impacts going forward. Existing structures can be modified or retrofitted to reduce impacts, and proposed new structures can be more carefully sited, designed, and managed to minimize impacts. However, the costs of some of these measures can be high and can vary greatly, but most importantly the efficacies of many of these measures remain uncertain. Both the costs and effectiveness of all of these measures can be better understood through experimentation and careful scientific investigation. **Post-construction fatality monitoring should be an essential feature of any new building project.** Below is a listing of mitigation options, along with some notes and findings from the literature.

Any new project should be informed by preconstruction surveys of daytime and nocturnal flight activity. Such surveys can reveal the one or more façades facing the prevailing approach direction of birds, and these revelations can help prioritize where certain types of mitigation can be targeted. It is critical to formulate effective measures prior to construction, because post-construction options will be limited, likely more expensive, and probably less effective.

(1) Retrofitting to reduce impacts

- (1A) Marking windows
- (1B) Managing outdoor landscape vegetation
- (1C) Managing indoor landscape vegetation
- (1D) Managing nocturnal lighting

(1A) Marking windows.— Whereas Klem (1990) found no deterrent effect from decals on windows, Johnson and Hudson (1976) reported a fatality reduction of about 69% after placing decals on windows. In an experiment of opportunity, Ocampo-Peñuela et al. (2016) found only 2 of 86 fatalities at one of 6 buildings – the only building with windows treated with a bird deterrent film. At the building with fritted glass, bird collisions were 82% lower than at other buildings with untreated windows. Kahle et al. (2016) added external window shades to some windowed façades to reduce fatalities 82% and 95%. Brown et al. (2020) reported an 84% lower collision probability among fritted glass windows and windows treated with ORNILUX R UV. City of Portland Bureau of Environmental Services and Portland Audubon (2020) reduced bird collision fatalities 94% by affixing marked Solyx window film to existing glass panels of Portland’s Columbia Building. Many external and internal glass markers have been tested experimentally, some showing no effect and some showing strong deterrent effects (Klem 1989, 1990, 2009, 2011; Klem and Saenger 2013; Rössler et al. 2015).

Following up on the results of Johnson and Hudson (1976), I decided to mark windows of my home, where I have documented 5 bird collision fatalities between the time I moved in and 6 years later. I marked my windows with decals delivered to me via US Postal Service from a commercial vendor. I have documented no fatalities at my

windows during the 10 years hence. In my assessment, markers can be effective in some situations.

(2) Siting and Designing to minimize impacts

- (2A) Deciding on location of structure
- (2B) Deciding on façade and orientation
- (2C) Selecting type and sizes of windows
- (2D) Designing to minimize transparency through two parallel façades
- (2E) Designing to minimize views of interior plants
- (2F) Landscaping to increase distances between windows and trees and shrubs

(3) Monitoring for adaptive management to reduce impacts

- (3A) Systematic monitoring for fatalities to identify seasonal and spatial patterns
- (3B) Adjust light management, window marking and other measures as needed.

WILDLIFE MOVEMENT

The IS provides an analysis of potential impacts to wildlife movement, but only from the perspective of whether and to what degrees birds use trees on the site. The appropriate analysis is whether and to what degree the proposed 372-foot-tall building would impede the traffic of migratory birds in the atmosphere. It might seem a simple matter for birds to fly around the building, but not all of them would succeed at doing that and for those that do, there would be an energetic cost that ought to be estimated in a revised EIR.

TRAFFIC IMPACTS TO WILDLIFE

The EIR neglects to address one of the project's most substantial impacts to wildlife, and that is wildlife mortality and injuries caused by project-generated traffic. Project-generated traffic would endanger wildlife that must, for various reasons, cross roads used by the project's traffic (Photos 1-4). Vehicle collisions have accounted for the deaths of many thousands of amphibian, reptile, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally.

Photo 1. A Gambel's quail dashes across a road on 3 April 2021. Such road crossings are usually successful, but too often prove fatal to the animal. Photo by Noriko Smallwood.



Photo 2. Great-tailed grackle walks onto a rural road in Imperial County, 4 February 2022.

Photo 3. A mourning dove killed by vehicle traffic on a California road. Photo by Noriko Smallwood, 21 June 2020.



Photo 4. Raccoon killed on Road 31 just east of Highway 505 in Solano County. Photo taken on 10 November 2018.



The nearest study of traffic-caused wildlife mortality was performed along a 2.5 mile stretch of Vasco Road in Contra Costa County, California. Fatality searches in this study found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches (Mendelsohn et al. 2009). This fatality number needs to be adjusted for the proportion of fatalities that were not found due to scavenger removal and searcher error. This adjustment is

typically made by placing carcasses for searchers to find (or not find) during their routine periodic fatality searches. This step was not taken at Vasco Road (Mendelsohn

et al. 2009), but it was taken as part of another study right next to Vasco Road (Brown et al. 2016). The Brown et al. (2016) adjustment factors were similar to those for carcass persistence of road fatalities (Santos et al. 2011). Applying searcher detection rates estimated from carcass detection trials performed at a wind energy project immediately adjacent to this same stretch of road (Brown et al. 2016), the adjusted total number of fatalities was estimated at 12,187 animals killed by traffic on the road. This fatality number translates to a rate of 3,900 wild animals per mile per year killed along 2.5 miles of road in 1.25 years. In terms comparable to the national estimates, the estimates from the Mendelsohn et al. (2009) study would translate to 243,740 animals killed per 100 km of road per year, or 29 times that of Loss et al.'s (2014) upper bound estimate and 68 times the Canadian estimate. An analysis is needed of whether increased traffic generated by the project site would similarly result in local impacts on wildlife.

Predicting project-generated traffic impacts to wildlife

The Air Quality chapter of the EIR predicts 8,914,030 annual vehicle miles traveled (VMT). Considering that terrestrial wildlife is less common on the urban landscape of Los Angeles, perhaps 10% of these miles would be traveled through areas populated by many wild animals. Even 10% of these miles – 891,403 miles – would be many miles driven at great peril to wildlife that must cross roads to go about their business of foraging, patrolling home ranges, dispersing and migrating. Despite the obvious risk to wildlife, and despite the multiple papers and books written about this type of impact and how to mitigate them, the EIR does not address impacts to wildlife caused by vehicles traveling to and from the project site.

For wildlife vulnerable to front-end collisions and crushing under tires, road mortality can be predicted from the study of Mendelsohn et al. (2009) as a basis, although it would be helpful to have the availability of more studies like that of Mendelsohn et al. (2009) at additional locations. My analysis of the Mendelsohn et al. (2009) data resulted in an estimated 3,900 animals killed per mile along a county road in Contra Costa County. Two percent of the estimated number of fatalities were birds, and the balance was composed of 34% mammals (many mice and pocket mice, but also ground squirrels, desert cottontails, striped skunks, American badgers, raccoons, and others), 52.3% amphibians (large numbers of California tiger salamanders and California red-legged frogs, but also Sierran treefrogs, western toads, arboreal salamanders, slender salamanders and others), and 11.7% reptiles (many western fence lizards, but also skinks, alligator lizards, and snakes of various species).

During the Mendelsohn et al. (2009) study, 19,500 cars traveled Vasco Road daily, so the vehicle miles that contributed to my estimate of non-volant fatalities was 19,500 cars and trucks \times 2.5 miles \times 365 days/year \times 1.25 years = 22,242,187.5 vehicle miles per 12,187 wildlife fatalities, or 1,825 vehicle miles per fatality. This rate divided into only 10% of the predicted annual VMT would predict 488 wildlife fatalities per year.

Operations over 50 years would accumulate 24,400 wildlife fatalities. It remains unknown whether and to what degree vehicle tires contribute to carcass removals from the roadway, thereby contributing a negative bias to the fatality estimates I made from the Mendelsohn et al. (2009) fatality counts. It also remains unknown

whether my assumed 10% of VMT overlapping wildlife habitat is accurate, but a more confident assumption could be derived by overlaying predicted travel routes with natural areas.

Based on my assumptions and simple calculations, the project-generated traffic would cause substantial, significant impacts to wildlife. There is at least a fair argument that can be made for the need to revise the EIR to analyze this impact. Mitigation measures to improve wildlife safety along roads are available and are feasible, and they need exploration for their suitability with the proposed project.

CUMULATIVE EFFECTS

The IS applies the same argument to conclude no significant cumulative effects to biological resources as it did to direct effects. The argument is that because the site is situated within an urban landscape, the degrees of disturbance simply prevent wildlife from occurring in the project area. With no wildlife, there should be no impacts, according to the IS. (No analysis is provided in the EIR, although the IS assured that such an analysis of cumulative impacts would be provided in the EIR.) However, the IS neglected to consider the aerosphere as of any importance to volant wildlife. The EIR needs to be revised to appropriately analyze the project's potential contribution of cumulative effects to bird mortality caused by existing, proposed and planned structures that kill birds with their use of structural glass. Cumulative impacts of bird-window collision mortality should be addressed with the formulation of a city ordinance to guide building design, fatality monitoring and compensatory mitigation.

RECOMMENDED MITIGATION MEASURES

Guidelines on Building Design: If the project goes forward, it should adhere to the available guidelines prepared by American Bird Conservancy and New York and San Francisco. The American Bird Conservancy (ABC) produced an excellent set of guidelines that recommend actions to: (1) Minimize use of glass; (2) Placing glass behind some type of screening (grilles, shutters, exterior shades); (3) Using glass with inherent properties to reduce collisions, such as patterns, window films, decals or tape; and (4) Turning off lights during migration seasons (Sheppard and Phillips 2015). The City of San Francisco (San Francisco Planning Department 2011) also has a set of building design guidelines, based on the excellent guidelines produced by the New York City Audubon Society (Orff et al. 2007). The ABC document and both the New York and San Francisco documents provide excellent alerting of potential bird-collision hazards as well as many visual examples. The San Francisco Planning Department's (2011) building design guidelines are more comprehensive than those of New York City, but they could have gone further. For example, the San Francisco guidelines probably should have also covered scientific monitoring of impacts as well as compensatory mitigation for impacts that could not be avoided, minimized or reduced.

Monitoring and the use of compensatory mitigation should be incorporated at any new building project because the measures recommended in the available guidelines remain of uncertain efficacy, and even if these measures are effective, they will not reduce

collision fatalities to zero. The only way to assess efficacy and to quantify post-construction fatalities is to monitor the project for fatalities.

Road Mortality: Compensatory mitigation is needed for the increased wildlife mortality that will be caused by the project's contribution to increased road traffic in the region. I suggest that this mitigation can be directed toward funding research to identify fatality patterns and effective impact reduction measures such as reduced speed limits and wildlife under-crossings or overcrossings of particularly dangerous road segments. Compensatory mitigation can also be provided in the form of donations to wildlife rehabilitation facilities (see below).

Fund Wildlife Rehabilitation Facilities: Compensatory mitigation ought also to include funding contributions to wildlife rehabilitation facilities to cover the costs of injured animals that will be delivered to these facilities for care. Most of the injuries would likely be caused by bird-window collisions, but some would be injured for other reasons. Many of these animals would need treatment caused by collision injuries.

Thank you for your attention,



Shawn Smallwood, Ph.D.

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Curriculum Vitae

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Born May 3, 1963 in
Sacramento, California.
Married, father of two.

Ecologist

Expertise

- Finding solutions to controversial problems related to wildlife interactions with human industry, infrastructure, and activities;
- Wildlife monitoring and field study using GPS, thermal imaging, behavior surveys;
- Using systems analysis and experimental design principles to identify meaningful ecological patterns that inform management decisions.

Education

Ph.D. Ecology, University of California, Davis. September 1990.
M.S. Ecology, University of California, Davis. June 1987.
B.S. Anthropology, University of California, Davis. June 1985.
Corcoran High School, Corcoran, California. June 1981.

Experience

- 665 professional publications, including:
 - 88 peer reviewed publications
 - 24 in non-reviewed proceedings
- 551 reports, declarations, posters and book reviews
- 8 in mass media outlets
- 87 public presentations of research results

Editing for scientific journals: Guest Editor, *Wildlife Society Bulletin*, 2012-2013, of invited papers representing international views on the impacts of wind energy on wildlife and how to mitigate the impacts. Associate Editor, *Journal of Wildlife Management*, March 2004 to 30 June 2007. Editorial Board Member, *Environmental Management*, 10/1999 to 8/2004. Associate Editor, *Biological Conservation*, 9/1994 to 9/1995.

Member, Alameda County Scientific Review Committee (SRC), August 2006 to April 2011. The five-member committee investigated causes of bird and bat collisions in the Altamont Pass Wind Resource Area, and recommended mitigation and monitoring measures. The SRC reviewed the science underlying the Alameda County Avian Protection Program, and advised

the County on how to reduce wildlife fatalities.

Consulting Ecologist, 2004-2007, California Energy Commission (CEC). Provided consulting services as needed to the CEC on renewable energy impacts, monitoring and research, and produced several reports. Also collaborated with Lawrence-Livermore National Lab on research to understand and reduce wind turbine impacts on wildlife.

Consulting Ecologist, 1999-2013, U.S. Navy. Performed endangered species surveys, hazardous waste site monitoring, and habitat restoration for the endangered San Joaquin kangaroo rat, California tiger salamander, California red-legged frog, California clapper rail, western burrowing owl, salt marsh harvest mouse, and other species at Naval Air Station Lemoore; Naval Weapons Station, Seal Beach, Detachment Concord; Naval Security Group Activity, Skaggs Island; National Radio Transmitter Facility, Dixon; and, Naval Outlying Landing Field Imperial Beach.

Part-time Lecturer, 1998-2005, California State University, Sacramento. Instructed Mammalogy, Behavioral Ecology, and Ornithology Lab, Contemporary Environmental Issues, Natural Resources Conservation.

Senior Ecologist, 1999-2005, BioResource Consultants. Designed and implemented research and monitoring studies related to avian fatalities at wind turbines, avian electrocutions on electric distribution poles across California, and avian fatalities at transmission lines.

Chairman, Conservation Affairs Committee, The Wildlife Society--Western Section, 1999-2001. Prepared position statements and led efforts directed toward conservation issues, including travel to Washington, D.C. to lobby Congress for more wildlife conservation funding.

Systems Ecologist, 1995-2000, Institute for Sustainable Development. Headed ISD's program on integrated resources management. Developed indicators of ecological integrity for large areas, using remotely sensed data, local community involvement and GIS.

Associate, 1997-1998, Department of Agronomy and Range Science, University of California, Davis. Worked with Shu Geng and Mingua Zhang on several studies related to wildlife interactions with agriculture and patterns of fertilizer and pesticide residues in groundwater across a large landscape.

Lead Scientist, 1996-1999, National Endangered Species Network. Informed academic scientists and environmental activists about emerging issues regarding the Endangered Species Act and other environmental laws. Testified at public hearings on endangered species issues.

Ecologist, 1997-1998, Western Foundation of Vertebrate Zoology. Conducted field research to determine the impact of past mercury mining on the status of California red-legged frogs in Santa Clara County, California.

Senior Systems Ecologist, 1994-1995, EIP Associates, Sacramento, California. Provided consulting services in environmental planning, and quantitative assessment of land units for their conservation and restoration opportunities based on ecological resource requirements of 29 special-status species. Developed ecological indicators for prioritizing areas within Yolo County

to receive mitigation funds for habitat easements and restoration.

Post-Graduate Researcher, 1990-1994, Department of Agronomy and Range Science, *U.C. Davis*. Under Dr. Shu Geng's mentorship, studied landscape and management effects on temporal and spatial patterns of abundance among pocket gophers and species of Falconiformes and Carnivora in the Sacramento Valley. Managed and analyzed a data base of energy use in California agriculture. Assisted with landscape (GIS) study of groundwater contamination across Tulare County, California.

Work experience in graduate school: Co-taught Conservation Biology with Dr. Christine Schonewald, 1991 & 1993, UC Davis Graduate Group in Ecology; Reader for Dr. Richard Coss's course on Psychobiology in 1990, UC Davis Department of Psychology; Research Assistant to Dr. Walter E. Howard, 1988-1990, UC Davis Department of Wildlife and Fisheries Biology, testing durable baits for pocket gopher management in forest clearcuts; Research Assistant to Dr. Terrell P. Salmon, 1987-1988, UC Wildlife Extension, Department of Wildlife and Fisheries Biology, developing empirical models of mammal and bird invasions in North America, and a rating system for priority research and control of exotic species based on economic, environmental and human health hazards in California. Student Assistant to Dr. E. Lee Fitzhugh, 1985-1987, UC Cooperative Extension, Department of Wildlife and Fisheries Biology, developing and implementing statewide mountain lion track count for long-term monitoring.

Fulbright Research Fellow, Indonesia, 1988. Tested use of new sampling methods for numerical monitoring of Sumatran tiger and six other species of endemic felids, and evaluated methods used by other researchers.

Projects

Repowering wind energy projects through careful siting of new wind turbines using map-based collision hazard models to minimize impacts to volant wildlife. Funded by wind companies (principally NextEra Renewable Energy, Inc.), California Energy Commission and East Bay Regional Park District, I have collaborated with a GIS analyst and managed a crew of five field biologists performing golden eagle behavior surveys and nocturnal surveys on bats and owls. The goal is to quantify flight patterns for development of predictive models to more carefully site new wind turbines in repowering projects. Focused behavior surveys began May 2012 and continue. Collision hazard models have been prepared for seven wind projects, three of which were built. Planning for additional repowering projects is underway.

Test avian safety of new mixer-ejector wind turbine (MEWT). Designed and implemented a before-after, control-impact experimental design to test the avian safety of a new, shrouded wind turbine developed by Ogin Inc. (formerly known as FloDesign Wind Turbine Corporation). Supported by a \$718,000 grant from the California Energy Commission's Public Interest Energy Research program and a 20% match share contribution from Ogin, I managed a crew of seven field biologists who performed periodic fatality searches and behavior surveys, carcass detection trials, nocturnal behavior surveys using a thermal camera, and spatial analyses with the collaboration of a GIS analyst. Field work began 1 April 2012 and ended 30 March 2015 without Ogin installing its MEWTs, but we still achieved multiple important scientific advances.

Reduce avian mortality due to wind turbines at Altamont Pass. Studied wildlife impacts caused by 5,400 wind turbines at the world's most notorious wind resource area. Studied how impacts are perceived by monitoring and how they are affected by terrain, wind patterns, food resources, range management practices, wind turbine operations, seasonal patterns, population cycles, infrastructure management such as electric distribution, animal behavior and social interactions.

Reduce avian mortality on electric distribution poles. Directed research toward reducing bird electrocutions on electric distribution poles, 2000-2007. Oversaw 5 founts of fatality searches at 10,000 poles from Orange County to Glenn County, California, and produced two large reports.

Cook *et al.* v. Rockwell International *et al.*, No. 90-K-181 (D. Colorado). Provided expert testimony on the role of burrowing animals in affecting the fate of buried and surface-deposited radioactive and hazardous chemical wastes at the Rocky Flats Plant, Colorado. Provided expert reports based on four site visits and an extensive document review of burrowing animals. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals. I testified in federal court in November 2005, and my clients were subsequently awarded a \$553,000,000 judgment by a jury. After appeals the award was increased to two billion dollars.

Hanford Nuclear Reservation Litigation. Provided expert testimony on the role of burrowing animals in affecting the fate of buried radioactive wastes at the Hanford Nuclear Reservation, Washington. Provided three expert reports based on three site visits and extensive document review. Predicted and verified a certain population density of pocket gophers on buried waste structures, as well as incidence of radionuclide contamination in body tissue. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals.

Expert testimony and declarations on proposed residential and commercial developments, gas-fired power plants, wind, solar and geothermal projects, water transfers and water transfer delivery systems, endangered species recovery plans, Habitat Conservation Plans and Natural Communities Conservation Programs. Testified before multiple government agencies, Tribunals, Boards of Supervisors and City Councils, and participated with press conferences and depositions. Prepared expert witness reports and court declarations, which are summarized under Reports (below).

Protocol-level surveys for special-status species. Used California Department of Fish and Wildlife and US Fish and Wildlife Service protocols to search for California red-legged frog, California tiger salamander, arroyo southwestern toad, blunt-nosed leopard lizard, western pond turtle, giant kangaroo rat, San Joaquin kangaroo rat, San Joaquin kit fox, western burrowing owl, Swainson's hawk, Valley elderberry longhorn beetle and other special-status species.

Conservation of San Joaquin kangaroo rat. Performed research to identify factors responsible for the decline of this endangered species at Lemoore Naval Air Station, 2000-2013, and implemented habitat enhancements designed to reverse the trend and expand the population.

Impact of West Nile Virus on yellow-billed magpies. Funded by Sacramento-Yolo Mosquito and Vector Control District, 2005-2008, compared survey results pre- and post-West Nile Virus epidemic for multiple bird species in the Sacramento Valley, particularly on yellow-billed magpie and American crow due to susceptibility to WNV.

Workshops on HCPs. Assisted Dr. Michael Morrison with organizing and conducting a 2-day workshop on Habitat Conservation Plans, sponsored by Southern California Edison, and another 1-day workshop sponsored by PG&E. These Workshops were attended by academics, attorneys, and consultants with HCP experience. We guest-edited a Proceedings published in Environmental Management.

Mapping of biological resources along Highways 101, 46 and 41. Used GPS and GIS to delineate vegetation complexes and locations of special-status species along 26 miles of highway in San Luis Obispo County, 14 miles of highway and roadway in Monterey County, and in a large area north of Fresno, including within reclaimed gravel mining pits.

GPS mapping and monitoring at restoration sites and at Caltrans mitigation sites. Monitored the success of elderberry shrubs at one location, the success of willows at another location, and the response of wildlife to the succession of vegetation at both sites. Also used GPS to monitor the response of fossorial animals to yellow star-thistle eradication and natural grassland restoration efforts at Bear Valley in Colusa County and at the decommissioned Mather Air Force Base in Sacramento County.

Mercury effects on Red-legged Frog. Assisted Dr. Michael Morrison and US Fish and Wildlife Service in assessing the possible impacts of historical mercury mining on the federally listed California red-legged frog in Santa Clara County. Also measured habitat variables in streams.

Opposition to proposed No Surprises rule. Wrote a white paper and summary letter explaining scientific grounds for opposing the incidental take permit (ITP) rules providing ITP applicants and holders with general assurances they will be free of compliance with the Endangered Species Act once they adhere to the terms of a “properly functioning HCP.” Submitted 188 signatures of scientists and environmental professionals concerned about No Surprises rule US Fish and Wildlife Service, National Marine Fisheries Service, all US Senators.

Natomas Basin Habitat Conservation Plan alternative. Designed narrow channel marsh to increase the likelihood of survival and recovery in the wild of giant garter snake, Swainson’s hawk and Valley Elderberry Longhorn Beetle. The design included replication and interspersions of treatments for experimental testing of critical habitat elements. I provided a report to Northern Territories, Inc.

Assessments of agricultural production system and environmental technology transfer to China. Twice visited China and interviewed scientists, industrialists, agriculturalists, and the Directors of the Chinese Environmental Protection Agency and the Department of Agriculture to assess the need and possible pathways for environmental clean-up technologies and trade opportunities between the US and China.

Yolo County Habitat Conservation Plan. Conducted landscape ecology study of Yolo County to spatially prioritize allocation of mitigation efforts to improve ecosystem functionality within the County from the perspective of 29 special-status species of wildlife and plants. Used a hierarchically structured indicators approach to apply principles of landscape and ecosystem ecology, conservation biology, and local values in rating land units. Derived GIS maps to help guide the conservation area design, and then developed implementation strategies.

Mountain lion track count. Developed and conducted a carnivore monitoring program throughout California since 1985. Species counted include mountain lion, bobcat, black bear, coyote, red and gray fox, raccoon, striped skunk, badger, and black-tailed deer. Vegetation and land use are also monitored. Track survey transect was established on dusty, dirt roads within randomly selected quadrats.

Sumatran tiger and other felids. Upon award of Fulbright Research Fellowship, I designed and initiated track counts for seven species of wild cats in Sumatra, including Sumatran tiger, fishing cat, and golden cat. Spent four months on Sumatra and Java in 1988, and learned Bahasa Indonesia, the official Indonesian language.

Wildlife in agriculture. Beginning as post-graduate research, I studied pocket gophers and other wildlife in 40 alfalfa fields throughout the Sacramento Valley, and I surveyed for wildlife along a 200 mile road transect since 1989 with a hiatus of 1996-2004. The data are analyzed using GIS and methods from landscape ecology, and the results published and presented orally to farming groups in California and elsewhere. I also conducted the first study of wildlife in cover crops used on vineyards and orchards.

Agricultural energy use and Tulare County groundwater study. Developed and analyzed a data base of energy use in California agriculture, and collaborated on a landscape (GIS) study of groundwater contamination across Tulare County, California.

Pocket gopher damage in forest clear-cuts. Developed gopher sampling methods and tested various poison baits and baiting regimes in the largest-ever field study of pocket gopher management in forest plantations, involving 68 research plots in 55 clear-cuts among 6 National Forests in northern California.

Risk assessment of exotic species in North America. Developed empirical models of mammal and bird species invasions in North America, as well as a rating system for assigning priority research and control to exotic species in California, based on economic, environmental, and human health hazards.

Peer Reviewed Publications

Smallwood, K. S. 2020. USA wind energy-caused bat fatalities increase with shorter fatality search intervals. *Diversity* 12(98); doi:10.3390/d12030098.

Smallwood, K. S., D. A. Bell, and S. Standish. 2020. Dogs detect larger wind energy impacts on bats and birds. *Journal of Wildlife Management* 84:852-864. DOI: 10.1002/jwmg.21863.

Smallwood, K. S., and D. A. Bell. 2020. Relating bat passage rates to wind turbine fatalities. *Diversity* 12(84); doi:10.3390/d12020084.

Smallwood, K. S., and D. A. Bell. 2020. Effects of wind turbine curtailment on bird and bat fatalities. *Journal of Wildlife Management* 84:684-696. DOI: 10.1002/jwmg.21844

Kitano, M., M. Ino, K. S. Smallwood, and S. Shiraki. 2020. Seasonal difference in carcass persistence rates at wind farms with snow, Hokkaido, Japan. *Ornithological Science* 19: 63 –

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Smallwood, K. S. and M. L. Morrison. 2018. Nest-site selection in a high-density colony of burrowing owls. *Journal of Raptor Research* 52:454-470.

Smallwood, K. S., D. A. Bell, E. L. Walther, E. Leyvas, S. Standish, J. Mount, B. Karas. 2018. Estimating wind turbine fatalities using integrated detection trials. *Journal of Wildlife Management* 82:1169-1184.

Smallwood, K. S. 2017. Long search intervals under-estimate bird and bat fatalities caused by wind turbines. *Wildlife Society Bulletin* 41:224-230.

Smallwood, K. S. 2017. The challenges of addressing wildlife impacts when repowering wind energy projects. Pages 175-187 in Köppel, J., Editor, *Wind Energy and Wildlife Impacts: Proceedings from the CWW2015 Conference*. Springer. Cham, Switzerland.

May, R., Gill, A. B., Köppel, J. Langston, R. H.W., Reichenbach, M., Scheidat, M., Smallwood, S., Voigt, C. C., Hüppop, O., and Portman, M. 2017. Future research directions to reconcile wind turbine-wildlife interactions. Pages 255-276 in Köppel, J., Editor, *Wind Energy and Wildlife Impacts: Proceedings from the CWW2015 Conference*. Springer. Cham, Switzerland.

Smallwood, K. S. 2017. Monitoring birds. M. Perrow, Ed., *Wildlife and Wind Farms - Conflicts and Solutions*, Volume 2. Pelagic Publishing, Exeter, United Kingdom. www.bit.ly/2v3cR9Q

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Salmon, T.P. and K.S. Smallwood. 1989. Final Report – Evaluating exotic vertebrates as pests to California agriculture. California Department of Food and Agriculture, Sacramento.

Smallwood, K.S. and W. A. Erickson (written under supervision of W.E. Howard, R.E. Marsh, and R.J. Laacke). 1990. Environmental exposure and fate of multi-kill strychnine gopher baits. Final Report to USDA Forest Service –NAPIAP, Cooperative Agreement PSW-89-0010CA.

Fitzhugh, E.L., K.S. Smallwood, and R. Gross. 1985. Mountain lion track count, Marin County, 1985. Report on file at Wildlife Extension, University of California, Davis.

Comments on Environmental Documents (Year; pages)

I was retained or commissioned to comment on environmental planning and review documents, including:

- Mulqueeney Ranch Wind Repowering Project DSEIR (2021; 98);
- Clawiter Road Industrial Project IS/MND, Hayward (2021; 18);
- Garnet Energy Center Stipulations, New York (2020);
- Heritage Wind Energy Project, New York (2020: 71);
- Ameresco Keller Canyon RNG Project IS/MND, Martinez (2020; 11);
- Cambria Hotel Project Staff Report, Dublin (2020; 19);
- Central Pointe Mixed-Use Staff Report, Santa Ana (2020; 20);
- Oak Valley Town Center EIR Addendum, Calimesa (2020; 23);

- Coachillin Specific Plan MND Amendment, Desert Hot Springs (2020; 26);
- Stockton Avenue Hotel and Condominiums Project Tiering to EIR, San Jose (2020; 19);
- Cityline Sub-block 3 South Staff Report, Sunnyvale (2020; 22);
- Station East Residential/Mixed Use EIR, Union City (2020; 21);
- Multi-Sport Complex & Southeast Industrial Annexation Suppl. EIR, Elk Grove (2020; 24);
- Sun Lakes Village North EIR Amendment 5, Banning, Riverside County (2020; 27);
- 2nd comments on 1296 Lawrence Station Road, Sunnyvale (2020; 4);
- 1296 Lawrence Station Road, Sunnyvale (2020; 16);
- Mesa Wind Project EA, Desert Hot Springs (2020; 31);
- 11th Street Development Project IS/MND, City of Upland (2020; 17);
- Vista Mar Project IS/MND, Pacifica (2020; 17);
- Emerson Creek Wind Project Application, Ohio (2020; 64);
- Replies on Wister Solar Energy Facility EIR, Imperial County (2020; 12);
- Wister Solar Energy Facility EIR, Imperial County (2020; 28);
- Crimson Solar EIS/EIR, Mojave Desert (2020, 35) not submitted;
- Sakioka Farms EIR tiering, Oxnard (2020; 14);
- 3440 Wilshire Project IS/MND, Los Angeles (2020; 19);
- Replies on 2400 Barranca Office Development Project EIR, Irvine (2020; 8);
- 2400 Barranca Office Development Project EIR, Irvine (2020; 25);
- Replies on Heber 2 Geothermal Repower Project IS/MND, El Centro (2020; 4);
- 2nd comments on Heber 2 Geothermal Repower Project IS/MND, El Centro (2020; 8);
- Heber 2 Geothermal Repower Project IS/MND, El Centro (2020; 3);
- Lots 4-12 Oddstad Way Project IS/MND, Pacifica (2020; 16);
- Declaration on DDG Visalia Warehouse project (2020; 5);
- Terraces of Lafayette EIR Addendum (2020; 24);
- AMG Industrial Annex IS/MND, Los Banos (2020; 15);
- Replies to responses on Casmalia and Linden Warehouse (2020; 15);
- Clover Project MND, Petaluma (2020; 27);
- Ruby Street Apartments Project Env. Checklist, Hayward (2020; 20);
- Replies to responses on 3721 Mt. Diablo Boulevard Staff Report (2020; 5);
- 3721 Mt. Diablo Boulevard Staff Report (2020; 9);
- Steeno Warehouse IS/MND, Hesperia (2020; 19);
- UCSF Comprehensive Parnassus Heights Plan EIR (2020; 24);
- North Pointe Business Center MND, Fresno (2020; 14);
- Casmalia and Linden Warehouse IS, Fontana (2020; 15);
- Rubidoux Commerce Center Project IS/MND, Jurupa Valley (2020; 27);
- Haun and Holland Mixed Use Center MND, Menifee (2020; 23);
- First Industrial Logistics Center II, Moreno Valley IS/MND (2020; 23);
- GLP Store Warehouse Project Staff Report (2020; 15);
- Replies on Beale WAPA Interconnection Project EA & CEQA checklist (2020; 29);
- 2nd comments on Beale WAPA Interconnection Project EA & CEQA checklist (2020; 34);
- Beale WAPA Interconnection Project EA & CEQA checklist (2020; 30);
- Levine-Fricke Softball Field Improvement Addendum, UC Berkeley (2020; 16);
- Greenlaw Partners Warehouse and Distribution Center Staff Report, Palmdale (2020; 14);

- Humboldt Wind Energy Project DEIR (2019; 25);
- Sand Hill Supplemental EIR, Altamont Pass (2019; 17);
- 1700 Dell Avenue Office Project, Campbell (2019, 28);
- 1180 Main Street Office Project MND, Redwood City (2019; 19);
- Summit Ridge Wind Farm Request for Amendment 4, Oregon (2019; 46);
- Shafter Warehouse Staff Report (2019; 4);
- Park & Broadway Design Review, San Diego (2019; 19);
- Pinnacle Pacific Heights Design Review, San Diego (2019; 19);
- Pinnacle Park & C Design Review, San Diego (2019; 19);
- Preserve at Torrey Highlands EIR, San Diego (2019; 24);
- Santana West Project EIR Addendum, San Jose (2019; 18);
- The Ranch at Eastvale EIR Addendum, Riverside County (2020; 19);
- Hageman Warehouse IS/MND, Bakersfield (2019; 13);
- Oakley Logistics Center EIR, Antioch (2019; 22);
- 27 South First Street IS, San Jose (2019; 23);
- 2nd replies on Times Mirror Square Project EIR, Los Angeles (2020; 11);
- Replies on Times Mirror Square Project EIR, Los Angeles (2020; 13);
- Times Mirror Square Project EIR, Los Angeles (2019; 18);
- East Monte Vista & Aviator General Plan Amend EIR Addendum, Vacaville (2019; 22);
- Hillcrest LRDP EIR, La Jolla (2019; 36);
- 555 Portola Road CUP, Portola Valley (2019; 11);
- Johnson Drive Economic Development Zone SEIR, Pleasanton (2019; 27);
- 1750 Broadway Project CEQA Exemption, Oakland (2019; 19);
- Mor Furniture Project MND, Murietta Hot Springs (2019; 27);
- Harbor View Project EIR, Redwood City (2019; 26);
- Visalia Logistics Center (2019; 13);
- Cordelia Industrial Buildings MND (2019; 14);
- Scheu Distribution Center IS/ND, Rancho Cucamonga (2019; 13);
- Mills Park Center Staff Report, San Bruno (2019; 22);
- Site visit to Desert Highway Farms IS/MND, Imperial County (2019; 9);
- Desert Highway Farms IS/MND, Imperial County (2019; 12);
- ExxonMobil Interim Trucking for Santa Ynez Unit Restart SEIR, Santa Barbara (2019; 9);
- Olympic Holdings Inland Center Warehouse Project MND, Rancho Cucamonga (2019; 14);
- Replies to responses on Lawrence Equipment Industrial Warehouse, Banning (2019; 19);
- PARS Global Storage MND, Murietta (2019; 13);
- Slover Warehouse EIR Addendum, Fontana (2019; 16);
- Seefried Warehouse Project IS/MND, Lathrop (2019; 19)
- World Logistics Center Site Visit, Moreno Valley (2019; 19);
- Merced Landfill Gas-To-Energy Project IS/MND (2019; 12);
- West Village Expansion FEIR, UC Davis (2019; 11);
- Site visit, Doheny Ocean Desalination EIR, Dana Point (2019; 11);
- Replies to responses on Avalon West Valley Expansion EIR, San Jose (2019; 10);
- Avalon West Valley Expansion EIR, San Jose (2019; 22);
- Sunroad – Otoy 50 EIR Addendum, San Diego (2019; 26);

- Del Rey Pointe Residential Project IS/MND, Los Angeles (2019; 34);
- 1 AMD Redevelopment EIR, Sunnyvale (2019; 22);
- Lawrence Equipment Industrial Warehouse IS/MND, Banning (2019; 14);
- SDG Commerce 330 Warehouse IS, American Canyon (2019; 21);
- PAMA Business Center IS/MND, Moreno Valley (2019; 23);
- Cupertino Village Hotel IS (2019; 24);
- Lake House IS/ND, Lodi (2019; 33);
- Campo Wind Project DEIS, San Diego County (DEIS, (2019; 14);
- Stirling Warehouse MND site visit, Victorville (2019; 7);
- Green Valley II Mixed-Use Project EIR, Fairfield (2019; 36);
- We Be Jammin rezone MND, Fresno (2019; 14);
- Gray Whale Cove Pedestrian Crossing IS/ND, Pacifica (2019; 7);
- Visalia Logistics Center & DDG 697V Staff Report (2019; 9);
- Mather South Community Masterplan Project EIR (2019; 35);
- Del Hombre Apartments EIR, Walnut Creek (2019; 23);
- Otay Ranch Planning Area 12 EIR Addendum, Chula Vista (2019; 21);
- The Retreat at Sacramento IS/MND (2019; 26);
- Site visit to Sunroad – Centrum 6 EIR Addendum, San Diego (2019; 9);
- Sunroad – Centrum 6 EIR Addendum, San Diego (2018; 22);
- North First and Brokaw Corporate Campus Buildings EIR Addendum, San Jose (2018; 30);
- South Lake Solar IS, Fresno County (2018; 18);
- Galloo Island Wind Project Application, New York (not submitted) (2018; 44);
- Doheny Ocean Desalination EIR, Dana Point (2018; 15);
- Stirling Warehouse MND, Victorville (2018; 18);
- LDK Warehouse MND, Vacaville (2018; 30);
- Gateway Crossings FEIR, Santa Clara (2018; 23);
- South Hayward Development IS/MND (2018; 9);
- CBU Specific Plan Amendment, Riverside (2018; 27);
- 2nd replies to responses on Dove Hill Road Assisted Living Project MND (2018; 11);
- Replies to responses on Dove Hill Road Assisted Living Project MND (2018; 7);
- Dove Hill Road Assisted Living Project MND (2018; 12);
- Deer Ridge/Shadow Lakes Golf Course EIR, Brentwood (2018; 21);
- Pyramid Asphalt BLM Finding of No Significance, Imperial County (2018; 22);
- Amáre Apartments IS/MND, Martinez (2018; 15);
- Petaluma Hill Road Cannabis MND, Santa Rosa (2018; 21);
- 2nd comments on Zeiss Innovation Center IS/MND, Dublin (2018; 12);
- Zeiss Innovation Center IS/MND, Dublin (2018; 32);
- City of Hope Campus Plan EIR, Duarte (2018; 21);
- Palo Verde Center IS/MND, Blythe (2018; 14);
- Logisticenter at Vacaville MND (2018; 24);
- IKEA Retail Center SEIR, Dublin (2018; 17);
- Merge 56 EIR, San Diego (2018; 15);
- Natomas Crossroads Quad B Office Project P18-014 EIR, Sacramento (2018; 12);
- 2900 Harbor Bay Parkway Staff Report, Alameda (2018; 30);

- At Dublin EIR, Dublin (2018; 25);
- Fresno Industrial Rezone Amendment Application No. 3807 IS (2018; 10);
- Nova Business Park IS/MND, Napa (2018; 18);
- Updated Collision Risk Model Priors for Estimating Eagle Fatalities, USFWS (2018; 57);
- 750 Marlborough Avenue Warehouse MND, Riverside (2018; 14);
- Replies to responses on San Bernardino Logistics Center IS (2018; 12);
- San Bernardino Logistics Center IS (2018; 19);
- CUP2017-16, Costco IS/MND, Clovis (2018; 11);
- Desert Land Ventures Specific Plan EIR, Desert Hot Springs (2018; 18);
- Ventura Hilton IS/MND (2018; 30);
- North of California Street Master Plan Project IS, Mountain View (2018; 11);
- Tamarind Warehouse MND, Fontana (2018; 16);
- Lathrop Gateway Business Park EIR Addendum (2018; 23);
- Centerpointe Commerce Center IS, Moreno Valley (2019; 18);
- Amazon Warehouse Notice of Exemption, Bakersfield (2018; 13);
- CenterPoint Building 3 project Staff Report, Manteca (2018; 23);
- Cessna & Aviator Warehouse IS/MND, Vacaville (2018; 24);
- Napa Airport Corporate Center EIR, American Canyon (2018; 15);
- 800 Opal Warehouse Initial Study, Mentone, San Bernardino County (2018; 18);
- 2695 W. Winton Ave Industrial Project IS, Hayward (2018; 22);
- Trinity Cannabis Cultivation and Manufacturing Facility DEIR, Calexico (2018; 15);
- Shoe Palace Expansion IS/MND, Morgan Hill (2018; 21);
- Newark Warehouse at Morton Salt Plant Staff Report (2018; 15);
- Northlake Specific Plan FEIR “Peer Review”, Los Angeles County (2018; 9);
- Replies to responses on Northlake Specific Plan SEIR, Los Angeles County (2018; 13);
- Northlake Specific Plan SEIR, Los Angeles County (2017; 27);
- Bogle Wind Turbine DEIR, east Yolo County (2017; 48);
- Ferrante Apartments IS/MND, Los Angeles (2017; 14);
- The Villages of Lakeview EIR, Riverside (2017; 28);
- Data Needed for Assessing Trail Management Impacts on Northern Spotted Owl, Marin County (2017; 5);
- Notes on Proposed Study Options for Trail Impacts on Northern Spotted Owl (2017; 4);
- Pyramid Asphalt IS, Imperial County (Declaration) (2017; 5);
- San Geronio Crossings EIR, Riverside County (2017; 22);
- Replies to responses on Jupiter Project IS and MND, Apple Valley (2017; 12);
- Proposed World Logistics Center Mitigation Measures, Moreno Valley (2017, 2019; 12);
- MacArthur Transit Village Project Modified 2016 CEQA Analysis (2017; 12);
- PG&E Company Bay Area Operations and Maintenance HCP (2017; 45);
- Central SoMa Plan DEIR (2017; 14);
- Suggested mitigation for trail impacts on northern spotted owl, Marin County (2016; 5);
- Colony Commerce Center Specific Plan DEIR, Ontario (2016; 16);
- Fairway Trails Improvements MND, Marin County (2016; 13);
- Review of Avian-Solar Science Plan (2016; 28);
- Replies on Pyramid Asphalt IS, Imperial County (2016; 5);

- Pyramid Asphalt IS, Imperial County (2016; 4);
- Agua Mansa Distribution Warehouse Project Initial Study (2016; 14);
- Santa Anita Warehouse MND, Rancho Cucamonga (2016; 12);
- CapRock Distribution Center III DEIR, Rialto (2016; 12);
- Orange Show Logistics Center IS/MND, San Bernardino (2016; 9);
- City of Palmdale Oasis Medical Village Project IS/MND (2016; 7);
- Comments on proposed rule for incidental eagle take, USFWS (2016, 49);
- Replies on Grapevine Specific and Community Plan FEIR, Kern County (2016; 25);
- Grapevine Specific and Community Plan DEIR, Kern County (2016; 15);
- Clinton County Zoning Ordinance for Wind Turbine siting (2016);
- Hallmark at Shenandoah Warehouse Project Initial Study, San Bernardino (2016; 6);
- Tri-City Industrial Complex Initial Study, San Bernardino (2016; 5);
- Hidden Canyon Industrial Park Plot Plan 16-PP-02, Beaumont (2016; 12);
- Kimball Business Park DEIR (2016; 10);
- Jupiter Project IS and MND, Apple Valley, San Bernardino County (2016; 9);
- Revised Draft Giant Garter Snake Recovery Plan of 2015 (2016, 18);
- Palo Verde Mesa Solar Project EIR, Blythe (2016; 27);
- Reply on Fairview Wind Project Natural Heritage Assessment, Ontario, Canada (2016; 14);
- Fairview Wind Project Natural Heritage Assessment, Ontario, Canada (2016; 41);
- Reply on Amherst Island Wind Farm Natural Heritage Assessment, Ontario (2015, 38);
- Amherst Island Wind Farm Natural Heritage Assessment, Ontario (2015, 31);
- Second Reply on White Pines Wind Farm, Ontario (2015, 6);
- Reply on White Pines Wind Farm Natural Heritage Assessment, Ontario (2015, 10);
- White Pines Wind Farm Natural Heritage Assessment, Ontario (2015, 9);
- Proposed Section 24 Specific Plan Agua Caliente Band of Cahuilla Indians DEIS (2015, 9);
- Replies on 24 Specific Plan Agua Caliente Band of Cahuilla Indians FEIS (2015, 6);
- Willow Springs Solar Photovoltaic Project DEIR, Rosamond (2015; 28);
- Sierra Lakes Commerce Center Project DEIR, Fontana (2015, 9);
- Columbia Business Center MND, Riverside (2015; 8);
- West Valley Logistics Center Specific Plan DEIR, Fontana (2015, 10);
- Willow Springs Solar Photovoltaic Project DEIR (2015, 28);
- Alameda Creek Bridge Replacement Project DEIR (2015, 10);
- World Logistic Center Specific Plan FEIR, Moreno Valley (2015, 12);
- Elkhorn Valley Wind Power Project Impacts, Oregon (2015; 143);
- Bay Delta Conservation Plan EIR/EIS, Sacramento (2014, 21);
- Addison Wind Energy Project DEIR, Mojave (2014, 32);
- Replies on the Addison Wind Energy Project DEIR, Mojave (2014, 15);
- Addison and Rising Tree Wind Energy Project FEIR, Mojave (2014, 12);
- Palen Solar Electric Generating System FSA (CEC), Blythe (2014, 20);
- Rebuttal testimony on Palen Solar Energy Generating System (2014, 9);
- Seven Mile Hill and Glenrock/Rolling Hills impacts + Addendum, Wyoming (2014; 105);
- Rising Tree Wind Energy Project DEIR, Mojave (2014, 32);
- Replies on the Rising Tree Wind Energy Project DEIR, Mojave (2014, 15);
- Soitec Solar Development Project PEIR, Boulevard, San Diego County (2014, 18);

- Oakland Zoo expansion on Alameda whipsnake and California red-legged frog (2014; 3);
- Alta East Wind Energy Project FEIS, Tehachapi Pass (2013, 23);
- Blythe Solar Power Project Staff Assessment, California Energy Commission (2013, 16);
- Clearwater and Yakima Solar Projects DEIR, Kern County (2013, 9);
- West Antelope Solar Energy Project IS/MND, Antelope Valley (2013, 18);
- Cuyama Solar Project DEIR, Carrizo Plain (2014, 19);
- Desert Renewable Energy Conservation Plan (DRECP) EIR/EIS (2015, 49);
- Kingbird Solar Photovoltaic Project EIR, Kern County (2013, 19);
- Lucerne Valley Solar Project IS/MND, San Bernardino County (2013, 12);
- Tule Wind project FEIR/FEIS (Declaration) (2013; 31);
- Sunlight Partners LANDPRO Solar Project MND (2013; 11);
- Declaration in opposition to BLM fracking (2013; 5);
- Blythe Energy Project (solar) CEC Staff Assessment (2013;16);
- Rosamond Solar Project EIR Addendum, Kern County (2013; 13);
- Pioneer Green Solar Project EIR, Bakersfield (2013; 13);
- Replies on Soccer Center Solar Project MND (2013; 6);
- Soccer Center Solar Project MND, Lancaster (2013; 10);
- Plainview Solar Works MND, Lancaster (2013; 10);
- Alamo Solar Project MND, Mojave Desert (2013; 15);
- Replies on Imperial Valley Solar Company 2 Project (2013; 10);
- Imperial Valley Solar Company 2 Project (2013; 13);
- FRV Orion Solar Project DEIR, Kern County (PP12232) (2013; 9);
- Casa Diablo IV Geothermal Development Project (2013; 6);
- Reply on Casa Diablo IV Geothermal Development Project (2013; 8);
- Alta East Wind Project FEIS, Tehachapi Pass (2013; 23);
- Metropolitan Air Park DEIR, City of San Diego (2013;);
- Davidon Homes Tentative Subdivision Rezoning Project DEIR, Petaluma (2013; 9);
- Oakland Zoo Expansion Impacts on Alameda Whipsnake (2013; 10);
- Campo Verde Solar project FEIR, Imperial Valley (2013; 11pp);
- Neg Dec comments on Davis Sewer Trunk Rehabilitation (2013; 8);
- North Steens Transmission Line FEIS, Oregon (Declaration) (2012; 62);
- Summer Solar and Springtime Solar Projects Ism Lancaster (2012; 8);
- J&J Ranch, 24 Adobe Lane Environmental Review, Orinda (2012; 14);
- Replies on Hudson Ranch Power II Geothermal Project and Simbol Calipatria Plant II (2012; 8);
- Hudson Ranch Power II Geothermal Project and Simbol Calipatria Plant II (2012; 9);
- Desert Harvest Solar Project EIS, near Joshua Tree (2012; 15);
- Solar Gen 2 Array Project DEIR, El Centro (2012; 16);
- Ocotillo Sol Project EIS, Imperial Valley (2012; 4);
- Beacon Photovoltaic Project DEIR, Kern County (2012; 5);
- Butte Water District 2012 Water Transfer Program IS/MND (2012; 11);
- Mount Signal and Calxico Solar Farm Projects DEIR (2011; 16);
- City of Elk Grove Sphere of Influence EIR (2011; 28);
- Sutter Landing Park Solar Photovoltaic Project MND, Sacramento (2011; 9);

- Rabik/Gudath Project, 22611 Coleman Valley Road, Bodega Bay (CPN 10-0002) (2011; 4);
- Ivanpah Solar Electric Generating System (ISEGS) (Declaration) (2011; 9);
- Draft Eagle Conservation Plan Guidance, USFWS (2011; 13);
- Niles Canyon Safety Improvement Project EIR/EA (2011; 16);
- Route 84 Safety Improvement Project (Declaration) (2011; 7);
- Rebuttal on Whistling Ridge Wind Energy Power DEIS, Skamania County, (2010; 6);
- Whistling Ridge Wind Energy Power DEIS, Skamania County, Washington (2010; 41);
- Klickitat County's Decisions on Windy Flats West Wind Energy Project (2010; 17);
- St. John's Church Project DEIR, Orinda (2010; 14);
- Results Radio Zone File #2009-001 IS/MND, Conaway site, Davis (2010; 20);
- Rio del Oro Specific Plan Project FEIR, Rancho Cordova (2010;12);
- Results Radio Zone File #2009-001, Mace Blvd site, Davis (2009; 10);
- Answers to Questions on 33% RPS Implementation Analysis Preliminary Results Report (2009; 9);
- SEPA Determination of Non-significance regarding zoning adjustments for Skamania County, Washington (Second Declaration) (2008; 17);
- Draft 1A Summary Report to CAISO (2008; 10);
- Hilton Manor Project Categorical Exemption, County of Placer (2009; 9);
- Protest of CARE to Amendment to the Power Purchase and Sale Agreement for Procurement of Eligible Renewable Energy Resources Between Hatchet Ridge Wind LLC and PG&E (2009; 3);
- Tehachapi Renewable Transmission Project EIR/EIS (2009; 142);
- Delta Shores Project EIR, south Sacramento (2009; 11 + addendum 2);
- Declaration in Support of Care's Petition to Modify D.07-09-040 (2008; 3);
- The Public Utility Commission's Implementation Analysis December 16 Workshop for the Governor's Executive Order S-14-08 to implement a 33% Renewable Portfolio Standard by 2020 (2008; 9);
- The Public Utility Commission's Implementation Analysis Draft Work Plan for the Governor's Executive Order S-14-08 to implement a 33% Renewable Portfolio Standard by 2020 (2008; 11);
- Draft 1A Summary Report to California Independent System Operator for Planning Reserve Margins (PRM) Study (2008; 7.);
- SEPA Determination of Non-significance regarding zoning adjustments for Skamania County, Washington (Declaration) (2008; 16);
- Colusa Generating Station, California Energy Commission PSA (2007; 24);
- Rio del Oro Specific Plan Project Recirculated DEIR, Mather (2008: 66);
- Replies on Regional University Specific Plan EIR, Roseville (2008; 20);
- Regional University Specific Plan EIR, Roseville (2008: 33);
- Clark Precast, LLC's "Sugarland" project, ND, Woodland (2008: 15);
- Cape Wind Project DEIS, Nantucket (2008; 157);
- Yuba Highlands Specific Plan EIR, Spenceville, Yuba County (2006; 37);
- Replies to responses on North Table Mountain MND, Butte County (2006; 5);
- North Table Mountain MND, Butte County (2006; 15);
- Windy Point Wind Farm EIS (2006; 14 and Powerpoint slide replies);
- Shiloh I Wind Power Project EIR, Rio Vista (2005; 18);

- Buena Vista Wind Energy Project NOP, Byron (2004; 15);
- Callahan Estates Subdivision ND, Winters (2004; 11);
- Winters Highlands Subdivision IS/ND (2004; 9);
- Winters Highlands Subdivision IS/ND (2004; 13);
- Creekside Highlands Project, Tract 7270 ND (2004; 21);
- Petition to California Fish and Game Commission to list Burrowing Owl (2003; 10);
- Altamont Pass Wind Resource Area CUP renewals, Alameda County (2003; 41);
- UC Davis Long Range Development Plan: Neighborhood Master Plan (2003; 23);
- Anderson Marketplace Draft Environmental Impact Report (2003; 18);
- Negative Declaration of the proposed expansion of Temple B'nai Tikyah (2003; 6);
- Antonio Mountain Ranch Specific Plan Public Draft EIR (2002; 23);
- Replies on East Altamont Energy Center evidentiary hearing (2002; 9);
- Revised Draft Environmental Impact Report, The Promenade (2002; 7);
- Recirculated Initial Study for Calpine's proposed Pajaro Valley Energy Center (2002; 3);
- UC Merced -- Declaration (2002; 5);
- Replies on Atwood Ranch Unit III Subdivision FEIR (2003; 22);
- Atwood Ranch Unit III Subdivision EIR (2002; 19);
- California Energy Commission Staff Report on GWF Tracy Peaker Project (2002; 20);
- Silver Bend Apartments IS/MND, Placer County (2002; 13);
- UC Merced Long-range Development Plan DEIR and UC Merced Community Plan DEIR (2001; 26);
- Colusa County Power Plant IS, Maxwell (2001; 6);
- Dog Park at Catlin Park, Folsom, California (2001; 5);
- Calpine and Bechtel Corporations' Biological Resources Implementation and Monitoring Program (BRMIMP) for the Metcalf Energy Center (2000; 10);
- Metcalf Energy Center, California Energy Commission FSA (2000);
- US Fish and Wildlife Service Section 7 consultation with the California Energy Commission regarding Calpine and Bechtel Corporations' Metcalf Energy Center (2000; 4);
- California Energy Commission's Preliminary Staff Assessment of the proposed Metcalf Energy Center (2000: 11);
- Site-specific management plans for the Natomas Basin Conservancy's mitigation lands, prepared by Wildlands, Inc. (2000: 7);
- Affidavit of K. Shawn Smallwood in Spirit of the Sage Council, et al. (Plaintiffs) vs. Bruce Babbitt, Secretary, U.S. Department of the Interior, et al. (Defendants), Injuries caused by the No Surprises policy and final rule which codifies that policy (1999: 9).
- California Board of Forestry's proposed amended Forest Practices Rules (1999);
- Sunset Skyranch Airport Use Permit IS/MND (1999);
- Ballona West Bluffs Project Environmental Impact Report (1999; oral presentation);
- Draft Recovery Plan for Giant Garter Snake (Fed. Reg. 64(176): 49497-49498) (1999; 8);
- Draft Recovery Plan for Arroyo Southwestern Toad (1998);
- Pacific Lumber Co. (Headwaters) HCP & EIR, Fortuna (1998; 28);
- Natomas Basin HCP Permit Amendment, Sacramento (1998);
- San Diego Multi-Species Conservation Program FEIS/FEIR (1997; 10);

Comments on other Environmental Review Documents:

- Proposed Regulation for California Fish and Game Code Section 3503.5 (2015: 12);
- Statement of Overriding Considerations related to extending Altamont Winds, Inc.'s Conditional Use Permit PLN2014-00028 (2015; 8);
- Covell Village PEIR, Davis (2005; 19);
- Bureau of Land Management Wind Energy Programmatic EIS Scoping (2003; 7.);
- NEPA Environmental Analysis for Biosafety Level 4 National Biocontainment Laboratory (NBL) at UC Davis (2003: 7);
- Notice of Preparation of UC Merced Community and Area Plan EIR, on behalf of The Wildlife Society—Western Section (2001: 8.);
- Preliminary Draft Yolo County Habitat Conservation Plan (2001; 2 letters totaling 35.);
- Merced County General Plan Revision, notice of Negative Declaration (2001: 2.);
- Notice of Preparation of Campus Parkway EIR/EIS (2001: 7.);
- Draft Recovery Plan for the bighorn sheep in the Peninsular Range (*Ovis candensis*) (2000);
- Draft Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*), on behalf of The Wildlife Society—Western Section (2000: 10.);
- Sierra Nevada Forest Plan Amendment Draft Environmental Impact Statement, on behalf of The Wildlife Society—Western Section (2000: 7.);
- State Water Project Supplemental Water Purchase Program, Draft Program EIR (1997);
- Davis General Plan Update EIR (2000);
- Turn of the Century EIR (1999: 10);
- Proposed termination of Critical Habitat Designation under the Endangered Species Act (Fed. Reg. 64(113): 31871-31874) (1999);
- NOA Draft Addendum to the Final Handbook for Habitat Conservation Planning and Incidental Take Permitting Process, termed the HCP 5-Point Policy Plan (Fed. Reg. 64(45): 11485 - 11490) (1999; 2 + attachments);
- Covell Center Project EIR and EIR Supplement (1997).

Position Statements I prepared the following position statements for the Western Section of The Wildlife Society, and one for nearly 200 scientists:

- Recommended that the California Department of Fish and Game prioritize the extermination of the introduced southern water snake in northern California. The Wildlife Society--Western Section (2001);
- Recommended that The Wildlife Society—Western Section appoint or recommend members of the independent scientific review panel for the UC Merced environmental review process (2001);
- Opposed the siting of the University of California's 10th campus on a sensitive vernal pool/grassland complex east of Merced. The Wildlife Society--Western Section (2000);
- Opposed the legalization of ferret ownership in California. The Wildlife Society--Western Section (2000);
- Opposed the Proposed "No Surprises," "Safe Harbor," and "Candidate Conservation Agreement" rules, including permit-shield protection provisions (Fed. Reg. Vol. 62, No. 103, pp. 29091-29098 and No. 113, pp. 32189-32194). This statement was signed by 188 scientists and went to the responsible federal agencies, as well as to the U.S. Senate and House of Representatives.

Posters at Professional Meetings

Leyvas, E. and K. S. Smallwood. 2015. Rehabilitating injured animals to offset and rectify wind project impacts. Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 9-12 March 2015.

Smallwood, K. S., J. Mount, S. Standish, E. Leyvas, D. Bell, E. Walther, B. Karas. 2015. Integrated detection trials to improve the accuracy of fatality rate estimates at wind projects. Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 9-12 March 2015.

Smallwood, K. S. and C. G. Thelander. 2005. Lessons learned from five years of avian mortality research in the Altamont Pass WRA. AWEA conference, Denver, May 2005.

Neher, L., L. Wilder, J. Woo, L. Spiegel, D. Yen-Nakafugi, and K.S. Smallwood. 2005. Bird's eye view on California wind. AWEA conference, Denver, May 2005.

Smallwood, K. S., C. G. Thelander and L. Spiegel. 2003. Toward a predictive model of avian fatalities in the Altamont Pass Wind Resource Area. Windpower 2003 Conference and Convention, Austin, Texas.

Smallwood, K.S. and Eva Butler. 2002. Pocket Gopher Response to Yellow Star-thistle Eradication as part of Grassland Restoration at Decommissioned Mather Air Force Base, Sacramento County, California. White Mountain Research Station Open House, Barcroft Station.

Smallwood, K.S. and Michael L. Morrison. 2002. Fresno kangaroo rat (*Dipodomys nitratoides*) Conservation Research at Resources Management Area 5, Lemoore Naval Air Station. White Mountain Research Station Open House, Barcroft Station.

Smallwood, K.S. and E.L. Fitzhugh. 1989. Differentiating mountain lion and dog tracks. Third Mountain Lion Workshop, Prescott, AZ.

Smith, T. R. and K. S. Smallwood. 2000. Effects of study area size, location, season, and allometry on reported *Sorex* shrew densities. Annual Meeting of the Western Section of The Wildlife Society.

Presentations at Professional Meetings and Seminars

Dog detections of bat and bird fatalities at wind farms in the Altamont Pass Wind Resource Area. East Bay Regional Park District 2019 Stewardship Seminar, Oakland, California, 13 November 2019.

Repowering the Altamont Pass. Altamont Symposium, The Wildlife Society – Western Section, 5 February 2017.

Developing methods to reduce bird mortality in the Altamont Pass Wind Resource Area, 1999-2007. Altamont Symposium, The Wildlife Society – Western Section, 5 February 2017.

Conservation and recovery of burrowing owls in Santa Clara Valley. Santa Clara Valley Habitat

Agency, Newark, California, 3 February 2017.

Mitigation of Raptor Fatalities in the Altamont Pass Wind Resource Area. Raptor Research Foundation Meeting, Sacramento, California, 6 November 2015.

From burrows to behavior: Research and management for burrowing owls in a diverse landscape. California Burrowing Owl Consortium meeting, 24 October 2015, San Jose, California.

The Challenges of repowering. Keynote presentation at Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 10 March 2015.

Research Highlights Altamont Pass 2011-2015. Scientific Review Committee, Oakland, California, 8 July 2015.

Siting wind turbines to minimize raptor collisions: Altamont Pass Wind Resource Area. US Fish and Wildlife Service Golden Eagle Working Group, Sacramento, California, 8 January 2015.

Evaluation of nest boxes as a burrowing owl conservation strategy. Sacramento Chapter of the Western Section, The Wildlife Society. Sacramento, California, 26 August 2013.

Predicting collision hazard zones to guide repowering of the Altamont Pass. Conference on wind power and environmental impacts. Stockholm, Sweden, 5-7 February 2013.

Impacts of Wind Turbines on Wildlife. California Council for Wildlife Rehabilitators, Yosemite, California, 12 November 2012.

Impacts of Wind Turbines on Birds and Bats. Madrone Audubon Society, Santa Rosa, California, 20 February 2012.

Comparing Wind Turbine Impacts across North America. California Energy Commission Staff Workshop: Reducing the Impacts of Energy Infrastructure on Wildlife, 20 July 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. California Energy Commission Staff Workshop: Reducing the Impacts of Energy Infrastructure on Wildlife, 20 July 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. Alameda County Scientific Review Committee meeting, 17 February 2011

Comparing Wind Turbine Impacts across North America. Conference on Wind energy and Wildlife impacts, Trondheim, Norway, 3 May 2011.

Update on Wildlife Impacts in the Altamont Pass Wind Resource Area. Raptor Symposium, The Wildlife Society—Western Section, Riverside, California, February 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. Raptor Symposium, The Wildlife Society - Western Section, Riverside, California, February 2011.

Wildlife mortality caused by wind turbine collisions. Ecological Society of America, Pittsburgh,

Pennsylvania, 6 August 2010.

Map-based repowering and reorganization of a wind farm to minimize burrowing owl fatalities. California burrowing Owl Consortium Meeting, Livermore, California, 6 February 2010.

Environmental barriers to wind power. Getting Real About Renewables: Economic and Environmental Barriers to Biofuels and Wind Energy. A symposium sponsored by the Environmental & Energy Law & Policy Journal, University of Houston Law Center, Houston, 23 February 2007.

Lessons learned about bird collisions with wind turbines in the Altamont Pass and other US wind farms. Meeting with Japan Ministry of the Environment and Japan Ministry of the Economy, Wild Bird Society of Japan, and other NGOs Tokyo, Japan, 9 November 2006.

Lessons learned about bird collisions with wind turbines in the Altamont Pass and other US wind farms. Symposium on bird collisions with wind turbines. Wild Bird Society of Japan, Tokyo, Japan, 4 November 2006.

Responses of Fresno kangaroo rats to habitat improvements in an adaptive management framework. California Society for Ecological Restoration (SERCAL) 13th Annual Conference, UC Santa Barbara, 27 October 2006.

Fatality associations as the basis for predictive models of fatalities in the Altamont Pass Wind Resource Area. EEI/APLIC/PIER Workshop, 2006 Biologist Task Force and Avian Interaction with Electric Facilities Meeting, Pleasanton, California, 28 April 2006.

Burrowing owl burrows and wind turbine collisions in the Altamont Pass Wind Resource Area. The Wildlife Society - Western Section Annual Meeting, Sacramento, California, February 8, 2006.

Mitigation at wind farms. Workshop: Understanding and resolving bird and bat impacts. American Wind Energy Association and Audubon Society. Los Angeles, CA. January 10 and 11, 2006.

Incorporating data from the California Wildlife Habitat Relationships (CWHR) system into an impact assessment tool for birds near wind farms. Shawn Smallwood, Kevin Hunting, Marcus Yee, Linda Spiegel, Monica Parisi. Workshop: Understanding and resolving bird and bat impacts. American Wind Energy Association and Audubon Society. Los Angeles, CA. January 10 and 11, 2006.

Toward indicating threats to birds by California's new wind farms. California Energy Commission, Sacramento, May 26, 2005.

Avian collisions in the Altamont Pass. California Energy Commission, Sacramento, May 26, 2005.

Ecological solutions for avian collisions with wind turbines in the Altamont Pass Wind Resource Area. EPRI Environmental Sector Council, Monterey, California, February 17, 2005.

Ecological solutions for avian collisions with wind turbines in the Altamont Pass Wind Resource Area. The Wildlife Society—Western Section Annual Meeting, Sacramento, California, January 19,

2005.

Associations between avian fatalities and attributes of electric distribution poles in California. The Wildlife Society - Western Section Annual Meeting, Sacramento, California, January 19, 2005.

Minimizing avian mortality in the Altamont Pass Wind Resources Area. UC Davis Wind Energy Collaborative Forum, Palm Springs, California, December 14, 2004.

Selecting electric distribution poles for priority retrofitting to reduce raptor mortality. Raptor Research Foundation Meeting, Bakersfield, California, November 10, 2004.

Responses of Fresno kangaroo rats to habitat improvements in an adaptive management framework. Annual Meeting of the Society for Ecological Restoration, South Lake Tahoe, California, October 16, 2004.

Lessons learned from five years of avian mortality research at the Altamont Pass Wind Resources Area in California. The Wildlife Society Annual Meeting, Calgary, Canada, September 2004.

The ecology and impacts of power generation at Altamont Pass. Sacramento Petroleum Association, Sacramento, California, August 18, 2004.

Burrowing owl mortality in the Altamont Pass Wind Resource Area. California Burrowing Owl Consortium meeting, Hayward, California, February 7, 2004.

Burrowing owl mortality in the Altamont Pass Wind Resource Area. California Burrowing Owl Symposium, Sacramento, November 2, 2003.

Raptor Mortality at the Altamont Pass Wind Resource Area. National Wind Coordinating Committee, Washington, D.C., November 17, 2003.

Raptor Behavior at the Altamont Pass Wind Resource Area. Annual Meeting of the Raptor Research Foundation, Anchorage, Alaska, September, 2003.

Raptor Mortality at the Altamont Pass Wind Resource Area. Annual Meeting of the Raptor Research Foundation, Anchorage, Alaska, September, 2003.

California mountain lions. Ecological & Environmental Issues Seminar, Department of Biology, California State University, Sacramento, November, 2000.

Intra- and inter-turbine string comparison of fatalities to animal burrow densities at Altamont Pass. National Wind Coordinating Committee, Carmel, California, May, 2000.

Using a Geographic Positioning System (GPS) to map wildlife and habitat. Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

Suggested standards for science applied to conservation issues. Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

The indicators framework applied to ecological restoration in Yolo County, California. Society for Ecological Restoration, September 25, 1999.

Ecological restoration in the context of animal social units and their habitat areas. Society for Ecological Restoration, September 24, 1999.

Relating Indicators of Ecological Health and Integrity to Assess Risks to Sustainable Agriculture and Native Biota. International Conference on Ecosystem Health, August 16, 1999.

A crosswalk from the Endangered Species Act to the HCP Handbook and real HCPs. Southern California Edison, Co. and California Energy Commission, March 4-5, 1999.

Mountain lion track counts in California: Implications for Management. Ecological & Environmental Issues Seminar, Department of Biological Sciences, California State University, Sacramento, November 4, 1998.

“No Surprises” -- Lack of science in the HCP process. California Native Plant Society Annual Conservation Conference, The Presidio, San Francisco, September 7, 1997.

In Your Interest. A half hour weekly show aired on Channel 10 Television, Sacramento. In this episode, I served on a panel of experts discussing problems with the implementation of the Endangered Species Act. Aired August 31, 1997.

Spatial scaling of pocket gopher (*Geomyidae*) density. Southwestern Association of Naturalists 44th Meeting, Fayetteville, Arkansas, April 10, 1997.

Estimating prairie dog and pocket gopher burrow volume. Southwestern Association of Naturalists 44th Meeting, Fayetteville, Arkansas, April 10, 1997.

Ten years of mountain lion track survey. Fifth Mountain Lion Workshop, San Diego, February 27, 1996.

Study and interpretive design effects on mountain lion density estimates. Fifth Mountain Lion Workshop, San Diego, February 27, 1996.

Small animal control. Session moderator and speaker at the California Farm Conference, Sacramento, California, Feb. 28, 1995.

Small animal control. Ecological Farming Conference, Asylomar, California, Jan. 28, 1995.

Habitat associations of the Swainson's Hawk in the Sacramento Valley's agricultural landscape. 1994 Raptor Research Foundation Meeting, Flagstaff, Arizona.

Alfalfa as wildlife habitat. Seed Industry Conference, Woodland, California, May 4, 1994.

Habitats and vertebrate pests: impacts and management. Managing Farmland to Bring Back Game Birds and Wildlife to the Central Valley. Yolo County Resource Conservation District, U.C. Davis, February 19, 1994.

Management of gophers and alfalfa as wildlife habitat. Orland Alfalfa Production Meeting and Sacramento Valley Alfalfa Production Meeting, February 1 and 2, 1994.

Patterns of wildlife movement in a farming landscape. Wildlife and Fisheries Biology Seminar Series: Recent Advances in Wildlife, Fish, and Conservation Biology, U.C. Davis, Dec. 6, 1993.

Alfalfa as wildlife habitat. California Alfalfa Symposium, Fresno, California, Dec. 9, 1993.

Management of pocket gophers in Sacramento Valley alfalfa. California Alfalfa Symposium, Fresno, California, Dec. 8, 1993.

Association analysis of raptors in a farming landscape. Plenary speaker at Raptor Research Foundation Meeting, Charlotte, North Carolina, Nov. 6, 1993.

Landscape strategies for biological control and IPM. Plenary speaker, International Conference on Integrated Resource Management and Sustainable Agriculture, Beijing, China, Sept. 11, 1993.

Landscape Ecology Study of Pocket Gophers in Alfalfa. Alfalfa Field Day, U.C. Davis, July 1993.

Patterns of wildlife movement in a farming landscape. Spatial Data Analysis Colloquium, U.C. Davis, August 6, 1993.

Sound stewardship of wildlife. Veterinary Medicine Seminar: Ethics of Animal Use, U.C. Davis. May 1993.

Landscape ecology study of pocket gophers in alfalfa. Five County Grower's Meeting, Tracy, California. February 1993.

Turbulence and the community organizers: The role of invading species in ordering a turbulent system, and the factors for invasion success. Ecology Graduate Student Association Colloquium, U.C. Davis. May 1990.

Evaluation of exotic vertebrate pests. Fourteenth Vertebrate Pest Conference, Sacramento, California. March 1990.

Analytical methods for predicting success of mammal introductions to North America. The Western Section of the Wildlife Society, Hilo, Hawaii. February 1988.

A state-wide mountain lion track survey. Sacramento County Dept Parks and Recreation. April 1986.

The mountain lion in California. Davis Chapter of the Audubon Society. October 1985.

Ecology Graduate Student Seminars, U.C. Davis, 1985-1990: Social behavior of the mountain lion; Mountain lion control; Political status of the mountain lion in California.

Other forms of Participation at Professional Meetings

- Scientific Committee, Conference on Wind energy and Wildlife impacts, Berlin, Germany, March 2015.
- Scientific Committee, Conference on Wind energy and Wildlife impacts, Stockholm, Sweden, February 2013.
- Workshop co-presenter at Birds & Wind Energy Specialist Group (BAWESG) Information sharing week, Bird specialist studies for proposed wind energy facilities in South Africa, Endangered Wildlife Trust, Darling, South Africa, 3-7 October 2011.
- Scientific Committee, Conference on Wind energy and Wildlife impacts, Trondheim, Norway, 2-5 May 2011.
- Chair of Animal Damage Management Session, The Wildlife Society, Annual Meeting, Reno, Nevada, September 26, 2001.
- Chair of Technical Session: Human communities and ecosystem health: Comparing perspectives and making connection. Managing for Ecosystem Health, International Congress on Ecosystem Health, Sacramento, CA August 15-20, 1999.
- Student Awards Committee, Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.
- Student Mentor, Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

Printed Mass Media

Smallwood, K.S., D. Mooney, and M. McGuinness. 2003. We must stop the UCD biolab now. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 2002. Spring Lake threatens Davis. Op-Ed to the Davis Enterprise.

Smallwood, K.S. Summer, 2001. Mitigation of habitation. The Flatlander, Davis, California.

Entrikan, R.K. and K.S. Smallwood. 2000. Measure O: Flawed law would lock in new taxes. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 2000. Davis delegation lobbies Congress for Wildlife conservation. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 1998. Davis Visions. The Flatlander, Davis, California.

Smallwood, K.S. 1997. Last grab for Yolo's land and water. The Flatlander, Davis, California.

Smallwood, K.S. 1997. The Yolo County HCP. Op-Ed to the Davis Enterprise.

Radio/Television

PBS News Hour,

FOX News, Energy in America: Dead Birds Unintended Consequence of Wind Power Development, August 2011.

KXJZ Capital Public Radio -- Insight (Host Jeffrey Callison). Mountain lion attacks (with guest Professor Richard Coss). 23 April 2009;

KXJZ Capital Public Radio -- Insight (Host Jeffrey Callison). Wind farm Rio Vista Renewable Power. 4 September 2008;

KQED QUEST Episode #111. Bird collisions with wind turbines. 2007;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. December 27, 2001;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. May 3, 2001;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. February 8, 2001;

KDVS Speaking in Tongues (host Ron Glick & Shawn Smallwood), California Energy Crisis: 1 hour. Jan. 25, 2001;

KDVS Speaking in Tongues (host Ron Glick), Headwaters Forest HCP: 1 hour. 1998;

Davis Cable Channel (host Gerald Heffernon), Burrowing owls in Davis: half hour. June, 2000;

Davis Cable Channel (hosted by Davis League of Women Voters), Measure O debate: 1 hour. October, 2000;

KXTV 10, In Your Interest, The Endangered Species Act: half hour. 1997.

Reviews of Journal Papers (Scientific journals for whom I've provided peer review)

Journal	Journal
American Naturalist	Journal of Animal Ecology
Journal of Wildlife Management	Western North American Naturalist
Auk	Journal of Raptor Research
Biological Conservation	National Renewable Energy Lab reports
Canadian Journal of Zoology	Oikos
Ecosystem Health	The Prairie Naturalist
Environmental Conservation	Restoration Ecology
Environmental Management	Southwestern Naturalist
Functional Ecology	The Wildlife Society--Western Section Trans.

Journal	Journal
Journal of Zoology (London)	Proc. Int. Congress on Managing for Ecosystem Health
Journal of Applied Ecology	Transactions in GIS
Ecology	Tropical Ecology
Wildlife Society Bulletin	Peer J
Biological Control	The Condor

Committees

- Scientific Review Committee, Alameda County, Altamont Pass Wind Resource Area
- Ph.D. Thesis Committee, Steve Anderson, University of California, Davis
- MS Thesis Committee, Marcus Yee, California State University, Sacramento

Other Professional Activities or Products

Testified in Federal Court in Denver during 2005 over the fate of radio-nuclides in the soil at Rocky Flats Plant after exposure to burrowing animals. My clients won a judgment of \$553,000,000. I have also testified in many other cases of litigation under CEQA, NEPA, the Warren-Alquist Act, and other environmental laws. My clients won most of the cases for which I testified.

Testified before Environmental Review Tribunals in Ontario, Canada regarding proposed White Pines, Amherst Island, and Fairview Wind Energy projects.

Testified in Skamania County Hearing in 2009 on the potential impacts of zoning the County for development of wind farms and hazardous waste facilities.

Testified in deposition in 2007 in the case of O'Dell et al. vs. FPL Energy in Houston, Texas.

Testified in Klickitat County Hearing in 2006 on the potential impacts of the Windy Point Wind Farm.

Memberships in Professional Societies

The Wildlife Society
Raptor Research Foundation

Honors and Awards

Fulbright Research Fellowship to Indonesia, 1987
J.G. Boswell Full Academic Scholarship, 1981 college of choice
Certificate of Appreciation, The Wildlife Society—Western Section, 2000, 2001
Northern California Athletic Association Most Valuable Cross Country Runner, 1984
American Legion Award, Corcoran High School, 1981, and John Muir Junior High, 1977
CIF Section Champion, Cross Country in 1978
CIF Section Champion, Track & Field 2 mile run in 1981
National Junior Record, 20 kilometer run, 1982
National Age Group Record, 1500 meter run, 1978

Community Activities

District 64 Little League Umpire, 2003-2007
Dixon Little League Umpire, 2006-07
Davis Little League Chief Umpire and Board member, 2004-2005
Davis Little League Safety Officer, 2004-2005
Davis Little League Certified Umpire, 2002-2004
Davis Little League Scorekeeper, 2002
Davis Visioning Group member
Petitioner for Writ of Mandate under the California Environmental Quality Act against City of Woodland decision to approve the Spring Lake Specific Plan, 2002
Served on campaign committees for City Council candidates

Representative Clients/Funders

Law Offices of Stephan C. Volker	EDF Renewables
Blum Collins, LLP	National Renewable Energy Lab
Eric K. Gillespie Professional Corporation	Altamont Winds LLC
Law Offices of Berger & Montague	Salka Energy
Lozeau Drury LLP	Comstocks Business (magazine)
Law Offices of Roy Haber	BioResource Consultants
Law Offices of Edward MacDonald	Tierra Data
Law Office of John Gabrielli	Black and Veatch
Law Office of Bill Kopper	Terry Preston, Wildlife Ecology Research Center
Law Office of Donald B. Mooney	EcoStat, Inc.
Law Office of Veneruso & Moncharsh	US Navy
Law Office of Steven Thompson	US Department of Agriculture
Law Office of Brian Gaffney	US Forest Service
California Wildlife Federation	US Fish & Wildlife Service
Defenders of Wildlife	US Department of Justice
Sierra Club	California Energy Commission
National Endangered Species Network	California Office of the Attorney General
Spirit of the Sage Council	California Department of Fish & Wildlife
The Humane Society	California Department of Transportation
Hagens Berman LLP	California Department of Forestry
Environmental Protection Information Center	California Department of Food & Agriculture
Goldberg, Kamin & Garvin, Attorneys at Law	Ventura County Counsel
Californians for Renewable Energy (CARE)	County of Yolo
Seatuck Environmental Association	Tahoe Regional Planning Agency
Friends of the Columbia Gorge, Inc.	Sustainable Agriculture Research & Education Program
Save Our Scenic Area	Sacramento-Yolo Mosquito and Vector Control District
Alliance to Protect Nantucket Sound	East Bay Regional Park District
Friends of the Swainson's Hawk	County of Alameda
Alameda Creek Alliance	Don & LaNelle Silverstien
Center for Biological Diversity	Seventh Day Adventist Church
California Native Plant Society	Escuela de la Raza Unida
Endangered Wildlife Trust	Susan Pelican and Howard Beeman
and BirdLife South Africa	Residents Against Inconsistent Development, Inc.
AquAlliance	Bob Sarvey
Oregon Natural Desert Association	Mike Boyd
Save Our Sound	Hillcroft Neighborhood Fund
G3 Energy and Pattern Energy	Joint Labor Management Committee, Retail Food Industry
Emerald Farms	Lisa Rocca
Pacific Gas & Electric Co.	Kevin Jackson
Southern California Edison Co.	Dawn Stover and Jay Letto
Georgia-Pacific Timber Co.	Nancy Havassy
Northern Territories Inc.	Catherine Portman (for Brenda Cedarblade)
David Magney Environmental Consulting	Ventus Environmental Solutions, Inc.
Wildlife History Foundation	Panorama Environmental, Inc.
NextEra Energy Resources, LLC	Adams Broadwell Professional Corporation
Ogin, Inc.	

Representative special-status species experience

Common name	Species name	Description
Field experience		
California red-legged frog	<i>Rana aurora draytonii</i>	Protocol searches; Many detections
Foothill yellow-legged frog	<i>Rana boylei</i>	Presence surveys; Many detections
Western spadefoot	<i>Spea hammondi</i>	Presence surveys; Few detections
California tiger salamander	<i>Ambystoma californiense</i>	Protocol searches; Many detections
Coast range newt	<i>Taricha torosa torosa</i>	Searches and multiple detections
Blunt-nosed leopard lizard	<i>Gambelia sila</i>	Detected in San Luis Obispo County
California horned lizard	<i>Phrynosoma coronatum frontale</i>	Searches; Many detections
Western pond turtle	<i>Clemmys marmorata</i>	Searches; Many detections
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	Protocol searches; detections
Sumatran tiger	<i>Panthera tigris</i>	Track surveys in Sumatra
Mountain lion	<i>Puma concolor californicus</i>	Research and publications
Point Arena mountain beaver	<i>Aplodontia rufa nigra</i>	Remote camera operation
Giant kangaroo rat	<i>Dipodomys ingens</i>	Detected in Cholame Valley
San Joaquin kangaroo rat	<i>Dipodomys nitratoideus</i>	Monitoring & habitat restoration
Monterey dusky-footed woodrat	<i>Neotoma fuscipes luciana</i>	Non-target captures and mapping of dens
Salt marsh harvest mouse	<i>Reithrodontomys raviventris</i>	Habitat assessment, monitoring
Salinas harvest mouse	<i>Reithrodontomys megalotus distichlus</i>	Captures; habitat assessment
Bats		
California clapper rail	<i>Rallus longirostris</i>	Thermal imaging surveys
Golden eagle	<i>Aquila chrysaetos</i>	Surveys and detections
Swainson's hawk	<i>Buteo swainsoni</i>	Numerical & behavioral surveys
Northern harrier	<i>Circus cyaneus</i>	Numerical & behavioral surveys
White-tailed kite	<i>Elanus leucurus</i>	Numerical & behavioral surveys
Loggerhead shrike	<i>Lanius ludovicianus</i>	Numerical & behavioral surveys
Least Bell's vireo	<i>Vireo bellii pusillus</i>	Large area surveys
Willow flycatcher	<i>Empidonax traillii extimus</i>	Detected in Monterey County
Burrowing owl	<i>Athene cunicularia hypuglia</i>	Research at Sierra Nevada breeding sites
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	Numerical & behavioral surveys
Analytical		
Arroyo southwestern toad	<i>Bufo microscaphus californicus</i>	Monitored success of relocation and habitat restoration
Giant garter snake	<i>Thamnophis gigas</i>	Research and report.
Northern goshawk	<i>Accipiter gentilis</i>	Research and publication
Northern spotted owl	<i>Strix occidentalis</i>	Research and publication
Alameda whipsnake	<i>Masticophis lateralis euryxanthus</i>	Research and reports
		Expert testimony