



Item 5.3 Public Comment Provided by  
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## BY E-MAIL

October 6, 2023

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**Re: Comment on Ashley Furniture Project (CUP-23-08; SPR 23-09)  
City Council Agenda Item No. 5.3**

Dear Mayor Dhaliwal, Vice Mayor Akinjo, and Honorable Councilmembers:

I am writing on behalf of Laborers' International Union of North America, Local Union No. 73 ("LIUNA") regarding the Ashley Furniture Project ("Project") proposed to be located at the northwest corner of Dos Reis Rd and Manthey Road. The Planning Commission voted to recommend that the City Council find that the project is exempt from the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15183 (14 CCR § 15183) and Public Resources Code ("PRC") section 21083.3. However, after reviewing the Environmental Checklist prepared for the Project and the 2022 General Plan Update EIR that the Project relies upon, we conclude that the Project does not meet the requirements for an exemption under CEQA Guideline § 15183 and PRC § 21083.3. As such, LIUNA respectfully requests that the City Council refrain from approving the Project until the Project undergoes environmental review under CEQA.

### PROJECT DESCRIPTION AND BACKGROUND

The Project proposes to construct and operate a 1,486,607 square foot industrial building including a mix of retail, office/call center, and warehouse and distribution uses. About 110,000 square feet would be dedicated to retail use, 24,000 square feet to office and call-center uses, and 1,352,347 square feet to warehouse and distribution center uses.

The Project proposes to construct approximately 2,046 parking spaces throughout the development site, with 942 spaces for passenger vehicles and 1,104 spaces for truck trailer

parking. The Project expects to generate 2,798 daily passenger vehicle trips, including 203 a.m. peak hour trips (124 inbound, 79 outbound) and 255 p.m. peak hour trips (110 inbound, 145 outbound) for passenger vehicles. Another 680 daily truck trips also are expected, including 95 a.m. peak hour trips and 45 p.m. peak hour trips.

The Project site is located within the Central Lathrop Specific Plan (“CLSP”) Phase 2 area, which was approved by the City in 2004. In 2022, the City certified an environmental impact report (“EIR”) for the City’s 2022 General Plan Update (“2022 GP EIR”), which changed the land use designations in the CLSP Phase 2 area from Residential/Commercial to Limited Industrial. An Environmental Checklist was prepared for the Project to evaluate consistency with the 2022 GP EIR.

On September 13, 2023, the Planning Commission voted to recommend that the City Council approve the Project conditional use permit (CUP-23-08) and site plan review (SPR-23-09) and find that the Project is exempt from further environmental review under Public Resources Code section 21083.3 and CEQA Guidelines section 15183 because the Project would not result in any impacts beyond those addressed in the 2022 GP EIR. Prior to the Planning Commission meeting, LIUNA submitted a written comment attached hereto as **Exhibit C** and incorporated by reference.

### LEGAL STANDARD

To achieve its objectives of environmental protection, CEQA has a three-tiered structure. (*Committee to Save the Hollywoodland Specific Plan v. City of Los Angeles* (2008) 161 Cal.App.4th 1168, 1185-86 (*Hollywoodland*) [citing 14 CCR § 15002(k)].). First, if a project falls into an exempt category, or it can be seen with certainty that the activity in question will not have a significant effect on the environment, no further agency evaluation is required. (*Id.* at 1185.) Second, if there is a possibility the project will have a significant effect on the environment, the agency must perform an initial threshold study and may issue a negative declaration if the study indicates no significant impacts. (*Id.* at 1185-86; see also 14 CCR §§ 15063(b)(2), 15070.) Finally, if the project will have a significant effect on the environment, an environmental impact report (“EIR”) is required. (*Hollywoodland, supra*, 161 Cal.App.4th at 1186.)

Here, the Planning Commission recommended that the City Council find the Project exempt from CEQA under CEQA Guidelines section 15183 (“Section 15183”), which, for projects “which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified,” does not require additional environmental review for such projects “except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site.” (14 CCR § 15183(a).)

The purpose of Section 15183 is to streamline CEQA review and relieves the City of the obligation to prepare an EIR if a qualifying project’s impacts “[are] not peculiar to the parcel or

to the project, [have] been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards.” (14 CCR § 15183 (c).) Section 15183 further explains,

An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect.

(14 CCR § 15183(f).) A city’s decision to utilize Section 15183 is governed by the substantial evidence standard of review. (*Lucas v. City of Pomona* (2023) 92 Cal.App.5th 508, 538.)

## DISCUSSION

### **I. The Project Is Not Exempt from CEQA Under Section 15183 Due to Unmitigated, Project-Specific Impacts to Biological Resources.**

LIUNA retained wildlife biology expert Dr. Shawn Smallwood, Ph.D., who conducted a site visit and reviewed the Project’s documentation, including the Environmental Checklist and the Biological Resources Analysis Report prepared by Olberding Environmental, Inc. dated May 2021 (“Biological Report”). Dr. Smallwood found the Project would result in significant, unmitigated impacts to multiple special-status species of wildlife. Dr. Smallwood’s comment and CV are attached as **Exhibit A**.

#### **A. The Project’s Biological Report underestimates the diversity of species using the Project site.**

Dr. Smallwood conducted a site visit to the Project site for approximately 2.5 hours on September 21, 2023. (Ex. A, p. 1.) During those visits, Dr. Smallwood “detected 35 species of vertebrate wildlife, including 10 special-status species,” including Swainson’s hawk, which is listed as a threatened species in California, and loggerhead shrike, a California Species of Special Concern priority level 2. (*Id.* at pp. 3-4.) Dr. Smallwood estimates that with additional surveys, a total of 178 species would be detected at the Project site, of which 51 would be special-status species. (*Id.*, p. 9.) Based on his site visit and projections, Dr. Smallwood concluded that “[m]ore surveys are needed” and “the species richness at the site relative to its level of disturbance is peculiar to the site.” (*Id.*, p. 10.)

#### **B. The Project’s Biological Report fails to accurately characterize the existing environmental setting.**

Dr. Smallwood found that the Project’s Biological Report failed “to accurately

characterize the existing environmental setting, including the biological species that use the site, their relative abundances, how they use the site, key ecological relationships, and known and ongoing threats to those species with special status.” (Ex. A, p. 10.) He explains that an accurate characterization of the environmental setting typically relies on two factors: (1) field surveys and (2) reviews of literature and databases. (*Id.*) For this Project, “these needed steps were grossly inadequate.” (*Id.*)

First, the Biological Report’s field survey lacked critical information, including the time of day of the survey or the duration of the survey, and did not meet the minimum standards for surveys of plants (Ex. A, p. 11.) Further, the Biological Report’s survey only detected 6 species of vertebrate wildlife at the Project site, which is that number that Dr. Smallwood detected in his first *two minutes* on the Project site on September 21, 2023. (*Id.*) The survey also only detected 3 special-status species, whereas Dr. Smallwood detected 10. (*Id.*) Additionally, the Biological Report’s survey made no mention of the great horned owl pellets, kangaroo rat and Botta’s pocket gopher burrow systems, or birds smaller than a white-tailed kite as were observed by Dr. Smallwood. (*Id.*) The Biological Report had no surveys for bats or several special-status species known to occur in the area, including burrowing owl and Swainson’s hawk. (*Id.*)

Second, the Biological Report’s review of available wildlife databases was inadequate. (Ex. A, pp. 12-13.) The Biological Report relied solely on the California Natural Diversity Data Base (“CNDDDB”) to determine which species have potential to occur in the project area. The Biological Report did not consult other known databases, such as iNaturalist or eBird. When searching CNDDDB, the Biological Report only searched for species with documented occurrences within the nearest CNDDDB quadrangles, which “screens out many special-status species from further consideration in the characterization of the wildlife community as part of the baseline environmental setting.” (*Id.*, p. 12.) Furthermore, “CNDDDB is not designed to support absence determinations or to screen out species from characterization of a site’s wildlife community.” (*Id.*) Based on available databases and site visits, Dr. Smallwood estimates that “107 special-status species of wildlife are known to occur near enough to the site to warrant analysis of occurrence potential.” (*Id.*, p. 20.)

Third, the Biological Report improperly assumed that the Project site’s lack of *nesting habitat* means that development of the Project would not cause impacts to wildlife species. However, as Dr. Smallwood explains,

[T]here is no sound scientific distinction between nesting habitat and some other characterization of habitat. For any given species, the environment of a site is either habitat or it is not, as habitat is defined as that part of the environment that is used by a species. . . . Certain portions of a species’ habitat may provide nesting opportunities, but all parts of its habitat are critical to the nesting success of members of the species. If an animal cannot find sufficient forage and cover during non-nesting season or at portions of its habitat where it does not normally nest, then it might not survive to reproduce or its nesting attempt might not succeed. [The Biological Report] asserts a false distinction of the value of a site based on whether

the species nests on-site.

(Ex. A, p. 19.) By limiting habitat to only nesting habitat, the Biological Report underestimates the value of the Project site and the impacts to species that may occur. For example, the Biological Report claimed that loggerhead shrike have a low likelihood of occurrence on the Project site due to lack of trees and shrubs needed for nesting. However, Dr. Smallwood observed a loggerhead shrike foraging on the Project site during his site visit. This is just one example of how the Biological Report misjudged the occurrence likelihood of the many special-status species discussed in the Biological Report as well as the potential wildlife impacts peculiar to this specific site.

**C. The Biological Report failed to adequately analyze and mitigate the Project's biological impacts due to habitat loss, wildlife movement, and vehicle collisions.**

Dr. Smallwood found that the Biological Report and Environmental Checklist failed to address numerous potentially significant impacts that the Project may have on biological resources, including habitat loss, wildlife movement, collision mortality due to Project-generated traffic, and cumulative impacts. (Ex. A, pp. 18-25.)

1. Habitat Loss and Fragmentation

Dr. Smallwood warns that “[t]he project would destroy 89.92 acres of habitat to every species of wildlife that makes use of the project site.” (Ex. A, p. 20.) Dr. Smallwood predicts that development of the Project would result in the loss of 191 bird nest sites and a lost breeding capacity of 630 birds per year. (*Id.*, pp. 20-21.) Dr. Smallwood concludes that this impact is significant. (*Id.*)

2. Wildlife Movement

The Biological Report provided a “flawed and misleading” analysis of the Project’s impact on wildlife movement. (Ex. A, p. 21.) According to the Environmental Checklist, the Biological Report “included a CNDDB record search that did not reveal any documented wildlife corridors or wildlife nursery sites on or adjacent to warehouse site.” However, as Dr. Smallwood explains, “CNDDB is not where an analyst would find information relevant to whether a site is important to wildlife movement. . . . In effect, there is no analysis of whether the project would interfere with wildlife movement.” (*Id.*)

The Environmental Checklist also claims that the Project’s impacts on wildlife movement were adequately addressed in the 2022 GP EIR. However, the 2022 GP EIR only focused on the San Joaquin River as a wildlife corridor. As such, “[t]he General Plan EIR implies the premise that interference with wildlife movement in the region can result only from a project’s disruption of the function of a wildlife movement corridor.” (Ex. A, p. 21.) This is not the proper standard under CEQA. Rather, CEQA requires an analysis of impacts to wildlife movement “regardless of

whether the movement is channeled by a corridor. A site such as the project site is critically important for wildlife movement because it composes an increasingly diminishing area of open space within a growing expanse of anthropogenic uses, forcing more species of volant wildlife to use the site for stopover and staging during migration, dispersal, and home range patrol.” (*Id.*) By ignoring this standard, the Biological Report has failed to adequately and mitigate the Project’s impacts on wildlife movement disruptions that are unique to the Project site.

### 3. Vehicle Collisions

The Biological Report and 2022 GP EIR failed to analyze wildlife mortality and injuries caused by Project-generated traffic. (Ex. A, pp. 22-24.) Dr. Smallwood estimates that the Project would result in 6,151 vertebrate deaths annually due to collisions with Project-generated traffic. (*Id.*, pp. 24.) Especially due to the special-status 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 by the Environmental Checklist or 2022 GP EIR. But for the Project, these additional wildlife collisions would not occur.

### 4. Cumulative Impacts

The Environmental Checklist concludes that cumulative impacts to biological resources were addressed in the 2022 GP EIR, which relies on the San Joaquin Multi-Species Habitat Conservation Plan (“SJMSCP”) to prevent significant cumulative impacts. However, as discussed in greater detail below, the SJMSCP has failed at conserving wildlife species and cannot be relied upon to conclude that cumulative impacts will be less than significant. (Ex. A, pp. 24-25.)

#### **D. The Project cannot rely on the SJMSCP to mitigate the Project’s impacts to biological resources.**

To mitigate the project’s impacts to biological resources, the Environmental Checklist requires compliance with the SJMSCP, as required by the 2020 General Plan. (Env’t. Checklist, p. 55.) However, as Dr. Smallwood explains, the SJMSCP cannot be relied upon to mitigate the Project’s impacts “[d]ue to grossly deficient implementation and due to poor performance of the SJMSCP.” (Ex. A, p. 25.) Dr. Smallwood identified several shortcomings of the SJMSCP, as discussed below.

First, the majority of special-status species likely to occur at the Project site are not covered by the SJMSCP. (Ex. A, p. 26.) As a result, “the SJMSCP insufficiently covers special-status species that would be adversely affected by the project.” (*Id.*) The reason that so many species are not covered by the SJMSCP is that more and more species have been designated as “special-status” since adoption of the SJMSCP. The SJMSCP does not provide any protection for those species.

Second, the SJMSCP requires protocol-level detection surveys. (Ex. A, p. 26.) Yet, no

such surveys have been conducted on the Project site. (*Id.*) Detection surveys must be conducted, especially for burrowing owl and Swainson's hawk, to properly comply with the SJMSCP.

Third, Dr. Smallwood conducted an in-depth review of the SJMSCP and found that, to date, the SJMSCP has utterly failed at conserving special status-species. (Ex. A, pp. 26-33.)<sup>1</sup> To conduct his analysis, Dr. Smallwood reviewed the SJMSCP's Annual Reports published since 2008. As an initial matter, he found that the Annual Reports had flaws with study design, deficient implementation, and poor reporting, including inconsistent naming of preserve areas, a failure to conduct any trend analysis, and a failure to report survey methods including time, duration, or standards. (*Id.*, pp. 27-28.) Dr. Smallwood's review of the Annual Reports revealed several unsettling trends demonstrating the SJMSCP's failure to conserve species, including a decline in Swainson's hawk detections (*id.*, p. 29), a decline in detections of species covered by the SJMSCP (*id.*, p. 30), a decline in detections of all species (*id.*), a decline in the productivity of Swainson's hawk (*id.*, p. 32), and a decline in the number of acres surveyed (*id.*, p. 33). Based on this analysis, Dr. Smallwood concludes that "[t]he SJMSCP has failed in its implementation, and it has proven ineffective at conserving its covered species; it should not be used to mitigate impacts to wildlife that occur on the project site. (*Id.*)

Although Section 15183 exempts project from further CEQA review where project-specific impacts can be mitigated by uniformly applied development policies or standards (such as the SJMSCP), the exemption does not apply if "new information shows that the policies or standards will not substantially mitigate the environmental effect." (14 CCR § 15183(f).) Here, Dr. Smallwood's analysis of the SJHSCP's Annual Records presents new information showing that the SJMSCP has failed to substantially mitigate impacts to wildlife and, therefore, cannot substantially mitigate the Project's impacts. As a result, the City's reliance on Section 15183 is misplaced.

**E. The additional mitigation measures required for the Project's impacts to biological resources are inadequate and render the Project ineligible for an exemption under Section 15183.**

In addition to compliance with the SJMSCP, the Project is required to adopt the mitigation recommendations identified in the Biological Report, which include preconstruction surveys for reptiles, birds, and burrowing owls. (Env'tl Checklist, pp. 52-54.) The need for these additional mitigation measures is proof in and of itself that the Project will result in Project-specific impacts that have not been adequately addressed or mitigated by the 2022 GP EIR. Section 15183 exempts projects with project-specific impacts only where those impacts "can be substantially mitigated by the imposition of uniformly applied development policies or standards." (14 CCR § 5183(c).) The preconstruction surveys required for this Project are *not* uniformly applied policies or standards. Rather, they are specific mitigation measures taken from

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<sup>1</sup> The data utilized in Dr. Smallwood's evaluation of the SJMSCP is available at: <https://www.dropbox.com/scl/fo/mzkfrnz0utg7gd6oldk4b/h?rlkey=zklf5bmetrp0g95u9mi7kxtc3&dl=0>

the Biological Report specifically designed to mitigate *this* Project’s peculiar impacts to wildlife that are not addressed in the 2022 GP EIR. As a result, the Project does not qualify for an exemption under Section 15183 and further CEQA analysis is required for the Project.

Moreover, as Dr. Smallwood explains, pre-construction surveys are inadequate to mitigate the Project’s impacts. (Ex. A, pp. 33-35.) Rather, protocol-level detection surveys are necessary because detection surveys have a much greater probability of detection than pre-construction-surveys. (*Id.*, p. 33.) Dr. Smallwood explains that “[b]irds are highly skilled at hiding their nests” and “[l]oggerhead shrikes and burrowing owls, as examples, make efforts to fool human observers into thinking the birds’ nests are located where they are not.” (*Id.* p. 34.) As a result, “[l]ocating nest sites of these species and most others requires multiple surveys over long time periods . . . This is why the breeding-season survey protocols require multiple surveys spaced through much of the breeding season.” (*Id.*) Furthermore, even with pre-construction surveys, impacts to wildlife would not be reduced to less-than-significant levels because such surveys do nothing to mitigate the additional impacts identified by Dr. Smallwood, including breeding capacity and habitat fragmentation. (*Id.*) Therefore, the Project will result in Project-specific impacts to biological resources that remain significant and unmitigated.

## **II. The Analysis of the Project’s Impacts to Human Health from Emissions of Toxic Air Contaminants Is Inadequate.**

For warehouses and distribution centers within 1,000 feet of planned residential uses or other sensitive receptors, the 2022 General Plan requires “requires the preparation of a Health Risk Assessment (“HRA”) that meets the standards established by the Office of Environmental Health Hazard Assessment (“OEHHA”), and the San Joaquin Valley Air Pollution Control District (“SJVAPCD”). (2022 GP, p. 3.3-31 [LU-5c].) The General Plan prohibits approval of such a project “until it can be demonstrated that the project would not result in an exceedance of the established thresholds of significance for public health risks at nearby sensitive receptors.” (*Id.*)

Here, there are numerous sensitive receptors within 1,000 feet of the Project, including clusters of residences 320 feet, 400 feet, and 940 feet away and a single residence 820 feet away (Env’t Checklist, p. 43.) According to the Environmental Checklist, an HRA was conducted and found that the Project’s increased cancer risk from emissions of diesel particulate matter (“DPM”) would not exceed SJVAPCD’s significance threshold of 20 in one million. (*Id.*, pp. 44-45.) LIUNA retained air quality experts Matt Hagemann, P.G., C.Hg., and Paul E. Rosenfeld, Ph.D., of the Soil/Water/Air Protection Enterprise (“SWAPE”) to review the HRA. SWAPE found that HRA did not comply with the standards established by OEHHA and, as a result, the Project’s impacts had not been adequately evaluated. SWAPE’s comment and CVs are attached as **Exhibit B**.

First, SWAPE notes that the Checklist failed to provide the exposure assumptions for the HRA, such as the age sensitivity factors (“ASF”) or fraction of time at home (“FAH”) values, and, as a result, the HRA may underestimate the Project’s increased cancer risk. (Ex. B, p. 2.)



Additionally, the Checklist failed to provide the dose and risk equation used to calculate the Project's cancer risks. (*Id.*) Without providing this equation, there is no way to verify that the HRA utilized the proper equation recommended by OEHHA. (*Id.*)

Second, even though the 2022 General Plan requires that the HRA meet the standards established by OEHHA, the HRA prepared for the Project failed to do so because it only analyzed the Project's *operational* cancer risks but completely ignored the Project's *construction-related* cancer risks. According to OEHHA, the cancer risk of all short-term projects lasting at least 2 months should be assessed and projects lasting more than 6 months should be evaluated for the duration of the project. (Ex. B, p. 3.) Because construction of the Project will surely last at least 2 months (and may exceed six months), the HRA should have included construction-related emissions in addition to operational emissions. The HRA further conflicts with OEHHA guidance by failing to evaluate the lifetime cancer risk to nearby receptors as a result of Project construction and operation *combined*. (*Id.*)

Due to these shortcomings, the HRA does not comply with OEHHA standards as required by the 2022 General Plan and underestimates the Project's cancer risks. As a result, the City lacks substantial evidence to conclude that the Project will not result in specific health impacts. Furthermore, the City lacks substantial evidence to conclude that the Project's impacts were addressed in the 2022 GP EIR since the 2022 General Plan required compliance with OEHHA standards, which the Project's HRA did not do. The HRA must be updated prior to any approval of the Project.

### **III. The Analysis of the Project's Energy Impacts Is Inadequate.**

The 2022 GP EIR's discussion of the General Plan's energy impacts boils down to stating that by complying with California's Building Energy Efficiency Standards ("CalGreen"), promoting the use of renewable energy sources and encouraging public transportation and bicycle use, and the fact that PG&E will generally make progress on adding new renewable energy sources to its portfolio, projects within the planning area will not have energy impacts. (2022 GP EIR, pp. 3.7-41 to 3.7-42.) The Environmental Checklist focuses on the Ashley Furniture Project's compliance with CalGreen and PG&E's long-term efforts. (Env't Checklist, p. 66.) None of these considerations address the energy effects that are peculiar to a 1.4 million square feet furniture distribution and retail center.

The standard under CEQA is whether the Project would result in wasteful, inefficient, or unnecessary consumption of energy resources. Failing to undertake "an investigation into renewable energy options that might be available or appropriate for a project" violates CEQA. (*California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 213.) Energy conservation under CEQA is defined as the "wise and efficient use of energy." (CEQA Guidelines, app. F, § I.) The "wise and efficient use of energy" is achieved by "(1) decreasing overall per capita energy consumption, (2) decreasing reliance on fossil fuels such as coal, natural gas and oil, and (3) increasing reliance on renewable energy resources." (*Id.*)

Noting compliance with the California Building Energy Efficiency Standards (Cal.Code Regs., tit. 24, part 6 (Title 24)) does not constitute an adequate analysis of energy impacts. (*Ukiah Citizens for Safety First v. City of Ukiah* (2016) 248 Cal.App.4th 256, 264-65.) Similarly, the court in *City of Woodland* held unlawful an energy analysis that relied on compliance with Title 24, that failed to assess transportation energy impacts, and that failed to address renewable energy impacts. (*California Clean Energy Committee v. City of Woodland*, 225 Cal.App.4th 173, 209-13.) As such, the General Plan EIR's reliance on Title 24 compliance does not address the proposed furniture warehouse Project's energy impacts. The energy effects of the Project are, by definition, peculiar to the Project. Given the vast expanse of roofing provided by the proposed Project, any evaluation of its energy impacts cannot ignore the obvious feasibility of an array of solar panels on the roof or covering the extensive parking proposed at the site. Energy efficiency, in the context of the Proposed project and site would require the consideration and implementation of sufficient solar panels to meet all of the Project's direct electricity demand, as well as solar power that would offset the considerable GHG and other air pollution emissions that will result from the thousands of trucks and cars driving to and from the Project every day once it's operational.

The Environmental Checklist contains no discussion of the project's cost effectiveness in terms of energy requirements. There is no discussion of energy consuming equipment and processes that will be used during the construction or operation of the project. The project's energy use efficiencies by amount and fuel type for each stage of the project including construction and operation were not identified. The effect of the project on peak and base period demands for electricity has not been addressed. As such, the Environmental Checklist's conclusions are unsupported by the necessary discussions of the Project's energy impacts under CEQA and the City lacks substantial evidence to exempt the Project under Section 15183.

#### **IV. The City Must Prepare a Statement of Overriding Considerations.**

The 2022 General Plan Update concluded that several of the impacts identified as a result of the General Plan Update project were significant and unavoidable. These impacts included agricultural resources, air quality, greenhouse gas, and traffic noise impacts. In the Environmental Checklist prepared for the Project, the City acknowledges these significant and unavoidable impacts, but states that:

Impacts from buildout of the General Plan including cumulative impacts associated with development and buildout of the CLSP Phase 2 plan area and the warehouse Project site, as proposed, were fully addressed in the General Plan EIR (State Clearinghouse No. 2021100139), and implementation of the proposed project would not result in any new or altered impacts beyond those addressed in the General Plan EIR.

(Env't Checklist, p. 13.) Similar statements are repeated for each of the specific unavoidable significant impacts. This conclusion does not, however, address all of the City's obligations to grapple with acknowledged significant and unavoidable cumulative

impacts.

In the case of *Communities for a Better Environment v. Cal. Resources Agency*, the court of appeal held that, although tiering may allow a later project to rely on the environmental analysis contained in a prior program-level EIR, that procedure does not relieve the agency of acknowledging the significant and unavoidable impacts and reconsidering its statement of overriding considerations. As the Court explained:

The section appears to allow an agency, in approving a later project that has significant unavoidable impacts, to forego making a statement of overriding considerations *specifically tied to that project*. This is contrary to CEQA law. CEQA section 21094, subdivision (d) requires agencies that approve a later project to comply with CEQA section 21081. Under CEQA section 21081, an agency approving a project with significant environmental effects must find that each effect will be mitigated or avoided, or “that *specific* overriding economic, legal, social, technological, or other benefits of *the project* outweigh the ... effect[] ....” The requirement of a statement of overriding considerations is central to CEQA’s role as a public accountability statute; it requires public officials, in approving environmentally detrimental projects, to justify their decisions based on counterbalancing social, economic or other benefits, and to point to substantial evidence in support. Under Guidelines section 15152(f)(3)(C), however, an agency apparently could adopt one statement of overriding considerations for a prior, more general EIR, and then avoid future political accountability by approving later, more specific projects with significant unavoidable impacts pursuant to the prior EIR and statement of overriding considerations. Even though a prior EIR’s *analysis* of environmental effects may be subject to being incorporated in a later EIR for a later, more specific project, the responsible public officials must still go on the record and explain specifically why they are approving the later project despite *its* significant unavoidable impacts.

(*Communities for a Better Env’t v. California Res. Agency* (2002) 103 Cal.App.4th 98, 124-25.).

The same reasoning applies to the implementation of Section 15183. The Project, based on its reliance on the 2022 GP EIR, will have cumulative impacts on agricultural resources, air quality, greenhouse gas emissions, and traffic noise. Although sections 21083 and 15183 provide for streamlining of the environmental review of a subsequent project, neither section relieves the City from its obligation to make a statement of overriding considerations for the Project. (PRC § 21081.) Thus, the City must prepare a statement of overriding considerations—supported by substantial evidence and evaluating whether any additional feasible mitigation measures applicable to this specific project— prior to approval of the Project.

## CONCLUSION

In light of the above the Project does not qualify for an exemption from CEQA under

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Section 15183 and, the City must prepare an EIR or, if appropriate, a mitigated negative declaration for the Project prior to approval.

Sincerely,



Brian B. Flynn  
LOZEAU DRURY LLP

# EXHIBIT A

Shawn Smallwood, PhD  
3108 Finch Street  
Davis, CA 95616

Attn: Rick Caguiat, Director of Community Development  
The City of Lathrop  
390 Towne Centre Dr  
Lathrop, CA 95330

1 October 2023

RE: Ashley Warehouse Project

Dear Mr. Caguiat,

I write to comment on potential impacts to biological resources that could result from the Ashley Warehouse Project. I reviewed an Environmental Checklist prepared for the Central Lathrop Specific Plan (CLSP) Phase 2 Update, and Ashley Warehouse Project, and a biological resources assessment prepared by Olberding (2021). I understand the project would construct a 1,486,607 square-foot building up to 60 feet in height and 943 vehicle spaces, and 1,104 trailer spaces/stalls on 89.92 acres of what used to be in dryland agriculture, but which over the past decade has been unfarmed but repeatedly disced, leaving patches of ruderal grassland unreached by the discing assembly. I am concerned that the project would cause significant impacts to multiple special-status species of wildlife and to wildlife in general, and that the impacts would be insufficiently mitigated with participation in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), which is failing to conserve its covered species (see below). I am concerned that exemptions per CEQA Guidelines §15183 do not apply to this site nor to this project.

My qualifications for preparing expert comments are the following. I hold a Ph.D. degree in Ecology from University of California at Davis, where I also worked as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, wildlife interactions with the anthrosphere, and conservation of rare and endangered species. I authored many papers on these and other topics. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and Raptor Research Foundation, and I've lectured part-time at California State University, Sacramento. I was Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, as well as of Biological Conservation, and I was on the Editorial Board of Environmental Management. I have performed wildlife surveys in California for thirty-seven years. My CV is attached.

### **SITE VISIT**

I visited the site of the proposed project for 2.55 hours from 06:53 to 09:26 hours on 21 September 2023. I scanned for wildlife with use of binoculars from the roads bordering the site. I recorded all species of vertebrate wildlife I detected, including those whose members flew over the site or were seen adjacent to the site. Animals of uncertain

species identity were either omitted or recorded to a higher taxonomic level. Weather was sunny with no wind and 55–65° F. The site was mostly disced, and otherwise covered by ruderal annual grassland (Photos 1–3).



**Photos 1–3.** The project site on 21 September 2023, depicting at top the trees (at left) where Swainson’s hawks nested, at middle a raised area that could not be disced, and at bottom a patch of elderberry on the project site’s west side.

Despite the disturbed nature of the project site, I detected 35 species of vertebrate wildlife, including 10 special-status species (Table 1). On the site were at least 3 Swainson’s hawks (Photo 4), which is a threatened species under the California Endangered Species Act. The repeatedly landed on a nest located on the south side of Dos Reis Road. I also found red-tailed hawks (Photo 5) loggerhead shrikes (Photos 6 and 7), lesser goldfinches, Brewer’s blackbirds and house finches (Photos 8–10), and California ground squirrels (Photos 11 and 12).

**Table 1.** Species of wildlife I observed during 2.55 hours of survey on 21 September 2023.

| <b>Common name</b>         | <b>Species name</b>             | <b>Status<sup>1</sup></b> | <b>Notes</b>         |
|----------------------------|---------------------------------|---------------------------|----------------------|
| White-throated swift       | <i>Aeronautes saxatalis</i>     |                           | Foraged              |
| Rock pigeon                | <i>Columba livia</i>            | Non-native                | Foraged              |
| Eurasian collared-dove     | <i>Streptopelia decaocto</i>    | Non-native                | Foraged              |
| Mourning dove              | <i>Zenaida macroura</i>         |                           | Foraged              |
| Killdeer                   | <i>Charadrius vociferus</i>     |                           | Foraged              |
| California gull            | <i>Larus californicus</i>       | BCC, TWL                  | Flyovers             |
| Double-crested cormorant   | <i>Nannopterum auritum</i>      | TWL                       | Flyover              |
| Snowy egret                | <i>Egretta thula</i>            |                           | Flyover              |
| Turkey vulture             | <i>Cathartes aura</i>           | BOP                       | Foraged              |
| White-tailed kite          | <i>Elanus leucurus</i>          | CFP, BOP                  | Called               |
| Cooper’s hawk              | <i>Accipiter cooperii</i>       | TWL, BOP                  | Harassed by kestrels |
| Swainson’s hawk            | <i>Buteo swainsoni</i>          | CT, BOP                   | Foraged              |
| Red-tailed hawk            | <i>Buteo jamaicensis</i>        | BOP                       | Foraged              |
| Great horned owl           | <i>Bubo virginianus</i>         | BOP                       | Pellets              |
| American kestrel           | <i>Falco sparverius</i>         | BOP                       | Foraged              |
| Black phoebe               | <i>Sayornis nigricans</i>       |                           | Foraged              |
| Say’s phoebe               | <i>Sayornis saya</i>            |                           | Foraged              |
| Loggerhead shrike          | <i>Lanius ludovicianus</i>      | SSC2                      | Foraged              |
| California scrub-jay       | <i>Aphelocoma californica</i>   |                           | Foraged              |
| American crow              | <i>Corvus brachyrhynchos</i>    |                           | Foraged              |
| Horned lark                | <i>Eremophila alpestris</i>     |                           | Flyover              |
| Barn swallow               | <i>Hirundo rustica</i>          |                           | Foraged              |
| American pipit             | <i>Anthus rubescens</i>         |                           | Foraged              |
| Northern mockingbird       | <i>Mimus polyglottos</i>        |                           | Foraged              |
| European starling          | <i>Sturnus vulgaris</i>         | Non-native                | Foraged              |
| House finch                | <i>Haemorphous mexicanus</i>    |                           | Foraged              |
| Lesser goldfinch           | <i>Spinus psaltria</i>          |                           | Foraged              |
| Western meadowlark         | <i>Sturnella neglecta</i>       |                           | Foraged              |
| Red-winged blackbird       | <i>Agelaius phoeniceus</i>      |                           | Flyovers             |
| Brewer’s blackbird         | <i>Euphagus cyanocephalus</i>   |                           | Foraged              |
| Desert cottontail          | <i>Sylvilagus audubonii</i>     |                           | Tracks               |
| California ground squirrel | <i>Otospermophilus beecheyi</i> |                           |                      |
| Coyote                     | <i>Canis latrans</i>            |                           |                      |
| Kangaroo rat               | <i>Dipodomys</i>                |                           | Burrows              |
| Botta’s pocket gopher      | <i>Thomomys bottae</i>          |                           | Burrows              |



<sup>1</sup> Listed as CT = California threatened, CFP = California Fully Protected (CFG Code 3511), SSC2 = California Species of Special Concern priority level 2, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, TWL = Taxa to Watch List (Shuford and Gardali 2008), and BOP = Birds of Prey (California Fish and Game Code 3503.5).



**Photo 4.** One of at least three Swainson's hawk foraging on the project site, 21 September 2023.

**Photo 5.** One of two red-tailed hawks on the project site, 21 September 2023, although this photo was taken of the hawk just south of the site.



**Photos 6 and 7.** Loggerhead shrikes on the project site, 21 September 2023. In the left photo, a Say's phoebe is flying in the immediate foreground.



**Photos 8–10.** *Lesser goldfinch and Brewer's blackbird (top), and house finches (bottom) on the project site, 21 September 2023.*

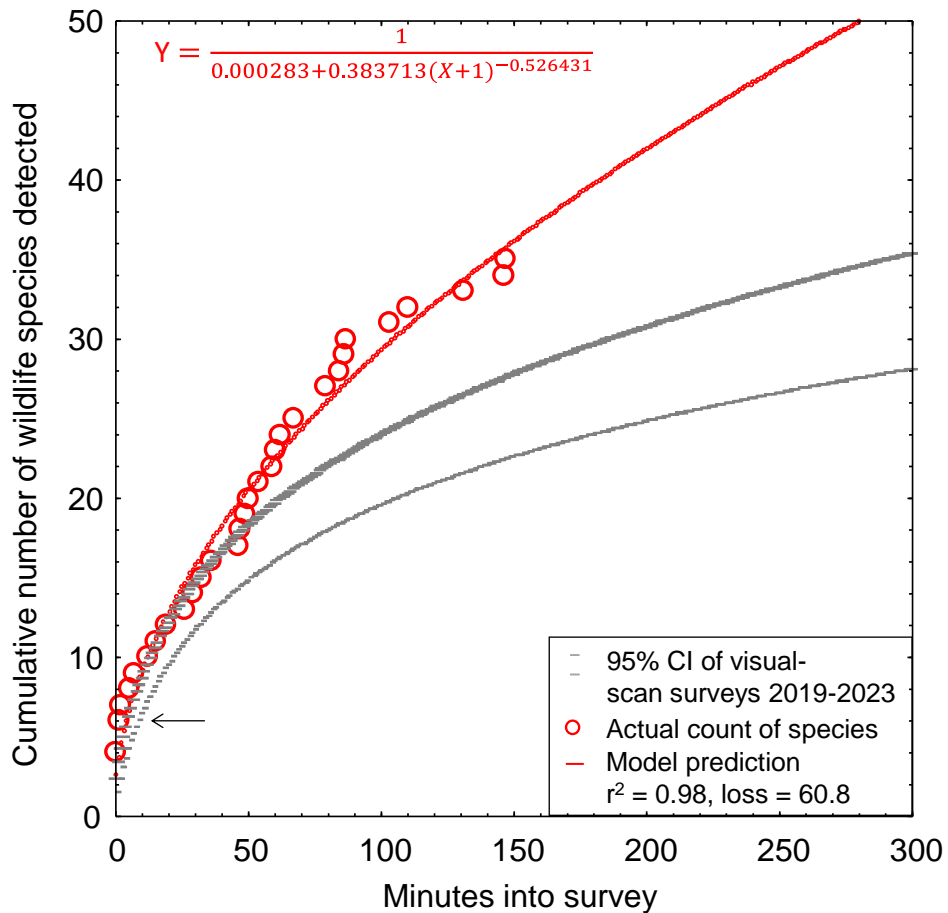


**Photo 11.** *Burrows of California ground squirrel on the project site, 21 September 2023.*

**Photos 12.** *A California ground squirrel located adjacent to the project site, 21 September 2023.*



What I found at the project site qualifies as an exception to CEQA Guidelines §15183 regarding exemptions to additional environmental review. Considering the site's condition and what I have found at 55 other sites throughout California that were of similar condition, the relatively large number of species I detected, and especially the number of special-status species I detected, should the project go forward as proposed, it would result in impacts peculiar to the parcel on which the project would be located. What I found at the project site is a rate of species' detections that exceeded the 95% confidence interval derived from similar reconnaissance surveys I completed at 55 other sites (Figure 1). The project site is inherently rich in wildlife, especially in special-status species of wildlife.



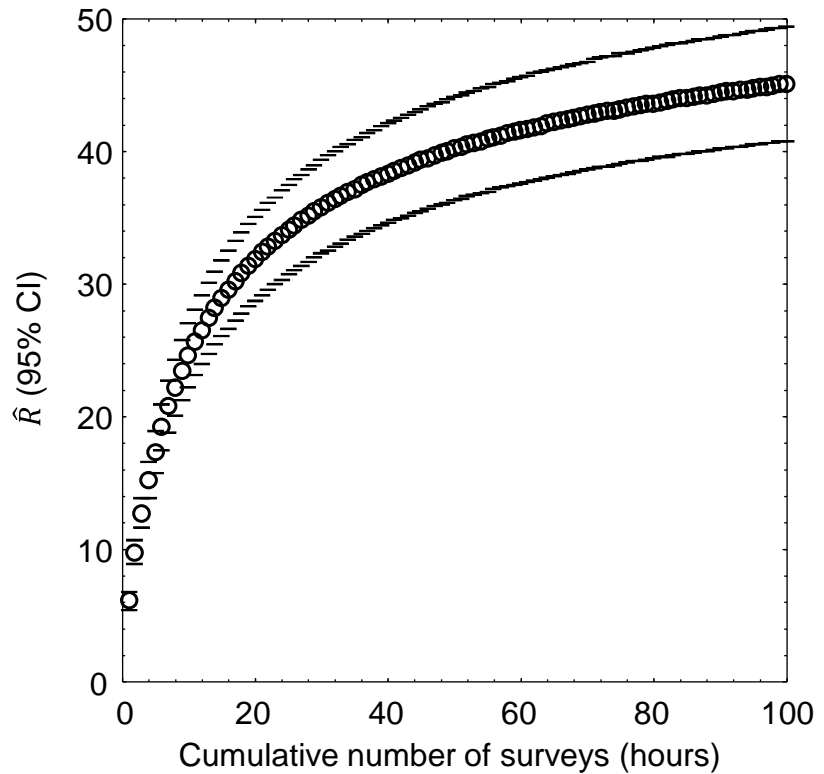
**Figure 1.** Actual (circles) and predicted (line) relationship between the number of vertebrate wildlife species detected and the elapsed survey time based on my visual-scan surveys on 21 September 2023, and compared to the 95% CI of 55 surveys I completed at sites proposed for projects throughout California that had similarly been intensively and extensively disturbed in manners to suppress wildlife occurrences. The arrow points to the place on the graph which corresponds with the time it took me to find the same number of vertebrate wildlife species as reportedly detected by Olberding (2021) on 5 May 2021.

My surveys provide evidence of the project site's exceptional habitat value to wildlife, but additional value can be inferred from my data. Reconnaissance surveys, such as the survey I completed, can be useful for confirming presence of species that were detected, but they can also be useful for estimating the number of species that were not detected. One can model the pattern in species detections during a survey as a means to estimate the number of species that used the site but were undetected during the survey. But whereas this modeling approach is useful for more realistically representing the species richness of the site at the time of a survey, such as in Figure 1, it cannot represent the species richness throughout the year or across multiple years because many species are seasonal or even multi-annual in their movement patterns and in their occupancy of habitat. Multiple surveys are needed to inventory the species that make use of a site over the period of a year or longer.

By use of an analytical bridge, a modeling effort applied to a large, robust data set from a research site can predict the number of vertebrate wildlife species that likely make use of the site over the longer term. As part of my research, I completed a much larger survey effort across 167 km<sup>2</sup> of annual grasslands of the Altamont Pass Wind Resource Area, where from 2015 through 2019 I performed 721 1-hour visual-scan surveys, or 721 hours of surveys, at 46 stations. I used binoculars and otherwise the methods were the same as the methods I and other consulting biologists use for surveys at proposed project sites. At each of the 46 survey stations, I tallied new species detected with each sequential survey at that station, and then related the cumulative species detected to the hours (number of surveys, as each survey lasted 1 hour) used to accumulate my counts of species detected. I used combined quadratic and simplex methods of estimation in Statistica to estimate least-squares, best-fit nonlinear models of the number of cumulative species detected regressed on hours of survey (number of surveys) at the station:  $\hat{R} = \frac{1}{1/a + b \times (\text{Hours})^c}$ , where  $\hat{R}$  represented cumulative species richness detected. The coefficients of determination,  $r^2$ , of the models ranged 0.88 to 1.00, with a mean of 0.97 (95% CI: 0.96, 0.98); or in other words, the models were excellent fits to the data.

I projected the predictions of each model to thousands of hours to find predicted asymptotes of wildlife species richness. The mean model-predicted asymptote of species richness was 57 after 11,857 hours of visual-scan surveys among the 46 stations of my research site. I also averaged model predictions of species richness at each incremental increase of number of surveys, i.e., number of hours (Figure 2). On average I detected 11.2 species over the first 2.55 hours of surveys at my research site in the Altamont Pass (2.55 hours to match the 2.55 hours I surveyed at the project site), which composed 19.65% of the predicted total number of species I would detect with a much larger survey effort at the research site. Given the example illustrated in Figure 2, the 35 species I detected after my 2.55 hours of survey at the project site likely represented 19.65% of the species to be detected after many more visual-scan surveys over another year or longer. With many more repeat surveys through the year, I would likely detect  $35 / 0.1965 = 178$  species of vertebrate wildlife at the site. Assuming my ratio of special-status to non-special-status species was to hold through the detections of all 178 predicted species, then continued surveys would eventually detect 51 special-status species of vertebrate wildlife.

**Figure 2.** Mean (95% CI) predicted wildlife species richness,  $\hat{R}$ , as a nonlinear function of hour-long survey increments across 46 visual-scan survey stations across the Altamont Pass Wind Resource Area, Alameda and Contra Costa Counties, 2015–2019. Note that the location of the study is largely irrelevant to the utility of the graph to the interpretation of survey outcomes at the project site. It is the pattern in the data that is relevant, because the pattern is typical of the pattern seen elsewhere.



Again, however, my prediction of 178 species of vertebrate wildlife, including 51 special-status species of vertebrate wildlife, is derived from daytime visual-scan surveys, and would not detect nocturnal mammals such as bats. The true number of species composing the wildlife community of the site must be larger. A reconnaissance survey should serve only as a starting point toward characterization of a site’s wildlife community, but it certainly cannot alone inform of the inventory of species that use the site. More surveys are needed. Nevertheless, the large number of species I predict at the project site is exceptional, and in my experience with many reconnaissance surveys in California, the species richness at the site relative to its level of disturbance is peculiar to the site.

### EXISTING ENVIRONMENTAL SETTING

The first step in analysis of potential project impacts to biological resources is to accurately characterize the existing environmental setting, including the biological species that use the site, their relative abundances, how they use the site, key ecological relationships, and known and ongoing threats to those species with special status. A reasonably accurate characterization of the environmental setting can provide the basis for determining whether the site holds habitat value to wildlife, as well as a baseline against which to analyze potential project impacts. For these reasons, characterization of the environmental setting, including the project site’s regional setting, is one of CEQA’s essential analytical steps. Methods to achieve this first step typically include (1) surveys of the site for biological resources, and (2) reviews of literature, databases and local experts for documented occurrences of special-status species. In the case of the proposed project, these needed steps were grossly inadequate.

## **Environmental Setting informed by Field Surveys**

To CEQA's primary objective to disclose potential environmental impacts of a proposed project, the analysis should be informed of which biological species are known to occur at the proposed project site, which special-status species are likely to occur, as well as the limitations of the survey effort directed to the site. Analysts need this information to characterize the environmental setting as a basis for opining on, or predicting, potential project impacts to biological resources.

Olberding (2021) incompletely reports on the reconnaissance survey that was completed at the project site. Although the survey date is reported (5 May 2021), Olberding (2021) does not report what time of day the survey began, nor the survey's duration. These are critical omissions that prevent the reader from understanding the survey outcome.

Olberding (2021) did not achieve the minimum standards for reconnaissance survey directed toward plants (CDFW 2018). Olberding's (2021) conclusions regarding the unlikely occurrences of special-status species of plants therefore lack adequate foundation in survey.

The findings of the Olberding (2021) are largely unreliable. Olberding (2021) managed to detect only six species of vertebrate wildlife, which is the number of vertebrate wildlife species I detected within two minutes from the start of my survey on 21 September 2023 (see the arrow in Figure 1). After 2.55 hours, I detected nearly six times the number of species of vertebrate wildlife as did Olberding (2021), and the pattern in the data indicate I would have detected many more species had I continued the survey (Figure 1). Whereas Olberding (2021) saw three special-status species, I saw ten of them. Olberding (2021) missed the great horned owl pellets that I found under nearly every span of electric distribution lines. Olberding (2021) missed the kangaroo rat burrow systems, and the Botta's pocket gopher burrow systems, both types of burrows of which are readily visible. Furthermore, Olberding (2021) saw no bird smaller than a white-tailed kite, whereas I saw 22 such species. Perhaps because the survey was too brief or for some other reason, Olberding (2021) saw and reported few of the vertebrate wildlife species that occur on the project site.

No surveys were completed for bats. Nor were any protocol-level detection surveys completed for special-status species despite known occurrences in the project area. No detection surveys were completed for burrowing owl and Swainson's hawk (I saw three on site). Swainson's hawks nested on a tree just across Dos Reis Road on the south side of the project site in 2021 (Olberding 2021) and probably again in 2023, based on my observations. And because ground squirrels occur on and around the project site, there is a reasonable likelihood that burrowing owls also occur on the site. Protocol-level detection surveys are available for these species (CDFW 2010, 2012), and should be implemented.

Olberding (2021) fails to accurately inform the Checklist of the wildlife community that is part of the existing environmental setting. Olberding's (2021) reporting was deficient, and the surveys were grossly incomplete and unreliable.



## **Environmental Setting informed by Desktop Review**

The purpose of literature and database review and of consulting with local experts is to inform the reconnaissance survey, to augment interpretation of its outcome, and to help determine which protocol-level detection surveys should be implemented. Analysts need this information to identify which species are known to have occurred at or near the project site, and to identify which other special-status species could conceivably occur at the site due to geographic range overlap and site conditions. This step is important because the reconnaissance survey is not going to detect all of the species of wildlife that make use of the site over a period of a year or longer. This step can identify those species yet to be detected at the site but which have been documented to occur nearby or whose available habitat associations are consistent with site conditions. Some special-status species can be ruled out of further analysis, but only if compelling evidence is available in support of such determinations.

Olberding (2021) provides an inadequate database or desktop review. The desktop review neglects iNaturalist and eBird as data sources. It provides no evidence that local experts were consulted for knowledge of occurrences of special-status species in the project area. The methodology for selecting special-status species for analysis of occurrence likelihoods was flawed (see below).

By including in the species' likelihood of occurrence analysis only species whose documented occurrences within the nearest CNDDDB quadrangles, Olberding (2021) screens out many special-status species from further consideration in the characterization of the wildlife community as part of the baseline environmental setting. CNDDDB is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community. As noted by CNDDDB, "*The CNDDDB is a positive sighting database. It does not predict where something may be found. We map occurrences only where we have documentation that the species was found at the site. There are many areas of the state where no surveys have been conducted and therefore there is nothing on the map. That does not mean that there are no special status species present.*" Olberding (2021) misuses CNDDDB.

CNDDDB relies entirely on volunteer reporting from biologists who were allowed access to whatever properties they report from. Many properties have never been surveyed by biologists. Many properties have been surveyed, but the survey outcomes never reported to CNDDDB. Many properties have been surveyed multiple times, but not all survey outcomes reported to CNDDDB. Furthermore, CNDDDB is interested only in the findings of special-status species, which means that species more recently assigned special status will have been reported many fewer times to CNDDDB than were species assigned special status since the inception of CNDDDB. The lack of many CNDDDB records for species recently assigned special status had nothing to do with whether the species' geographic ranges overlapped the project site, but rather more to do with the brief time for records to have accumulated since the species were assigned special status. And because negative findings are not reported to CNDDDB, CNDDDB cannot provide the basis for estimating occurrence likelihoods, either.

In my assessment based on database reviews and site visits, 107 special-status species of wildlife are known to occur near enough to the site to warrant analysis of occurrence potential (Table 2). Of these 107 species, 10 (9%) were recorded on site, and another 22 (21%) species have been documented within 1.5 miles of the site ('Very close'), another 19 (18%) within 1.5 and 4 miles ('Nearby'), and another 46 (43%) within 4 to 30 miles ('In region'). Nearly half (48%) of the species in Table 2 have been reportedly seen within 4 miles of the project site. The site therefore supports multiple special-status species of wildlife and carries the potential for supporting many more special-status species of wildlife based on proximity of recorded occurrences.

Because the project would attempt to mitigate its impacts to wildlife by participating with the SJMSCP, it is important to analyze the occurrence likelihoods of SJMSCP-covered species. Of the 107 special-status species in Table 2, 36 (34%) are covered by the SJMSCP, including 5 that I observed on the project site, 10 with known occurrences very close, 7 nearby, and 10 in the region. Of the 36 SJMSCP-covered species, the occurrence likelihoods of only 12 are analyzed by Olberding (2021), including 2 that Olberding (2021) observed on site, and determinations by Olberding (2021) that 1 may occur on site, 3 are unlikely, and 6 are presumed absent. In summary, only a third of the special-status species in Table 2 are covered by the SJMSCP, 67% of which have been recorded within 4 miles of the project site, and only 33% of which have been analyzed in support of the Checklist.

Because the project would attempt to mitigate its impacts to wildlife by participating with the SJMSCP, it is also important to analyze the occurrence likelihoods of special-status species that are not covered by the SJMSCP. In fact, for these species, it is even more important to analyze their occurrence likelihoods because the mitigation of the SJMSCP was not formulated with these species in mind. Of the 107 special-status species that are listed in Table 2, 71 (66%) are not covered by the SJMSCP, including 5 that I observed on site, and occurrence records of 12 that are very close, 12 nearby, and 36 in the region. Of 71 the special-status species in table 2 that not covered by the SJMSCP, Olberding (2021) analyzes the occurrence likelihoods of only 8 (11%), including of none that I observed on site, and determinations by Olberding (2021) of 2 as unlikely and 6 as presumed absent. Of the latter 6 species Olberding (2021) presumed absent, 2 have been recorded very close to the project site (yellow-headed blackbird and Modesto song sparrow only 0.46 miles away). In summary, two-thirds of the special-status species in Table 2 are not covered by the SJMSCP, 29 (41%) of which have been recorded within 4 miles of the project site, and only 8 (11%) of which have been analyzed in support of the Checklist. Except for my own assessments in Table 2, the Checklist is grossly inadequate in its characterization of that part of the wildlife community that lacks coverage under the SJMSCP.

**Table 2.** Occurrence likelihoods of special-status bird species at or near the proposed project site, according to eBird/iNaturalist records (<https://eBird.org>, <https://www.inaturalist.org>) and on-site survey findings, where ‘Very close’ indicates within 1.5 miles of the site, “nearby” indicates within 1.5 and 4 miles, and “in region” indicates within 4 and 30 miles, and ‘in range’ means the species’ geographic range overlaps the site. Records in bold font indicate those species I detected.

| <b>Common name</b>                | <b>Species name</b>                      | <b>Status<sup>1</sup></b> | <b>SJMSCP covered species</b> | <b>Checklist occurrence potential</b> | <b>Databased, Site visits</b> |
|-----------------------------------|--|---------------------------|-------------------------------|---------------------------------------|-------------------------------|
| Valley elderberry longhorn beetle | <i>Desmocerus californicus dimorphus</i> | FT                        | Yes                           | May occur                             | In range                      |
| Monarch                           | <i>Danaus plexippus</i>                  | FC                        |                               |                                       | Nearby                        |
| Crotch’s bumble bee               | <i>Bombus crotchii</i>                   | CCE                       |                               | Absent                                | In region                     |
| Western bumble bee                | <i>Bombus o. occidentalis</i>            | CCE                       |                               | Absent                                | In range                      |
| California tiger salamander       | <i>Ambystoma californiense</i>           | FT, CT, WL                | Yes                           | Absent                                | In region                     |
| Western spadefoot                 | <i>Spea hammondii</i>                    | SSC                       | Yes                           | Absent                                | In region                     |
| Western pond turtle               | <i>Emys marmorata</i>                    | SSC                       | Yes                           | Absent                                | Nearby                        |
| California glossy snake           | <i>Arizona elegans occidentalis</i>      | SSC                       |                               | Unlikely                              | In region                     |
| San Joaquin coachwhip             | <i>Masticophis flagellum ruddocki</i>    | SSC                       | Yes                           | Unlikely                              | In region                     |
| Giant gartersnake                 | <i>Thamnophis gigas</i>                  | FT, CT                    | Yes                           | Absent                                | In region                     |
| Brant                             | <i>Branta bernicla</i>                   | SSC2                      |                               |                                       | In region                     |
| Cackling goose (Aleutian)         | <i>Branta hutchinsii leucopareia</i>     | WL                        | Yes                           |                                       | Nearby                        |
| Redhead                           | <i>Aythya americana</i>                  | SSC2                      |                               |                                       | Nearby                        |
| Harlequin duck                    | <i>Histrionicus histrionicus</i>         | SSC2                      |                               |                                       | In region                     |
| Barrow’s goldeneye                | <i>Bucephala islandica</i>               | SSC                       |                               |                                       | Nearby                        |
| Western grebe                     | <i>Aechmophorus occidentalis</i>         | BCC                       | Yes                           |                                       | Nearby                        |
| Clark’s grebe                     | <i>Aechmophorus clarkii</i>              | BCC                       |                               |                                       | Nearby                        |
| Black swift                       | <i>Cypseloides niger</i>                 | SSC3, BCC                 |                               |                                       | In region                     |
| Vaux’s swift                      | <i>Chaetura vauxi</i>                    | SSC2, BCC                 |                               |                                       | In region                     |
| Costa’s hummingbird               | <i>Calypte costae</i>                    | BCC                       |                               |                                       | In region                     |
| Rufous hummingbird                | <i>Selasphorus rufus</i>                 | BCC                       |                               |                                       | In region                     |
| Allen’s hummingbird               | <i>Selasphorus sasin</i>                 | BCC                       |                               |                                       | In region                     |
| Lesser sandhill crane             | <i>Antigone canadensis canadensis</i>    | SSC3                      |                               |                                       | In region                     |
| Greater sandhill crane            | <i>Antigone canadensis tabida</i>        | CT, FP                    | Yes                           |                                       | In region                     |
| American avocet <sup>2</sup>      | <i>Recurvirostra americana</i>           | BCC                       |                               |                                       | Very close                    |

| <b>Common name</b>       | <b>Species name</b>                        | <b>Status<sup>1</sup></b> | <b>SJMSCP covered species</b> | <b>Checklist occurrence potential</b> | <b>Databased, Site visits</b> |
|--------------------------|--|---------------------------|-------------------------------|---------------------------------------|-------------------------------|
| Mountain plover          | <i>Charadrius montanus</i>                 | SSC2, BCC                 | Yes                           |                                       | In region                     |
| Snowy plover             | <i>Charadrius nivosus</i>                  | BCC                       |                               |                                       | In region                     |
| Whimbrel <sup>2</sup>    | <i>Numenius phaeopus</i>                   | BCC                       |                               |                                       | Nearby                        |
| Long-billed curlew       | <i>Numenius americanus</i>                 | WL                        | Yes                           |                                       | Very close                    |
| Marbled godwit           | <i>Limosa fedoa</i>                        | BCC                       |                               |                                       | In region                     |
| Red knot (Pacific)       | <i>Calidris canutus</i>                    | BCC                       |                               |                                       | In region                     |
| Short-billed dowitcher   | <i>Limnodromus griseus</i>                 | BCC                       |                               |                                       | Nearby                        |
| Willet                   | <i>Tringa semipalmata</i>                  | BCC                       |                               |                                       | Very close                    |
| Laughing gull            | <i>Leucophaeus atricilla</i>               | WL                        |                               |                                       | In region                     |
| Western gull             | <i>Larus occidentalis</i>                  | BCC                       |                               |                                       | In region                     |
| California gull          | <i>Larus californicus</i>                  | BCC, WL                   |                               |                                       | <b>On site</b>                |
| California least tern    | <i>Sternula antillarum browni</i>          | FE, CE, FP                |                               |                                       | In region                     |
| Black tern               | <i>Chlidonias niger</i>                    | SSC2, BCC                 |                               |                                       | In region                     |
| Common loon              | <i>Gavia immer</i>                         | SSC                       |                               |                                       | Nearby                        |
| Double-crested cormorant | <i>Phalacrocorax auritus</i>               | WL                        | Yes                           |                                       | <b>On site</b>                |
| American white pelican   | <i>Pelicanus erythrorhynchos</i>           | SSC1, BCC                 | Yes                           |                                       | Very close                    |
| California brown pelican | <i>Pelecanus occidentalis californicus</i> | FP                        |                               |                                       | In region                     |
| Least bittern            | <i>Ixobrychus exilis</i>                   | SSC2                      |                               |                                       | In region                     |
| White-faced ibis         | <i>Plegadis chihi</i>                      | WL                        | Yes                           |                                       | Very close                    |
| Turkey vulture           | <i>Cathartes aura</i>                      | BOP                       |                               |                                       | <b>On site</b>                |
| Osprey                   | <i>Pandion haliaetus</i>                   | WL, BOP                   | Yes                           |                                       | Very close                    |
| White-tailed kite        | <i>Elanus luecurus</i>                     | CFP, BOP                  | Yes                           | Observed                              | <b>On site</b>                |
| Golden eagle             | <i>Aquila chrysaetos</i>                   | BGEPA, CFP, BOP, WL       | Yes                           |                                       | Very close                    |
| Northern harrier         | <i>Circus cyaneus</i>                      | BCC, SSC3, BOP            | Yes                           |                                       | Very close                    |
| Sharp-shinned hawk       | <i>Accipiter striatus</i>                  | WL, BOP                   | Yes                           |                                       | Very close                    |
| Cooper's hawk            | <i>Accipiter cooperii</i>                  | WL, BOP                   | Yes                           |                                       | <b>On site</b>                |
| Bald eagle               | <i>Haliaeetus leucocephalus</i>            | CE, BGEPA, CFP            |                               |                                       | Nearby                        |
| Red-shouldered hawk      | <i>Buteo lineatus</i>                      | BOP                       |                               |                                       | Very close                    |
| Swainson's hawk          | <i>Buteo swainsoni</i>                     | CT, BOP                   | Yes                           | Observed                              | <b>On site</b>                |

| <b>Common name</b>                | <b>Species name</b>                 | <b>Status<sup>1</sup></b> | <b>SJMSCP covered species</b> | <b>Checklist occurrence potential</b> | <b>Databased, Site visits</b> |
|-----------------------------------|-------------------------------------|---------------------------|-------------------------------|---------------------------------------|-------------------------------|
| Red-tailed hawk                   | <i>Buteo jamaicensis</i>            | BOP                       |                               |                                       | <b>On site</b>                |
| Ferruginous hawk                  | <i>Buteo regalis</i>                | WL, BOP                   | Yes                           |                                       | Nearby                        |
| Rough-legged hawk                 | <i>Buteo lagopus</i>                | BOP                       |                               |                                       | Nearby                        |
| Barn owl                          | <i>Tyto alba</i>                    | BOP                       |                               |                                       | Very close                    |
| Western screech-owl               | <i>Megascops kennicotti</i>         | BOP                       |                               |                                       | In region                     |
| Great horned owl                  | <i>Bubo virginianus</i>             | BOP                       |                               |                                       | <b>On site</b>                |
| Burrowing owl                     | <i>Athene cunicularia</i>           | BCC, SSC2, BOP            | Yes                           | Unlikely                              | Very close                    |
| Long-eared owl                    | <i>Asio otus</i>                    | BCC, SSC3, BOP            |                               |                                       | In region                     |
| Short-eared owl                   | <i>Asia flammeus</i>                | BCC, SSC3, BOP            | Yes                           |                                       | In region                     |
| Lewis's woodpecker                | <i>Melanerpes lewis</i>             | BCC                       |                               |                                       | In region                     |
| Nuttall's woodpecker              | <i>Picoides nuttallii</i>           | BCC                       |                               |                                       | Very close                    |
| American kestrel                  | <i>Falco sparverius</i>             | BOP                       |                               |                                       | <b>On site</b>                |
| Merlin                            | <i>Falco columbarius</i>            | WL, BOP                   | Yes                           |                                       | Nearby                        |
| Peregrine falcon                  | <i>Falco peregrinus</i>             | BOP                       |                               |                                       | Very close                    |
| Prairie falcon                    | <i>Falco mexicanus</i>              | WL, BOP                   | Yes                           |                                       | Nearby                        |
| Olive-sided flycatcher            | <i>Contopus cooperi</i>             | BCC, SSC2                 |                               |                                       | Nearby                        |
| Willow flycatcher                 | <i>Empidonax trailii</i>            | CE                        |                               |                                       | Nearby                        |
| Vermilion flycatcher              | <i>Pyrocephalus rubinus</i>         | SSC2                      |                               |                                       | In region                     |
| Least Bell's vireo                | <i>Vireo bellii pusillus</i>        | FE, CE                    |                               | Absent                                | In region                     |
| Loggerhead shrike                 | <i>Lanius ludovicianus</i>          | SSC2                      | Yes                           | Unlikely                              | <b>On site</b>                |
| Yellow-billed magpie              | <i>Pica nuttalli</i>                | BCC                       |                               |                                       | Very close                    |
| Oak titmouse                      | <i>Baeolophus inornatus</i>         | BCC                       |                               |                                       | Very close                    |
| Bank swallow                      | <i>Riparia riparia</i>              | CT                        | Yes                           |                                       | In region                     |
| Purple martin                     | <i>Progne subis</i>                 | SSC2                      |                               |                                       | In region                     |
| Wrentit                           | <i>Chamaea fasciata</i>             | BCC                       |                               |                                       | In region                     |
| California thrasher               | <i>Toxostoma redivivum</i>          | BCC                       |                               |                                       | Nearby                        |
| Cassin's finch                    | <i>Haemorhous cassinii</i>          | BCC                       |                               |                                       | In region                     |
| Lawrence's goldfinch              | <i>Spinus lawrencei</i>             | BCC                       |                               |                                       | Very close                    |
| Grasshopper sparrow               | <i>Ammodramus savannarum</i>        | SSC2                      |                               |                                       | In region                     |
| Modesto song sparrow <sup>3</sup> | <i>Melospiza melodia mailliardi</i> | SSC3                      |                               | Absent                                | Very close                    |

| <b>Common name</b>          | <b>Species name</b>                  | <b>Status<sup>1</sup></b> | <b>SJMSCP covered species</b> | <b>Checklist occurrence potential</b> | <b>Databased, Site visits</b> |
|-----------------------------|--------------------------------------|---------------------------|-------------------------------|---------------------------------------|-------------------------------|
| Black-chinned sparrow       | <i>Spizella atrogularis</i>          | BCC                       |                               |                                       | In region                     |
| Bell's sparrow              | <i>Amphispiza b. belli</i>           | WL                        | Yes                           |                                       | In region                     |
| Oregon vesper sparrow       | <i>Pooecetes gramineus affinis</i>   | SSC2, BCC                 |                               |                                       | In range                      |
| Yellow-breasted chat        | <i>Icteria virens</i>                | SSC3                      | Yes                           |                                       | Nearby                        |
| Yellow-headed blackbird     | <i>Xanthocephalus xanthocephalus</i> | SSC3                      |                               | Absent                                | Very close                    |
| Bullock's oriole            | <i>Icterus bullockii</i>             | BCC                       |                               |                                       | Very close                    |
| Tricolored blackbird        | <i>Agelaius tricolor</i>             | CT, BCC, SSC1             | Yes                           | Absent                                | Very close                    |
| Lucy's warbler              | <i>Leiothlypis luciae</i>            | SSC3, BCC                 |                               |                                       | In region                     |
| Virginia's warbler          | <i>Leiothlypis virginiae</i>         | WL, BCC                   |                               |                                       | In region                     |
| Yellow warbler              | <i>Setophaga petechia</i>            | SSC2                      | Yes                           |                                       | Very close                    |
| Summer tanager              | <i>Piranga rubra</i>                 | SSC1                      |                               |                                       | In region                     |
| Pallid bat                  | <i>Antrozous pallidus</i>            | SSC, WBWG:H               |                               | Unlikely                              | In range                      |
| Townsend's big-eared bat    | <i>Corynorhinus townsendii</i>       | SSC, WBWG:H               | Yes                           | Absent                                | In range                      |
| Canyon bat                  | <i>Parastrellus hesperus</i>         | WBWG:L                    |                               |                                       | In region                     |
| Big brown bat               | <i>Episticus fuscus</i>              | WBWG:L                    |                               |                                       | In range                      |
| Silver-haired bat           | <i>Lasionycteris noctivagans</i>     | WBWG:M                    |                               |                                       | In range                      |
| Western red bat             | <i>Lasiurus blossevillii</i>         | SSC, WBWG:H               | Yes                           |                                       | In region                     |
| Hoary bat                   | <i>Lasiurus cinereus</i>             | WBWG:M                    |                               |                                       | In region                     |
| Western small-footed myotis | <i>Myotis cililabrum</i>             | WBWG:M                    | Yes                           |                                       | In range                      |
| Little brown myotis         | <i>Myotis lucifugus</i>              | WBWG:M                    |                               |                                       | In region                     |
| Yuma myotis                 | <i>Myotis yumanensis</i>             | WBWG:LM                   | Yes                           |                                       | In range                      |
| California myotis           | <i>Myotis californicus</i>           | WBWG:L                    |                               |                                       | In range                      |
| American badger             | <i>Taxidea taxus</i>                 | SSC                       |                               | Absent                                | In region                     |

<sup>1</sup> Listed as FT or FE = federal threatened or endangered, FC = federal candidate for listing, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, CT or CE = California threatened or endangered, CCT or CCE = Candidate California threatened or endangered, CFP = California Fully Protected (California Fish and Game 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 = Birds of Prey (CFG Code 3503.5), and WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H).

<sup>2</sup> Uncertain if BCC based on 2021 Bird of Conservation Concern list.

<sup>3</sup> Reported simply as song sparrow, but song sparrows in this area should be Modesto song sparrow.

## Habitat Assessment

Olberding (2021) speculates that “Due to the heavily disturbed nature of the Property there were a limited number of wildlife species observed during the survey.” However, the heavy disturbance was much less limiting to the number of wildlife species that I detected on the project site, as I found nearly 6 times the number reported by Olberding (2021). This noted, the project site has been intensively disturbed over a number of years, and this level of disturbance undoubtedly diminished the species of wildlife species that occur on the site as compared to times preceding the repeated discing of the site. Nevertheless, wildlife strive to survive, even where conditions are far from ideal. Some species often fare better on disturbed soils. Horned larks and killdeer are perfectly capable of nesting on the ground of the project site. American pipits, American crows, house finches and red-winged blackbirds often forage on disced soil, and these birds are in turn pursued by Swainson’s hawks, Cooper’s hawks and white-tailed kites, among others. Swainson’s hawks are known for foraging over disturbed fields, especially as the fields are being disturbed by activities such as discing (Smallwood 1995, Smallwood et al. 1996, Swolgaard et al. 2008). Swainson’s hawks nested adjacent to the project site for good reasons. The disturbance of a site is no justification for dismissing it as valuable to wildlife (Smallwood and Smallwood 2023).

For multiple species, Olberding (2021) speculates that the project site is unsuitable as nesting habitat and therefore is unlikely to cause significant impacts if it is developed. However, there is no sound scientific distinction between nesting habitat and some other characterization of habitat. For any given species, the environment of a site is either habitat or it is not, as habitat is defined as that part of the environment that is used by a species (Hall et al. 1997). Certain portions of a species’ habitat may provide nesting opportunities, but all parts of its habitat are critical to the nesting success of members of the species. If an animal cannot find sufficient forage and cover during non-nesting season or at portions of its habitat where it does not normally nest, then it might not survive to reproduce or its nesting attempt might not succeed. Olberding (2021) asserts a false distinction of the value of a site based on whether the species nests on-site.

The above-arguments were applied to loggerhead shrike, which serves as a good example of how poorly predictive the Olberding’s (2021) approach is to determining occurrence likelihood. Olberding (2021) determines loggerhead shrike to have a low likelihood of occurrence due to lack of trees and shrubs needed for nesting. However, loggerhead shrikes are resourceful when it comes to finding and using nest substrate (Smallwood and Smallwood 2021). Furthermore, elderberry shrubs occur on the project site (Photo 3) as do loggerhead shrikes (Table 1, Photos 6 and 7). When I arrived at the project site to perform my survey, I expected to see loggerhead shrikes, based on my experience. The occurrence likelihood of loggerhead shrike was not low, and the same can be concluded for many of the other special-status species considered by Olberding (2021).



## **POTENTIAL BIOLOGICAL IMPACTS**

An impacts analysis should consider whether and how a proposed project would affect members of a species, larger demographic units of the species, the whole of a species, and ecological communities. The accuracy of this analysis depends on an accurate characterization of the existing environmental setting. In the case of the proposed project, the existing environmental setting has not been accurately characterized, and several important types of potential project impact have not been analyzed. These types of impacts include habitat loss, interference with wildlife movement, and collision mortality with solar PV panels and project-generated traffic.

### **HABITAT LOSS**

The project would destroy 89.92 acres of habitat to every species of wildlife that makes use of the project site. My survey outcomes interpreted with the help of an analytical bridge to more extensive research at another site in a similar environment predict 178 species of vertebrate wildlife would eventually be detected by repeat visual-scan surveys similar those I completed. Added to these 178 species would be all the nocturnal species I would unlikely detect during the daytime, such as species of bat, multiple species of small mammal, American badger and perhaps San Joaquin kit fox. What remains without analysis is the magnitude of loss of the numbers of animals that can be produced by the project site.

In the case of birds, two methods exist for estimating the loss of productive capacity that would be caused by the project. One method would involve surveys to count the number of bird nests and chicks produced. The alternative method is to infer productive capacity from estimates of total nest density elsewhere. I am aware of estimates of total nest density elsewhere, but none were on fields that underwent discing every year except for a field I surveyed for total nest density this past spring. The field had been a walnut orchard in Rancho Cordova, California, but the walnuts were abandoned while the floor continued to be disced, sometimes entirely and sometimes partially. I surveyed the 12.74-acre study site 30 times from March through the first half of August to estimate total nest density. Total nest density of birds was 14.38 nests per acre, but this density included cavity nests and tree-supported cup nests within the scattering of abandoned orchard walnuts. Excluding the cavity nests and tree-supported cup nests, total nest density on the ground and in elderberry shrubs was 2.12 nests/acre. Assuming that the estimates of total bird nest density on the ground and in elderberry was similar between my study site and the project site, then the project site likely supports 191 nests per year.

The loss of 191 nest sites of birds would qualify as a potentially significant project impact, but the impact does not end with the immediate loss of nest sites as nest substrate is removed and foraging grounds graded in preparation for impervious surfaces. The reproductive capacity of the site would be lost. The average number of fledglings per nest in Young's (1948) study was 2.9. Assuming Young's (1948) study site typifies bird productivity, the project would prevent the production of 554 fledglings per year. Assuming an average bird generation time of 5 years, the lost capacity of both breeders and annual fledgling production can be estimated from an equation in

Smallwood (2022):  $\{(nests/year \times chicks/nest \times number\ of\ years) + (2\ adults/nest \times nests/year) \times (number\ of\ years \div years/generation)\} \div (number\ of\ years) = 630\ birds\ per\ year\ denied\ to\ California.$  In the face of a potential project impact of this magnitude, I conclude that the potential project impacts to the productive capacity of birds would be significant.

## **INTERFERENCE WITH WILDLIVE MOVEMENT**

The analysis of whether the project would interfere with wildlife movement in the region is flawed and misleading. According to the Checklist, “The Biological Resources Analysis Report (Attachment A) [Olberding 2021] included a CNDDDB record search that did not reveal any documented wildlife corridors or wildlife nursery sites on or adjacent to warehouse site.” However, CNDDDB is not where an analyst would find information relevant to whether a site is important to wildlife movement. Nor did Olberding (2021) address the issue of wildlife movement in the region. In effect, there is no analysis of whether the project would interfere with wildlife movement.

The Checklist also claims that the impact on wildlife movement corridors was adequately addressed in the General Plan EIR. Indeed, the General Plan EIR addresses wildlife movement corridors, but it does so with a focus on the San Joaquin River as a wildlife corridor, and it does so with a focus solely on the functionality of corridors. The General Plan EIR implies the premise that interference with wildlife movement in the region can result only from a project’s disruption of the function of a wildlife movement corridor. This premise represents a false CEQA standard, and was therefore inappropriate to the analysis. The primary phrase of the CEQA standard goes to wildlife movement regardless of whether the movement is channeled by a corridor. A site such as the project site is critically important for wildlife movement because it composes an increasingly diminishing area of open space within a growing expanse of anthropogenic uses, forcing more species of volant wildlife to use the site for stopover and staging during migration, dispersal, and home range patrol (Warnock 2010, Taylor et al. 2011, Runge et al. 2014).

In any case, many of the animals I saw on the project site got there by moving there from someplace else, and others were using the airspace of the site as a travel medium. California gulls flew across the site, as did snowy egrets, double-crested cormorants, mourning doves, horned larks and many other birds. To and from the project site, pocket gophers disperse along linear elements of the landscape (Smallwood et al. 2001), and so do kangaroo rats; otherwise, these species would have been extirpated from the site long ago due to the discing. The project site includes grassland patches to and from which many species of wildlife are compelled to travel, and the majority of the site in disturbed soil likely serves as an island of open space in the winter months for stopover by mountain plovers, merlin, ferruginous hawks and many other special-status species.

The Checklist fails to analyze whether and to what degree the project’s 60-foot-tall building and adjoining impervious surface covering nearly 90 acres would interfere with wildlife movement in the region, and whether the resulting impacts could be mitigated.

## TRAFFIC IMPACTS TO WILDLIFE

For the following reasons, the project would qualify as an exception to CEQA Guidelines §15183 regarding exemptions to additional environmental review: 1) project-generated traffic impacts to wildlife were mentioned as a bullet item but not analyzed as significant effects in the Lathrop General Plan EIR, and 2) the project-generated traffic impacts to wildlife would be potentially significant off-site and they would contribute cumulatively to traffic impacts to wildlife impacts generated by other projects in the region, and which were not discussed in the Lathrop General Plan EIR. The Lathrop General Plan EIR's only mention of traffic impacts to wildlife was "Significant impacts on special status species associated with individual subsequent projects could include: increased mortality caused by higher numbers of automobiles in new areas of development." This is a statement, but not an analysis, and it was followed by no policies or actions to minimize the impacts.

The Checklist fails to address one of the project's most obvious, 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 13–15), including along roads far from the project footprint. 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 13.** *A coyote uses the crosswalk to crosses a road on 2 February 2023.*





**Photos 14 and 15.** Raccoon killed on Road 31 just east of Highway 505 in Solano County (left; photo taken on 10 November 2018), and mourning dove killed by vehicle on a California road (right; photo by Noriko Smallwood, 21 June 2020.)

The nearest study of traffic-caused wildlife mortality was performed along a 2.5-mile stretch of Vasco Road (only 20 miles away 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 next to Vasco Road (Brown et al. 2016). Brown et al.'s (2016) adjustment factors for carcass persistence resembled those of Santos et al. (2011). Also applying searcher detection rates from 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 over 1.25 years and 2.5 miles of road translates to 3,900 wild animals per mile per year. 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.

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). VMT is useful for predicting wildlife mortality because I was able to quantify miles traveled along the studied reach of Vasco Road during the time period of the Mendelsohn et al. (2009), hence enabling a rate of fatalities per VMT that can be projected to other sites, assuming similar collision fatality rates.

### Predicting project-generated traffic impacts to wildlife

The Checklist predicts 2,798 daily trips among 1,295 employees and a mean 15.43 daily VMT per employee. Assuming the daily trips are weekdays, the annual VMT not including weekend mileage would amount to 11,225,016 annual VMT. 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 the predicted annual VMT would predict 6,151 vertebrate wildlife fatalities per year. Even if the mortality turns out to be as low as half that of the Mendelsohn et al. (2009) study, the annual death toll to wildlife resulting from project-generated traffic would be 3,075, which would also qualify as a significant, unmitigated impact to wildlife caused by the project.

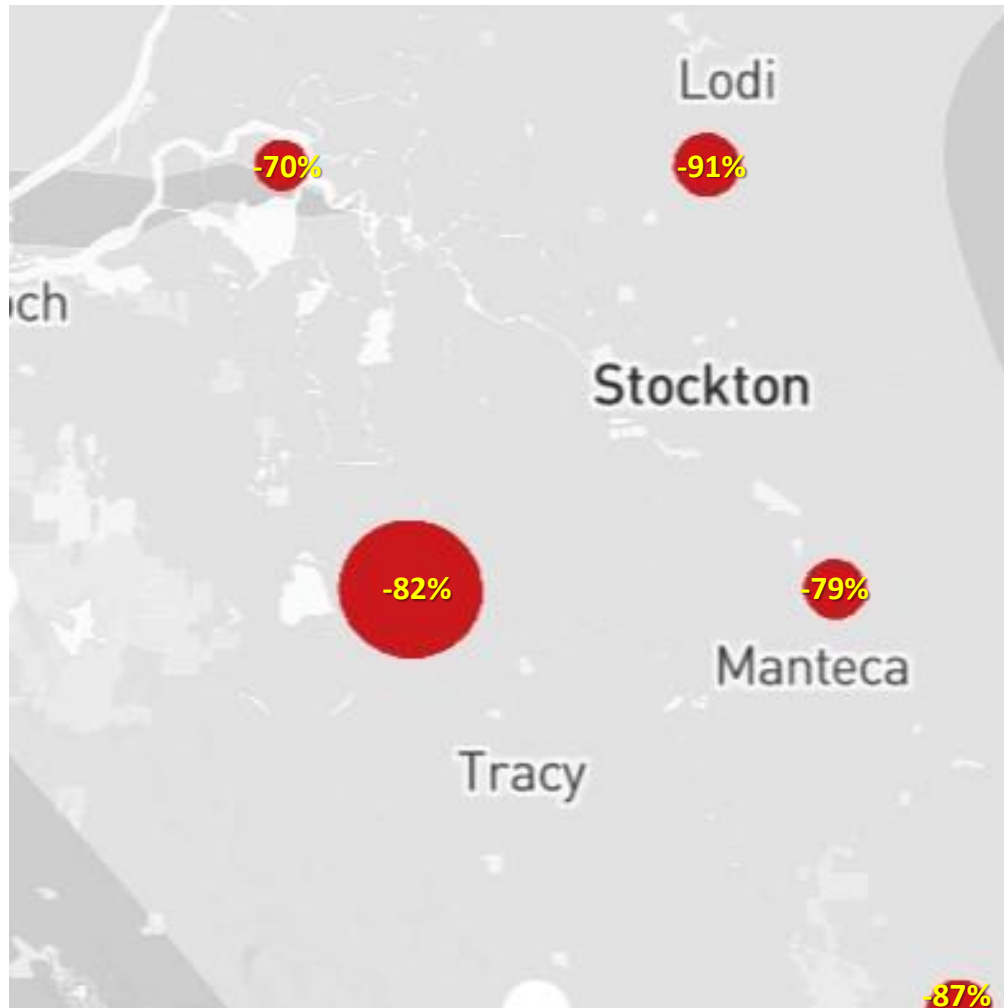
Based on my indicator-level analysis, the project-generated traffic would cause substantial, significant impacts to wildlife. The Checklist does not address this potential impact, let alone propose to mitigate it. Mitigation measures to improve wildlife safety along roads are available and are feasible, and they need exploration for their suitability with the proposed project. Given the predicted level of project-generated traffic-caused mortality, and the lack of any proposed mitigation, it is my opinion that the proposed project would result in potentially significant adverse biological impacts. The Checklist fails to analyze the impact of wildlife-automobile collisions resulting from project-generated traffic, and how to mitigate it.

## **CUMULATIVE IMPACTS**

Because cumulative impacts are proving more severe than discussed in the Lathrop General Plan EIR, the project would be inconsistent with the CEQA Guideline §15183 regarding exemptions to additional environmental review. According to the Checklist (p. 55), “The 2022 General Plan EIR determined that cumulative impacts to biological resources would be less than significant. ... As such, the proposed warehouse project is consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or increased impacts associated with biological resources, beyond those that were already addressed in the 2022 Lathrop General Plan EIR. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.” The cumulative impacts analysis of the Lathrop General Plan EIR asserts that participation with the SJMSCP would prevent significant cumulative impacts. But it has not.

For example, burrowing owls have all but disappeared from the County, despite the SJMSCP. Over the past month (since 26 September 2023), there has only been one occurrence of burrowing owl in San Joaquin County that has been reported to eBird, and that was in Tracy. eBird Trends Analysis reveals an average 82% decline in the area of the SJMSCP (Figure 3).

**Figure 3.**  
*eBird Trends Analysis reveals an average 82% decline of burrowing owls in the area of the SJMSCP between 2007 and 2021.*



## MITIGATION

### Requirement BIO-1: Participation with SJMSCP

The principal mitigation measure in the City's Checklist would be participation with the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Due to grossly deficient implementation and due to poor performance of the SJMSCP, the project's impacts to wildlife should be mitigated outside the SJMSCP. The SJMSCP is currently unsuitable as a mitigation strategy for the project. A project-specific EIR needs to be prepared in order to formulate more effective mitigation. Below I explain why.

There are four major problems with relying on the SJMSCP to mitigate the project's impacts to special-status species of wildlife: (1) Not all special-status species at the site are covered by the SJMSCP; (2) Many non-covered species of birds are still protected by the federal Migratory Bird Treaty Act (MBTA) and California Migratory Bird Protection Act (MBPA), which warrant CEQA review for potential impacts; (3) The SJMSCP requires protocol-level detection surveys at project sites for covered species, but no such surveys have been performed at the site of the proposed project; and, (4) Available evidence indicates that the premise is likely false that SJMSCP participation conserves covered species. These problems are discussed further below.

(1) Seventy-one (66%) of the species in Table 2 are not covered by the SJMSCP. Four of the 10 special-status species that I saw on the project site are not covered by the SJMSCP. In other words, the SJMSCP insufficiently covers special-status species that would be adversely affected by the project. An important reason for this deficiency has been the continued assignments of special status to additional species as resource agencies have determined these species are declining or are in trouble. The growing list of special-status species is indicative of the effects of cumulative impacts. The SJMSCP failed to effectively prepare for the assignment of special status to so many more species, nor did it provide sufficient conservation benefits to prevent these assignments. Many species of wildlife have declined despite the SJMSCP.

(2) Any potentially occurring bird species protected by the MBTA and the MBPA warrants an impact assessment related to the proposed project, regardless of any additional special status. Ground-nesting birds nest on the project site, and tree- and shrub-nesting birds rely on the site for forage. Ground-nesters on the project site could include northern harrier, burrowing owl, and California horned lark among others. City of Lathrop needs to consider project impacts and mitigation for all bird species protected by the MBTA and MBPA.

(3) According to SJMSCP §5.2.2.1 (A), there is the requirement for "Preconstruction surveys to ... determine if SJMSCP Covered Species are present..." The purpose of these surveys, according to the SJMSCP §5.2.2.5, is to comply with existing protocols or guidelines for supporting a determination of species' absence as the standard, i.e., if the species is present, the surveys should detect it. In other words, although preconstruction survey normally refer to a clearance survey to avoid take by imminent use of heavy machinery to grade the project site, the SJMSCP requires protocol-level detection surveys. Such surveys are to be performed at project sites where habitat would be destroyed (SJMSCP §5.9.2.5). No detection surveys have been implemented at the site of the proposed project. A project-specific DEIR needs to be prepared, and it needs to include the results of detection surveys, including those meeting the guidelines of CDFW (2012) for burrowing owls and of CEC and CDFW (2010) for Swainson's hawks.

(4) The premise that project mitigation via SJMSCP fees will conserve special-status species lacks support of evidence, which is required in the SJMSCP and its Implementation Agreement.

The SJMSCP requires ‘Pre-acquisition/Baseline surveys’ at “*potential or recently acquired SJMSCP Preserves*” (SJMSCP §5.9.2.6). These surveys are characterized in the SJMSCP as detection surveys. Detection surveys are also required at proposed project sites. The SJMSCP also requires biological effectiveness monitoring at the Preserves, which are said to be needed to inform an adaptive management program. All of these surveys are intended to quantify the initial nexus between project impacts and conservation value in Preserves, and to enable managers to react to emerging deficiencies in this nexus. Monitoring biological effectiveness of the SJMSCP was supposed to be annual, whereas additional focused surveys of certain covered species were to be completed every three years. The SJMSCP also requires Annual Reports. A reasonable presumption is that the monitoring data in the Annual Reports were to be analyzed to inform adaptive management, but no such analysis has been presented during the first 23 years of the SJMSCP.

*Detection Surveys at Project Sites.*--In my experience in San Joaquin County, and based on my review of additional CEQA reviews in the County such as the River Project EIR and the Tracy 580 Business Park EIR, protocol-level detection surveys are rarely completed at sites of proposed new projects. The surveys that are completed are typically no more rigorous than reconnaissance-level surveys, which are unsuitable for supporting absence determinations of most animal species. Reconnaissance surveys are not detection surveys. Failure to adequately complete detection surveys as part of this step of the SJMSCP vastly diminishes the likelihood of quantifying the initial nexus between project impacts and conservation value in Preserves, and hampers the ability of managers to react to emerging deficiencies in this nexus.

*Detection Surveys at New Preserves.*--Baseline surveys were to be completed upon acquisition of each new Preserve, including a focused search for Swainson’s hawk nests within 2 miles of the Preserve and additional focused surveys for SJMCP-covered species. The first evidence of baseline surveys having been completed was at four Preserves, as reported in the 2008 Annual Report. The 2008 Annual Report includes a list of wildlife species seen on the Rustan and Elworthy Preserves. However, no explanation is reported of how these species were detected, who performed the survey, on what date the surveys were completed, at what time the surveys were started, and for how long the surveys lasted and under what conditions. The reporting leaves the reader unable to ascertain whether many other species occurred on these Preserves but were undetected. I could find no evidence that the Baseline surveys at new Preserves qualified as detection surveys. Failure to adequately complete this step of the SJMSCP vastly diminishes the likelihood of quantifying the initial nexus between project impacts and conservation value in Preserves, and hampers the ability of managers to react to emerging deficiencies in this nexus.

*Biological effectiveness monitoring.*--Noriko Smallwood helped me to review the SJMSCP’s Annual Reports that are available online at <https://www.sjcog.org/DocumentCenter/Index/15>. Noriko entered data into electronic spreadsheets, which I later analyzed. We also found, in the process of reviewing the reports and processing and analyzing their data, that the Annual Reports reveal flawed study design, deficient implementation, and poor reporting, including poor quality control. Annual Reports



failed to include the results of biological effectiveness monitoring over the first five years of the certified SJMSCP. The Annual Report for 2012 is missing. The names of Preserves are inconsistent from Annual Report to Annual Report, so anyone attempting to compare survey results by year must carefully investigate the names of Preserves in order to record them consistently in database form. No trend analysis has been performed over 23 years of the SJMSCP. Because none of the Annual Reports compares biological effects monitoring among Preserves or among years, it is up to the reader to do so.

Reporting of survey results, and specifically of which wildlife species were detected, was in paragraph form for a decade, before switching to tables of results in 2015. Prior to 2015, some Annual Reports included counts of all wildlife species, whereas others included counts only of SJMSCP-covered species (2011). Annual Reports of 2008-2010 included counts of all species at certain Preserves and only covered species at other Preserves. Beginning in 2013, Annual Reports included counts of all species of wildlife, but the 2020 Annual Report only recorded the presence of those species detected by survey personnel. It was not until 2015 when all vertebrate species detections were recorded in Tables, although the referenced Table in the 2016 Annual Report does not actually appear in the Annual Report and was unavailable to us. It was not until 2015 when species counts and records of species detections qualified as comparable between years, as counts and records of presence numbered only fractions of what was reported after 2014, even including counts and records of presence of SJMSCP-covered species.

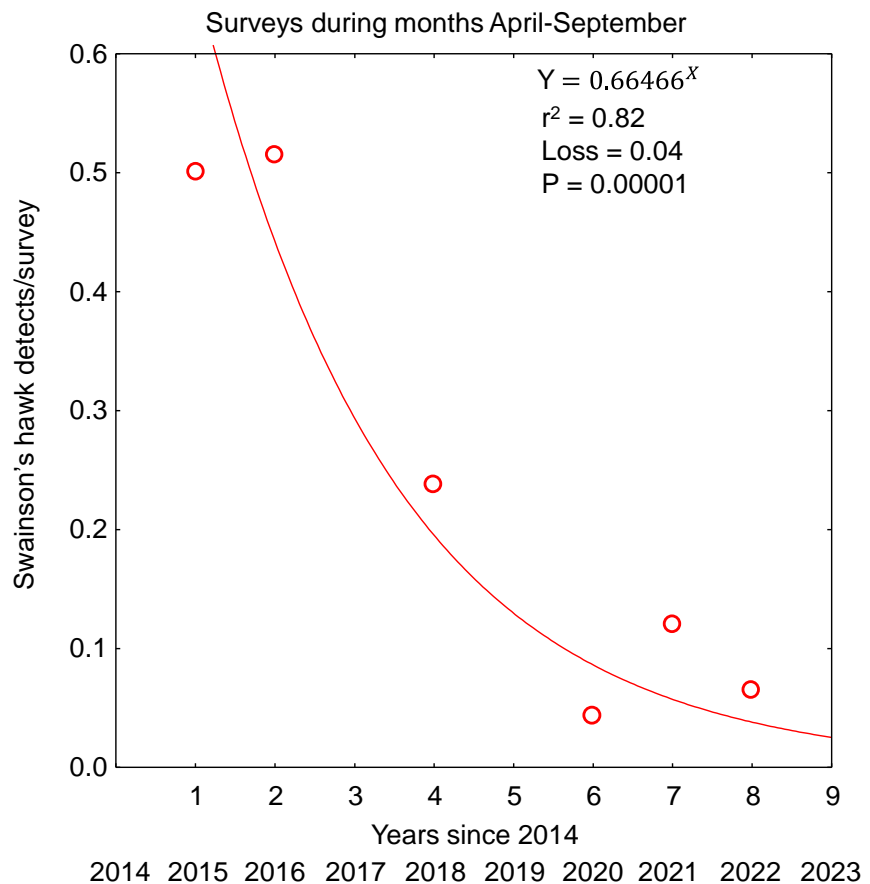
Other than the date of each survey, little of the survey methods is reported. Survey personnel are not identified. The survey method is characterized as “windshield surveys” on available roads that abut or cross the subject property, but there is no reported standard survey effort to adjust for variation in Preserve size, nor any standard on the minimum time that should be committed to each survey. No survey start time is reported. No survey duration is reported. No standards are reported about whether birds overflying the Preserve are counted, or whether animals seen just offsite are recorded, or if they are counted, then to what height above ground or distance from the Preserve’s boundary they are counted. The Annual Reports fail to report the most fundamental methodological details that the reader needs to interpret the monitoring results.

The windshield surveys for wildlife have been completed at different times of year from year to year, hence rendering inter-annual survey results incomparable for migratory species. One such migratory species is Swainson’s hawk, which has been the most important of the wildlife species covered by the SJMSCP. More than 63% of the surveys have been completed during times of the year when Swainson’s hawks are on migration to Mexico, which means that slightly more than a third of the surveys had any potential for detection of Swainson’s hawks. Therefore, I completed my analysis of Swainson’s hawk detections by first filtering out the surveys that would not have detected Swainson’s hawks while they were on migration.

According to the 2018 Annual Report, “Overall, the Swainson’s hawk population in San Joaquin County appears to be doing well, with a relatively high density of nesting pairs

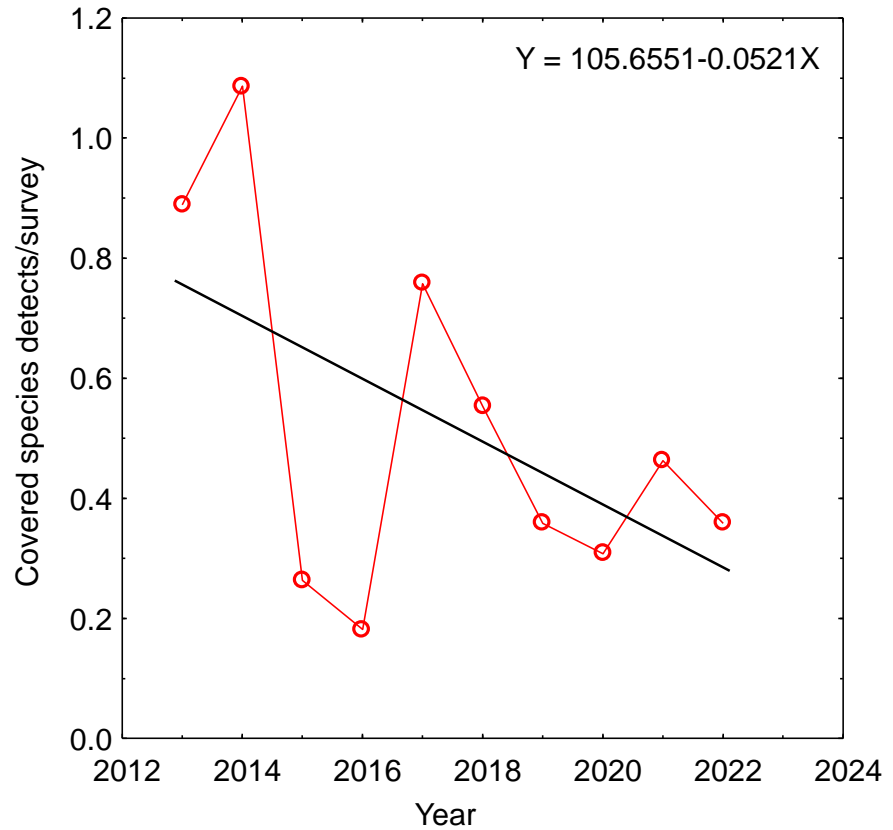
and a high rate of nest success.” According to the 2021 Annual Report, “the SJMSCP appears to be highly successful with respect to providing high quality habitat for Swainson’s hawk.” However, these conclusions were not found on any obvious comparison of performance metrics through time. After filtering the survey results as described above, I found evidence of an ongoing rapid decline of Swainson’s hawks among the SJMSCP Preserves (Figure 4). Another performance metric further supports this trend, as I will report below under Focused Surveys. In any case, the above-conclusions in the 2018 and 2021 Annual Reports are inaccurate and misleading. The SJMSCP has failed to conserve Swainson’s hawks, and appears to be contributing to its progress towards extirpation in the County.

**Figure 4.** *The number of Swainson’s hawk detections per survey during the months April through September has declined rapidly among Preserves since 2014. A nonlinear regression fit to the data indicates a recent slowing of the declines, but only after detections of the species have reached a very low level.*

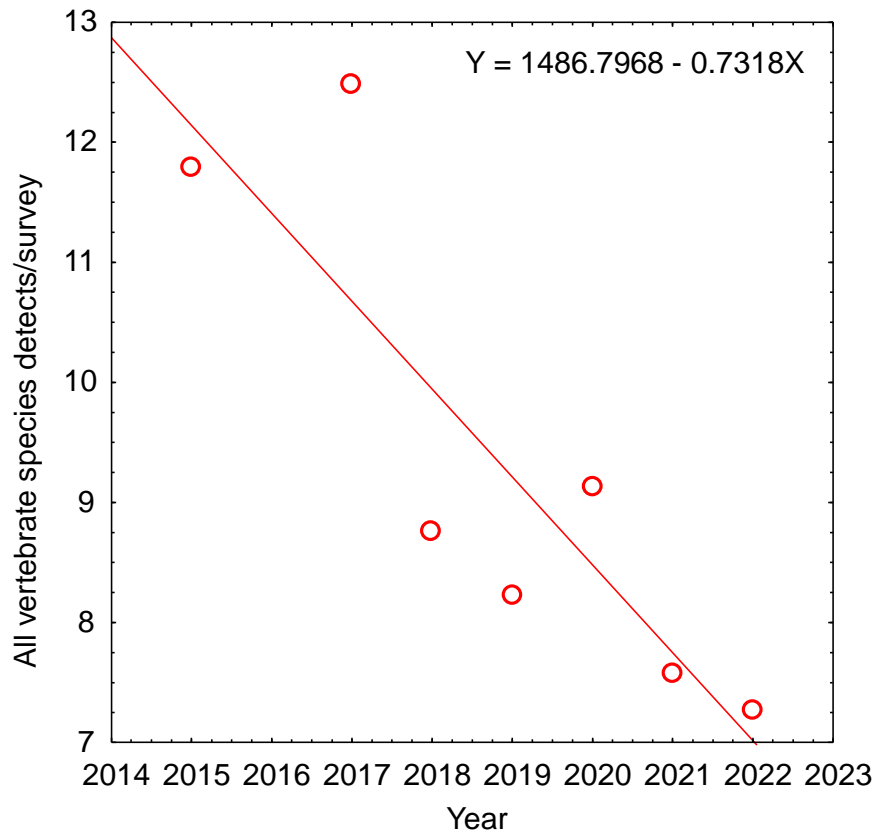


Not only does the evidence in the Annual Reports support the conclusion that the SJMSCP has failed to conserve Swainson’s hawks, but it also supports the conclusions that the SJMSCP is also failing to conserve other covered species (Figure 5). The covered species included in Figure 5 are those also identified in Table 2, as these also have other forms of special status. Additionally, the number of species detections of all vertebrate wildlife has been rapidly declining since 2014 (Figure 6). This decline has been a 42% loss of vertebrate species richness among the Preserves in only the last seven years. Considering the trends of Swainson’s hawk (Figure 4), covered species (Figure 5), and all vertebrate species (Figure 6), declines of these magnitudes are indicative of regional ecological collapse, the ecological, economic, and cultural significance of which are yet to be analyzed, but which are likely to be profound.

**Figure 5.** The number of covered species detections per survey among Preserves has declined since 2013, according to the data from biological effectiveness monitoring in the Annual Reports.



**Figure 6.** The number of all species detections per survey among Preserves has declined since 2015, according to the data from biological effectiveness monitoring in the Annual Reports. 2015 was when all species were first routinely recorded from the surveys.



*Focused Surveys.*--Focused surveys for Swainson's hawks are supposed to be completed every three years, including searches for nest sites within 2 miles of each Preserve. However, the first such survey was not completed until 2007, and another eight years went by before the second survey was completed. The fourth survey was completed in 2021, thus averaging one survey per 5.25 years. The reporting of the survey results has been inconsistent, but more importantly there has yet to be a scientifically sound analysis of the data. There has been no accounting of the increase in cumulative Preserve area in the comparisons of performance metrics such as the number of active nest sites and the number of successful nests. And no comparison has been made of the performance metric, the number of fledglings per successful nest.

The number of nests/100 acres has in fact been dangerously unstable, at one point nearing zero, and most recently again undergoing a rapid decline (Figure 7). At the same time, the number of fledglings per successful nest has steadily declined by 34% between 2007 and 2021 (Figure 8). At the present rate of decline, Swainson's hawks could be extirpated from San Joaquin County before the end of the SJMSCP's permit term.

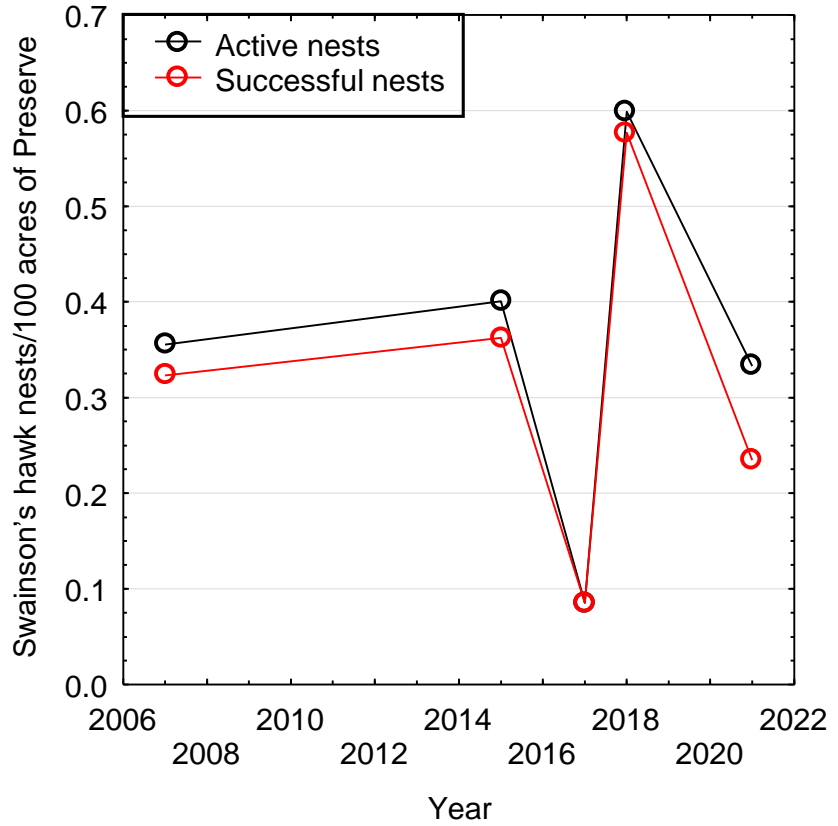
Without explanation for the 20-year delay, focused surveys for burrowing owls – the second most important covered species of the SJMSCP – did not begin until 2021. There is obviously no baseline against which to compare the findings of the 2021 survey. In 2021, the focused surveys detected only two pairs of breeding burrowing owls among all of the 16,667 acres of Preserves acquired by the time of the 2021 survey. Failure to adequately complete focused surveys as required by the SJMSCP hampers the ability of managers to react to emerging deficiencies in this nexus.

*Study Design and Implementation.*—The positive-sighting nature of the reporting complicates the processing and analysis of data, although none of the Annual Reports analyze the data, anyway. A more effective approach would have been to deliberately record 0 for all species that could potentially occur on a Preserve, but were not detected.

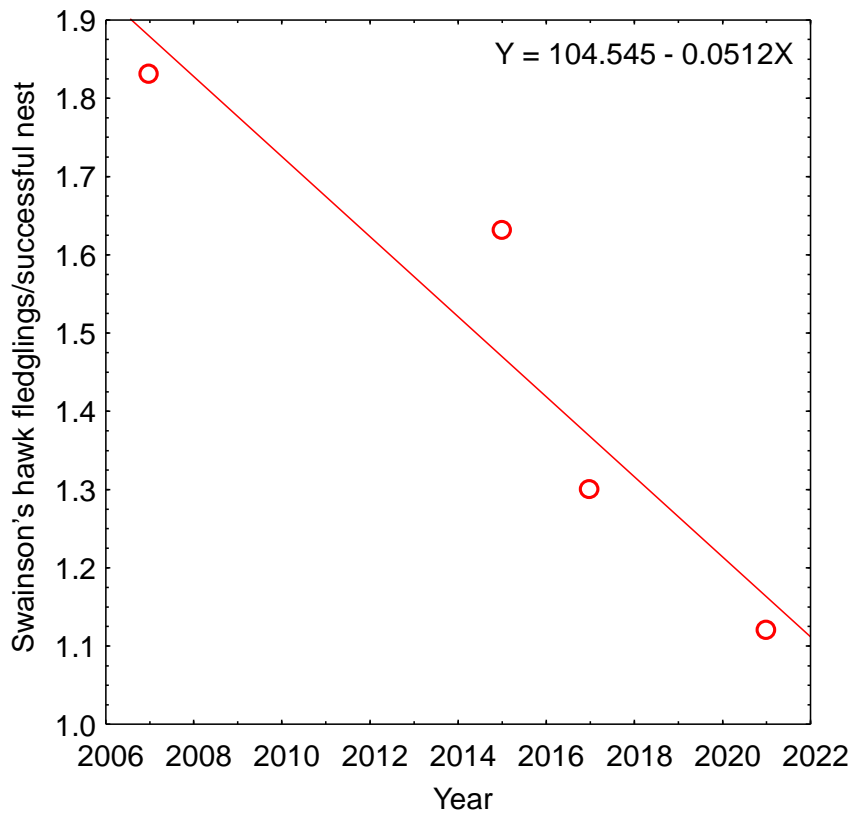
A randomized selection of sampling plots within the SJMSCP study area would have minimized potential bias in trend analysis of both the biological effectiveness monitoring and focused surveys. Instead, the SJMSCP implemented a survey design that grows and changes with the acquisitions and losses of Preserves. In other words, the sample size and the sampled area are always changing, which could change a performance metric positively or negatively for reasons having nothing to do with actual population trends.

Another trend indicative of a problem of implementation is the declining average number of acres monitored per Preserve (Figure 9). This decline reflects a trend towards acquisition of increasingly smaller properties as Preserves since the SJMSCP's inception. I do not know the reason for this trend, but it probably results from a diminishing pool of willing sellers of conservation easements in San Joaquin County. Acquiring smaller properties has likely lessened the probability of inclusion of covered species, which could bias analysis of inter-annual trends in species' detections/survey. More importantly, smaller properties are less capable of conserving covered species.

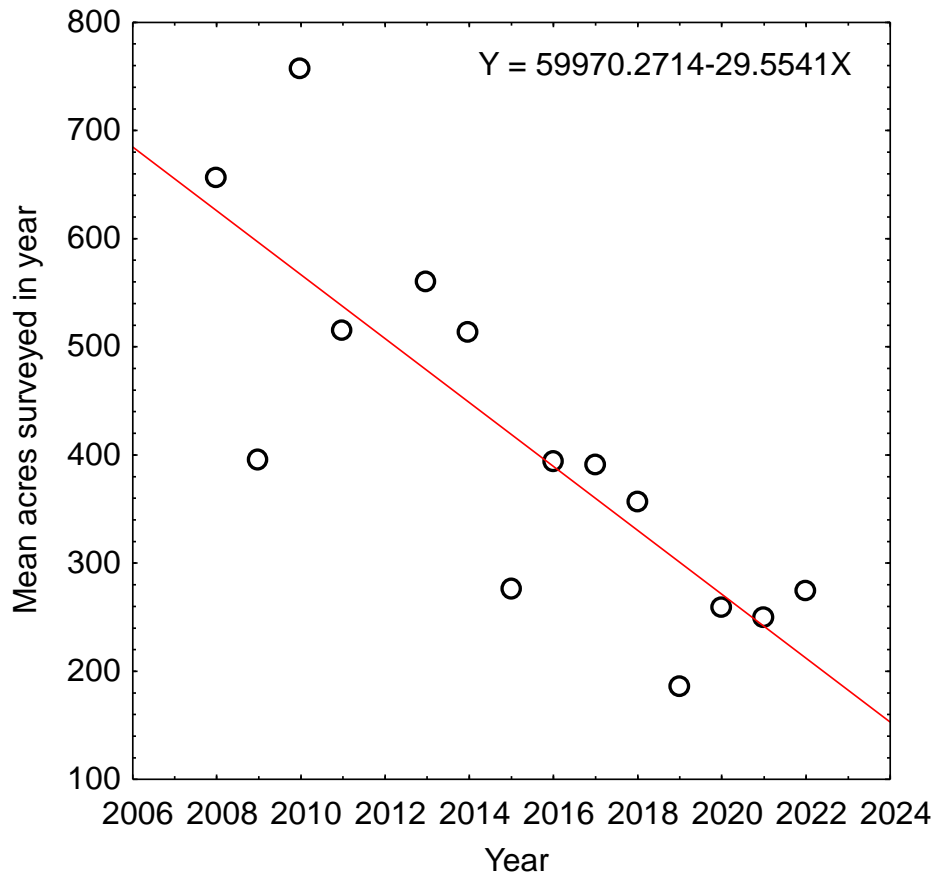
**Figure 7.** Focused surveys for Swainson's hawk nest sites within two miles of Preserves have revealed an unstable trend in nests per 100 acres of cumulative Preserves, and a dangerously low density in 2017.



**Figure 8.** Focused surveys for Swainson's hawk nest sites within two miles of Preserves have revealed a rapid decline in productivity between 2007 and 2021.



**Figure 9.** *The average number of acres monitored among Preserves has declined by year since 2008.*



Finally, although the SJMSCP’s monitoring data are fraught with errors and potential biases, they are the data the SJMSCP is supposed to rely upon as evidence of the SJMSCP’s performance. The absence of analysis of the data collected to date has prevented administrators of the SJMSCP from seeing (1) problems with study design, (2) problems with the data, (3) mismatches of biological resources between new project sites and Preserves, and (4) the alarming declines of covered species including Swainson’s hawks and burrowing owls. Unable to see the impacts of the SJMSCP and the ineffectiveness of its mitigation plan, managers have been unable to react to emerging deficiencies in the nexus sought by the SJMSCP. The SJMSCP has failed in its implementation, and it has proven ineffective at conserving its covered species; it should not be used to mitigate impacts to wildlife that occur on the project site.

**Requirement BIO-2: Recommendations of Biological Resources Analysis Report**

**Pre-construction Reptile Survey.** Contrary to the implication by Olberding (2021), preconstruction surveys for California glossy snake and San Joaquin coachwhip cannot support absence determinations of either species. Preconstruction, take-avoidance surveys are unequal to detection surveys, as they do not carry anywhere close to the same probability of detection. Detection surveys by qualified biologists need to be

completed as part of the CEQA review, and they need to inform preconstruction surveys about where members of the species are likely to be found.

**Pre-Construction Avian Survey.** Olberding (2021) characterizes the avian breeding season as February through August. However, the avian breeding season recognized by the California Department of Fish and Wildlife is now 1 February through 15 September.

I concur that preconstruction surveys for nesting birds should be implemented. However, having performed nest surveys for many bird species, I can attest to the difficulty of finding nest sites. Birds are highly skilled at hiding their nests, because with the exception of a few species, those birds that fail to hide their nests would fail in their nest attempts due to predation. Loggerhead shrikes and burrowing owls, as examples, make efforts to fool human observers into thinking the birds' nests are located where they are not. Locating nest sites of these species and most others requires multiple surveys over long time periods to note behavior patterns that can lead the observer to nest sites. This is why the breeding-season survey protocols require multiple surveys spaced through much of the breeding season, such as for burrowing owls (CDFW 2012). None of the available survey protocols for breeding birds recommend surveys to be completed within only a few days such as prior to construction, and this is because the notion that such a briefly conducted survey would detect more than a small fraction of nest sites is fantasy.

Preconstruction surveys should be performed for nesting birds, but not without first having completed detection surveys to inform where biologists can expect to find nests during their subsequent preconstruction surveys. Preconstruction surveys are only intended as last-minute, one-time salvage and rescue operations targeting readily detectable nests or individuals before they are crushed under heavy construction machinery. Because most special-status species are rare and cryptic, and because most bird species are expert at hiding their nests lest they get predated, most of their nests will not be detected by preconstruction surveys without prior support of detection surveys. For one thing, bird species vary in the timing of their nesting. For example, at a project site that I searched for nest attempts this past February through August, some bird species had already produced fledglings and some species began re-nesting before other bird species began nesting. Locating all of the nests on site would require more effort than is committed during preconstruction surveys. Furthermore, I found cavity-nesters to be easiest to locate, and ground-nesters the most difficult.

Regardless of whether construction timing avoids the nesting season or preconstruction surveys are completed, this measure would not reduce impacts to less-than-significant levels because the project would destroy the productive capacity of the birds that breed on the project site. Neither would the preconstruction surveys do anything to thwart or diminish the impacts of further habitat fragmentation.

Should the project go forward, I recommend that it be required of the preconstruction survey biologists to prepare a report of the methods and outcomes of preconstruction surveys. The report should be made available to the public.

**Burrowing Owl Surveys.** Contrary to the implication by Olberding (2021), preconstruction surveys for burrowing owls cannot support an absence determination. Preconstruction surveys are supposed to be preceded by protocol-level detection surveys (CDFW 2012). Note, also, that Olberding (2021) cites obsolete survey guidelines for burrowing owls. Furthermore, Olberding's (2021) recommendation for burrow destruction or passive relocation, no matter the behaviors of the associated burrowing owls, can be regarded as take, according to CDFW (2012).

Thank you for your attention,



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Shawn Smallwood, Ph.D.

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*Swainson's hawk perched on nest site on south side of Dos Reis Road next to the project site, 21 September 2023.*

# Kenneth Shawn Smallwood

## 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

- 762 professional reports, including:
  - 90 peer reviewed publications
  - 24 in non-reviewed proceedings
- 646 reports, declarations, posters and book reviews
- 8 in mass media outlets
- 92 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 foudns 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 interspersed 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. 2022. Utility-scale solar impacts to volant wildlife. *Journal of Wildlife Management*: e22216. <https://doi.org/10.1002/jwmg.22216>

Smallwood, K. S., and N. L. Smallwood. 2021. Breeding Density and Collision Mortality of Loggerhead Shrike (*Lanius ludovicianus*) in the Altamont Pass Wind Resource Area. *Diversity* 13, 540. <https://doi.org/10.3390/d13110540>.

Smallwood, K. S. 2020. USA wind energy-caused bat fatalities increase with shorter fatality search intervals. *Diversity* 12(98); <https://doi.org/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 – 71.
- 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](http://www.bit.ly/2v3cR9Q)
- Smallwood, K. S., L. Neher, and D. A. Bell. 2017. Turbine siting for raptors: an example from Repowering of the Altamont Pass Wind Resource Area. M. Perrow, Ed., *Wildlife and Wind Farms - Conflicts and Solutions*, Volume 2. Pelagic Publishing, Exeter, United Kingdom. [www.bit.ly/2v3cR9Q](http://www.bit.ly/2v3cR9Q)
- Johnson, D. H., S. R. Loss, K. S. Smallwood, W. P. Erickson. 2016. Avian fatalities at wind energy facilities in North America: A comparison of recent approaches. *Human-Wildlife Interactions* 10(1):7-18.
- Sadar, M. J., D. S.-M. Guzman, A. Mete, J. Foley, N. Stephenson, K. H. Rogers, C. Grosset, K. S. Smallwood, J. Shipman, A. Wells, S. D. White, D. A. Bell, and M. G. Hawkins. 2015. Mange Caused by a novel *Micnemidocoptes* mite in a Golden Eagle (*Aquila chrysaetos*). *Journal of Avian Medicine and Surgery* 29(3):231-237.
- Smallwood, K. S. 2015. Habitat fragmentation and corridors. Pages 84-101 in M. L. Morrison and H. A. Mathewson, Eds., *Wildlife habitat conservation: concepts, challenges, and solutions*. John Hopkins University Press, Baltimore, Maryland, USA.

# EXHIBIT B



Technical Consultation, Data Analysis and  
Litigation Support for the Environment

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October 4, 2023

Mike Lozeau  
Lozeau | Drury LLP  
1939 Harrison Street, Suite 150  
Oakland, CA 94618

**Subject:           Comments on the Municipal Code, Central Lathrop Specific Plan (CLSP) Phase 2  
Update, And Ashley Warehouse Project**

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Dear Mr. Lozeau,

We have reviewed the August 2023 Environmental Checklist (“Checklist”) for the Municipal Code, Central Lathrop Specific Plan (CLSP) Phase 2 Update, And Ashley Warehouse Project (“Project”) located in the City of Lathrop (“City”). The Project proposes to construct 1,486,607-square-feet (“SF”) of mixed-use space, including 1,352,347-SF of warehouse space, 110,000-SF of retail space, 24,000- SF of office space, and 2,046 parking spaces on the 89.82-acre site.

Our review concludes that the Checklist fails to adequately evaluate the Project’s health risk impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project may be underestimated and inadequately addressed. A subsequent Environmental Impact Report (“EIR”) should be prepared to adequately assess and mitigate the potential health risk impacts that the project may have on the environment.

## **Air Quality**

### **Diesel Particulate Matter Emissions Inadequately Evaluated**

The Checklist estimates that the maximum incremental cancer risk posed to nearby, existing sensitive receptors as a result of heavy-duty diesel trucks during Project operation would be 7.0 in one million, which would not exceed the San Joaquin Valley Air Pollution Control District (“SJVAPCD”) significance threshold of 20 in one million (see excerpt below) (p. 44, Table AIR-4).

**Table AIR-4: Summary of Maximum Health Risks**

| <i>RISK METRIC</i>                         | <i>MAXIMUM RISK</i> | <i>SIGNIFICANCE THRESHOLD</i> | <i>IS THRESHOLD EXCEEDED?</i> |
|--|---------------------|-------------------------------|-------------------------------|
| Residential Cancer Risk (70-year exposure) | 7.0                 | 20 per million                | No                            |
| Workplace Cancer Risk (40-year exposure)   | 1.3                 | 20 per million                | No                            |
| Chronic (non-cancer)                       | <0.01               | Hazard Index ≥1               | No                            |
| Acute (non-cancer)                         | 0                   | Hazard Index ≥1               | No                            |

SOURCES: AERMOD 11.2.0 (LAKES ENVIRONMENTAL SOFTWARE, 2023); AND HARP-2 AIR DISPERSION AND RISK TOOL.

However, the Checklist fails to conduct a construction health risk analysis (“HRA”) or discuss the toxic air contaminant (“TAC”) emissions associated with Project construction whatsoever. Consequently, the Checklist’s evaluation of the Project’s potential health risk impacts, as well as the subsequent less-than-significant impact conclusion, is incorrect for four reasons.

First, the Checklist fails to mention or provide the exposure assumptions for the HRA, such as the age sensitivity factors (“ASF”) or fraction of time at home (“FAH”) values whatsoever. Until the Checklist substantiates the use of correct exposure assumptions, the HRA may underestimate the cancer risk posed to nearby, existing sensitive receptors because of Project construction. Furthermore, according to the *Risk Assessment Guidelines* provided by the Office of Environmental Health Hazard Assessment (“OEHHA”), the organization responsible for providing guidance on conducting HRAs in California, the Checklist’s models should have used the following equation:<sup>1</sup>

**A. Equation 8.2.4 A:  $RISK_{inh-res} = DOSE_{air} \times CPF \times ASF \times ED/AT \times FAH$**

- 7.  $RISK_{inh-res}$  = Residential inhalation cancer risk
- 8.  $DOSE_{air}$  = Daily inhalation dose (mg/kg-day)
- 9. CPF = Inhalation cancer potency factor (mg/kg-day<sup>-1</sup>)
- 10. ASF = Age sensitivity factor for a specified age group (unitless)
- 11. ED = Exposure duration (in years) for a specified age group
- 12. AT = Averaging time for lifetime cancer risk (years)
- 13. FAH = Fraction of time spent at home (unitless)

The Checklist fails to include a dose and risk equation to calculate the Project’s construction cancer risks. As such, we cannot verify that the Checklist’s HRA is accurate, and the Project’s cancer risks may be underestimated.

<sup>1</sup> “Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, available at: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf>, p. 8-7 Equation 8.2.4.

Second, by failing to prepare a quantified construction HRA, the Checklist is inconsistent with CEQA's requirement to correlate the increase in emissions that the Project would generate to the adverse impacts on human health caused by those emissions.<sup>2</sup> This is incorrect, as construction of the proposed Project will produce DPM emissions through the exhaust stacks of construction equipment over the total construction duration. However, the Checklist fails to evaluate the potential Project-generated TACs or indicate the concentrations at which such pollutants would trigger adverse health effects. Without making a reasonable effort to connect the Project's construction-related TAC emissions to the potential health risks posed to nearby receptors, the Checklist is inconsistent with CEQA's requirement to correlate the increase in emissions generated by the Project with the potential adverse impacts on human health.

Third, the State of California Department of Justice recommends that warehouse projects prepare a quantitative HRA pursuant to OEHHA, the organization responsible for providing guidance on conducting HRAs in California, as well as local air district guidelines.<sup>3</sup> OEHHA released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments* in February 2015. This guidance document describes the types of projects that warrant the preparation of an HRA. Specifically, OEHHA recommends that all short-term projects lasting at least 2 months assess cancer risks.<sup>4</sup> Furthermore, according to OEHHA:

“Exposure from projects lasting more than 6 months should be evaluated for the duration of the project. In all cases, for assessing risk to residential receptors, the exposure should be assumed to start in the third trimester to allow for the use of the ASFs (OEHHA, 2009).”<sup>5</sup>

As the Project's anticipated construction duration likely exceeds the 2-month and 6-month requirements set forth by OEHHA, construction of the Project meets the threshold warranting a quantified HRA under OEHHA guidance and should be evaluated for the entire construction period. These recommendations reflect the most recent state health risk policies, and consequently, a subsequent EIR should be prepared to include an analysis of health risk impacts posed to nearby sensitive receptors from Project-generated DPM emissions.

Fourth, while the Checklist includes an HRA evaluating the health risk impacts to nearby, existing receptors as a result of Project operation, the HRA fails to evaluate the combined lifetime cancer risk to nearby, existing receptors as a result of Project construction and operation together. According to OEHHA guidance “the excess cancer risk is calculated separately for each age grouping and then

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<sup>2</sup> “Sierra Club v. County of Fresno.” Supreme Court of California, December 2018, *available at*: <https://ceqaportal.org/decisions/1907/Sierra%20Club%20v.%20County%20of%20Fresno.pdf>.

<sup>3</sup> “Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act.” State of California Department of Justice, *available at*: <https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/warehouse-best-practices.pdf>, p. 6.

<sup>4</sup> “Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, *available at*: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf>, p. 8-18.

<sup>5</sup> “Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, *available at*: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf>, p. 8-18.

summed to yield cancer risk at the receptor location.”<sup>6</sup> However, the Project’s HRA fails to sum each age bin to evaluate the total cancer risk over the course of the Project’s total construction and operation. This is incorrect, and an updated analysis should quantify the entirety of the Project’s construction and operational health risks together and sum them to compare to the SJVAPCD threshold of 20 in one million, as referenced by the Checklist (p. 44, Table AIR-4).

## Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,



Matt Hagemann, P.G., C.Hg.



Paul E. Rosenfeld, Ph.D.

Attachment A: Paul Rosenfeld CV  
Attachment B: Matt Hagemann CV

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<sup>6</sup> “Guidance Manual for preparation of Health Risk Assessments.” OEHHA, February 2015, *available at*: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf> p. 8-4



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## **Matthew F. Hagemann, P.G., C.Hg., QSD, QSP**

**Geologic and Hydrogeologic Characterization  
Investigation and Remediation Strategies  
Litigation Support and Testifying Expert  
Industrial Stormwater Compliance  
CEQA Review**

### **Education:**

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

### **Professional Certifications:**

California Professional Geologist

California Certified Hydrogeologist

Qualified SWPPP Developer and Practitioner

### **Professional Experience:**

Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);



- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

**Senior Regulatory and Litigation Support Analyst:**

With SWAPE, Matt’s responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 100 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt’s duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

**Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

**Hydrogeology:**

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nationwide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

### **Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, *Oxygenates in Water: Critical Information and Research Needs*.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

principles into the policy-making process.

- Established national protocol for the peer review of scientific documents.

### **Geology:**

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

### **Teaching:**

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

### **Invited Testimony, Reports, Papers and Presentations:**

**Hagemann, M.F.**, 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

**Hagemann, M.F.**, 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

**Hagemann, M.F.**, 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

**Hagemann, M.F.**, 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

**Hagemann, M.F.**, 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

**Hagemann, M.F.**, 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

**Hagemann, M.F.**, 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

**Hagemann, M.F.**, 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

**Hagemann, M.F.**, 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

**Hagemann, M.F.**, 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

**Hagemann, M.F.**, 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

**Hagemann, M.F.**, 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

**Hagemann, M.F.**, 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

**Hagemann, M.F.**, 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

**Hagemann, M.F.**, and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

**Hagemann, M.F.**, 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

**Hagemann, M.F.**, 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

**Hagemann, M.F.**, and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

**Hagemann, M.F.**, Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

**Hagemann, M. F.**, Fukunaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

**Hagemann, M.F.**, 1994. Groundwater Characterization and Clean up at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

**Hagemann, M.F.** and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

**Hagemann, M.F.**, 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

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**Hagemann, M.F.**, 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

**Other Experience:**

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.



Technical Consultation, Data Analysis and  
Litigation Support for the Environment

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## ***Paul Rosenfeld, Ph.D.***

*Principal Environmental Chemist*

**Chemical Fate and Transport & Air Dispersion Modeling**

**Risk Assessment & Remediation Specialist**

### **Education**

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Focus on wastewater treatment.

### **Professional Experience**

Dr. Rosenfeld has over 25 years of experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities. Dr. Rosenfeld has also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, creosote, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military sources.



## **Professional History:**

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner  
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)  
UCLA School of Public Health; 2003 to 2006; Adjunct Professor  
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator  
UCLA Institute of the Environment, 2001-2002; Research Associate  
Komex H<sub>2</sub>O Science, 2001 to 2003; Senior Remediation Scientist  
National Groundwater Association, 2002-2004; Lecturer  
San Diego State University, 1999-2001; Adjunct Professor  
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager  
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager  
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor  
King County, Seattle, 1996 – 1999; Scientist  
James River Corp., Washington, 1995-96; Scientist  
Big Creek Lumber, Davenport, California, 1995; Scientist  
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist  
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

## **Publications:**

**Rosenfeld P. E.**, Spaeth K., Hallman R., Bressler R., Smith, G., (2022) Cancer Risk and Diesel Exhaust Exposure Among Railroad Workers. *Water Air Soil Pollution*. **233**, 171.

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health*. 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P.**, (2015) Modeling the Effect of Refinery Emission On Residential Property Value. *Journal of Real Estate Research*. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.**, Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermol and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

**Rosenfeld, P.E.** & Feng, L. (2011). *The Risks of Hazardous Waste*. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries*. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution*, 123 (17), 319-327.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

**Rosenfeld, P.E.**, J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

**Rosenfeld, P. E.**, M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities*. Boston Massachusetts: Elsevier Publishing

**Rosenfeld, P.E.**, and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

**Rosenfeld P. E.**, J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

**Rosenfeld, P.E.**, and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

**Rosenfeld, P.E.**, and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49( 9), 171-178.

**Rosenfeld, P. E.**, Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

**Rosenfeld, P.E.**, Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office, Publications Clearinghouse (MS-6)*, Sacramento, CA Publication #442-02-008.

**Rosenfeld, P.E.**, and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

**Rosenfeld, P.E.**, and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality*. 29, 1662-1668.

**Rosenfeld, P.E.**, C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

**Rosenfeld, P.E.**, and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

**Rosenfeld, P.E.**, and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld**. (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

**Rosenfeld, P. E.** (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

**Rosenfeld, P. E.** (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

**Rosenfeld, P. E.** (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

**Rosenfeld, P. E.** (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

**Rosenfeld, P. E.** (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

## **Presentations:**

**Rosenfeld, P.E.**, "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

**Rosenfeld, P.E.**, Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society*. Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

**Rosenfeld, P.E.** (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

**Rosenfeld, P.E.** (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

**Rosenfeld, P. E.** (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. *The 23<sup>rd</sup> Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld P. E.** (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

**Rosenfeld P. E.** (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florida, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

**Paul Rosenfeld Ph.D.** (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

**Paul Rosenfeld Ph.D.** (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

**Paul Rosenfeld Ph.D.** (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

**Paul Rosenfeld Ph.D.** (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

**Paul Rosenfeld Ph.D.** (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

**Paul Rosenfeld Ph.D.** (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld Ph.D.** (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

**Paul Rosenfeld, Ph.D.** (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

**Paul Rosenfeld, Ph.D.** (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

**Rosenfeld, P. E.**, Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference Orlando, FL*.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants..* Lecture conducted from Hyatt Regency Phoenix Arizona.

**Paul Rosenfeld, Ph.D.** (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

**Paul Rosenfeld, Ph.D.** (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E.** and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E.** and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E.** and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

**Rosenfeld, P.E.** and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

**Rosenfeld, P.E.** (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

**Rosenfeld, P.E.** (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

**Rosenfeld, P.E.** (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E.**, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.**, and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

**Rosenfeld, P.E.,** C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

**Rosenfeld, P.E.,** C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

**Rosenfeld, P.E.,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.,** C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

## **Teaching Experience:**

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

## **Academic Grants Awarded:**

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

## **Deposition and/or Trial Testimony:**

In the Superior Court of the State of California, County of San Bernardino  
Billy Wildrick, Plaintiff vs. BNSF Railway Company  
Case No. CIVDS1711810  
Rosenfeld Deposition 10-17-2022

In the State Court of Bibb County, State of Georgia  
Richard Hutcherson, Plaintiff vs Norfolk Southern Railway Company  
Case No. 10-SCCV-092007  
Rosenfeld Deposition 10-6-2022

In the Civil District Court of the Parish of Orleans, State of Louisiana  
Millard Clark, Plaintiff vs. Dixie Carriers, Inc. et al.  
Case No. 2020-03891  
Rosenfeld Deposition 9-15-2022

In The Circuit Court of Livingston County, State of Missouri, Circuit Civil Division  
Shirley Ralls, Plaintiff vs. Canadian Pacific Railway and Soo Line Railroad  
Case No. 18-LV-CC0020  
Rosenfeld Deposition 9-7-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division  
Jonny C. Daniels, Plaintiff vs. CSX Transportation Inc.  
Case No. 20-CA-5502  
Rosenfeld Deposition 9-1-2022

In The Circuit Court of St. Louis County, State of Missouri  
Kieth Luke et. al. Plaintiff vs. Monsanto Company et. al.  
Case No. 19SL-CC03191  
Rosenfeld Deposition 8-25-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division  
Jeffery S. Lamotte, Plaintiff vs. CSX Transportation Inc.  
Case No. NO. 20-CA-0049  
Rosenfeld Deposition 8-22-2022

In State of Minnesota District Court, County of St. Louis Sixth Judicial District  
Greg Bean, Plaintiff vs. Soo Line Railroad Company  
Case No. 69-DU-CV-21-760  
Rosenfeld Deposition 8-17-2022

In United States District Court Western District of Washington at Tacoma, Washington  
John D. Fitzgerald Plaintiff vs. BNSF  
Case No. 3:21-cv-05288-RJB  
Rosenfeld Deposition 8-11-2022

In Circuit Court of the Sixth Judicial Circuit, Macon Illinois  
Rocky Bennyhoff Plaintiff vs. Norfolk Southern  
Case No. 20-L-56  
Rosenfeld Deposition 8-3-2022

In Court of Common Pleas, Hamilton County Ohio  
Joe Briggins Plaintiff vs. CSX  
Case No. A2004464  
Rosenfeld Deposition 6-17-2022

In the Superior Court of the State of California, County of Kern  
George LaFazia vs. BNSF Railway Company.  
Case No. BCV-19-103087  
Rosenfeld Deposition 5-17-2022

In the Circuit Court of Cook County Illinois  
Bobby Earles vs. Penn Central et. al.  
Case No. 2020-L-000550  
Rosenfeld Deposition 4-16-2022

In United States District Court Easter District of Florida  
Albert Hartman Plaintiff vs. Illinois Central  
Case No. 2:20-cv-1633  
Rosenfeld Deposition 4-4-2022

In the Circuit Court of the 4<sup>th</sup> Judicial Circuit, in and For Duval County, Florida  
Barbara Steele vs. CSX Transportation  
Case No.16-219-Ca-008796  
Rosenfeld Deposition 3-15-2022

In United States District Court Easter District of New York  
Romano et al. vs. Northrup Grumman Corporation  
Case No. 16-cv-5760  
Rosenfeld Deposition 3-10-2022

In the Circuit Court of Cook County Illinois  
Linda Benjamin vs. Illinois Central  
Case No. No. 2019 L 007599  
Rosenfeld Deposition 1-26-2022

In the Circuit Court of Cook County Illinois  
Donald Smith vs. Illinois Central  
Case No. No. 2019 L 003426  
Rosenfeld Deposition 1-24-2022

In the Circuit Court of Cook County Illinois  
Jan Holeman vs. BNSF  
Case No. 2019 L 000675  
Rosenfeld Deposition 1-18-2022

In the State Court of Bibb County State of Georgia  
Dwayne B. Garrett vs. Norfolk Southern  
Case No. 20-SCCV-091232  
Rosenfeld Deposition 11-10-2021



In the Circuit Court of Cook County Illinois  
Joseph Ruepke vs. BNSF  
Case No. 2019 L 007730  
Rosenfeld Deposition 11-5-2021

In the United States District Court For the District of Nebraska  
Steven Gillett vs. BNSF  
Case No. 4:20-cv-03120  
Rosenfeld Deposition 10-28-2021

In the Montana Thirteenth District Court of Yellowstone County  
James Eadus vs. Soo Line Railroad and BNSF  
Case No. DV 19-1056  
Rosenfeld Deposition 10-21-2021

In the Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois  
Martha Custer et al.cvs. Cerro Flow Products, Inc.  
Case No. 0i9-L-2295  
Rosenfeld Deposition 5-14-2021  
Trial October 8-4-2021

In the Circuit Court of Cook County Illinois  
Joseph Rafferty vs. Consolidated Rail Corporation and National Railroad Passenger Corporation d/b/a  
AMTRAK,  
Case No. 18-L-6845  
Rosenfeld Deposition 6-28-2021

In the United States District Court For the Northern District of Illinois  
Theresa Romcoe vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA Rail  
Case No. 17-cv-8517  
Rosenfeld Deposition 5-25-2021

In the Superior Court of the State of Arizona In and For the Cunty of Maricopa  
Mary Tryon et al. vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc.  
Case No. CV20127-094749  
Rosenfeld Deposition 5-7-2021

In the United States District Court for the Eastern District of Texas Beaumont Division  
Robinson, Jeremy et al vs. CNA Insurance Company et al.  
Case No. 1:17-cv-000508  
Rosenfeld Deposition 3-25-2021

In the Superior Court of the State of California, County of San Bernardino  
Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company.  
Case No. 1720288  
Rosenfeld Deposition 2-23-2021

In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse  
Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al.  
Case No. 18STCV01162  
Rosenfeld Deposition 12-23-2020

In the Circuit Court of Jackson County, Missouri  
Karen Cornwell, Plaintiff, vs. Marathon Petroleum, LP, Defendant.  
Case No. 1716-CV10006  
Rosenfeld Deposition 8-30-2019

In the United States District Court For The District of New Jersey  
Duarte et al, Plaintiffs, vs. United States Metals Refining Company et. al. Defendant.  
Case No. 2:17-cv-01624-ES-SCM  
Rosenfeld Deposition 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division  
M/T Carla Maersk vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS “Conti Perdido” Defendant.  
Case No. 3:15-CV-00106 consolidated with 3:15-CV-00237  
Rosenfeld Deposition 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica  
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants  
Case No. BC615636  
Rosenfeld Deposition 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica  
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants  
Case No. BC646857  
Rosenfeld Deposition 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado  
Bells et al. Plaintiffs vs. The 3M Company et al., Defendants  
Case No. 1:16-cv-02531-RBJ  
Rosenfeld Deposition 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112<sup>th</sup> Judicial District  
Phillip Bales et al., Plaintiff vs. Dow Agrosiences, LLC, et al., Defendants  
Cause No. 1923  
Rosenfeld Deposition 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa  
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants  
Cause No. C12-01481  
Rosenfeld Deposition 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois  
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants  
Case No.: No. 0i9-L-2295  
Rosenfeld Deposition 8-23-2017

In United States District Court For The Southern District of Mississippi  
Guy Manuel vs. The BP Exploration et al., Defendants  
Case No. 1:19-cv-00315-RHW  
Rosenfeld Deposition 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles  
Warrn Gilbert and Penny Gilbert, Plaintiff vs. BMW of North America LLC  
Case No. LC102019 (c/w BC582154)  
Rosenfeld Deposition 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division  
Brenda J. Cooper, et al., Plaintiffs, vs. Meritor Inc., et al., Defendants  
Case No. 4:16-cv-52-DMB-JVM  
Rosenfeld Deposition July 2017

In The Superior Court of the State of Washington, County of Snohomish  
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants  
Case No. 13-2-03987-5  
Rosenfeld Deposition, February 2017  
Trial March 2017

In The Superior Court of the State of California, County of Alameda  
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants  
Case No. RG14711115  
Rosenfeld Deposition September 2015

In The Iowa District Court In And For Poweshiek County  
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants  
Case No. LALA002187  
Rosenfeld Deposition August 2015

In The Circuit Court of Ohio County, West Virginia  
Robert Andrews, et al. v. Antero, et al.  
Civil Action No. 14-C-30000  
Rosenfeld Deposition June 2015

In The Iowa District Court for Muscatine County  
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant  
Case No. 4980  
Rosenfeld Deposition May 2015

In the Circuit Court of the 17<sup>th</sup> Judicial Circuit, in and For Broward County, Florida  
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.  
Case No. CACE07030358 (26)  
Rosenfeld Deposition December 2014

In the County Court of Dallas County Texas  
Lisa Parr et al, Plaintiff, vs. Aruba et al, Defendant.  
Case No. cc-11-01650-E  
Rosenfeld Deposition: March and September 2013  
Rosenfeld Trial April 2014

In the Court of Common Pleas of Tuscarawas County Ohio  
John Michael Abicht, et al., Plaintiffs, vs. Republic Services, Inc., et al., Defendants  
Case No. 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)  
Rosenfeld Deposition October 2012

In the United States District Court for the Middle District of Alabama, Northern Division  
James K. Benefield, et al., Plaintiffs, vs. International Paper Company, Defendant.  
Civil Action No. 2:09-cv-232-WHA-TFM  
Rosenfeld Deposition July 2010, June 2011

In the Circuit Court of Jefferson County Alabama  
Jaeonette Moss Anthony, et al., Plaintiffs, vs. Drummond Company Inc., et al., Defendants  
Civil Action No. CV 2008-2076  
Rosenfeld Deposition September 2010

In the United States District Court, Western District Lafayette Division  
Ackle et al., Plaintiffs, vs. Citgo Petroleum Corporation, et al., Defendants.  
Case No. 2:07CV1052  
Rosenfeld Deposition July 2009

# EXHIBIT C



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September 13, 2023

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**Re: Comment on Planning Commission Agenda Items No. 8.3 Regarding the Ashley Furniture Project (Conditional Use Permit No. CUP-23-08; Site Plan Review No. SPR 23-09)**

Dear Mr. Caguiat and Honorable Members of the Planning Commission:

I am writing on behalf of Laborers' International Union of North America, Local Union No. 73 ("LIUNA") regarding the proposed Ashley Furniture Project proposed to be located at the northwest corner of Dos Reis Rd and Manthey Road. The Planning Commission staff have determined that the project is exempt from the requirement for preparation of environmental documents pursuant to California Environmental Quality Act ("CEQA") Guidelines, Section 15183 and Public Resources Code § 21083.3. However, after reviewing the Environmental Checklist and relevant appendices prepared for the Project, and the 2022 General Plan Update EIR that the Project relies upon, we conclude that the Project does not meet the requirements for an exemption under CEQA Guideline § 15183 and PRC § 21083.3. LIUNA respectfully requests that the Planning Commission not recommend approval of each of the agenda items addressed by the proposed exemption and, in particular, the proposed Ashley Furniture Project, and instead request staff to prepare the necessary environmental documents under CEQA.

## I. PROJECT DESCRIPTION

The Project proposes to construct and operate a 1,486,607 square foot industrial building including a mix of retail, office/call center, and warehouse and distribution uses. About 110,000 square feet would be dedicated to retail use, 24,000 square feet to office and call-center uses, and 1,352,347 square feet to warehouse and distribution center uses.

The Project proposes to construct approximately 2,046 parking spaces throughout the development site, with 942 spaces for passenger vehicles and 1,104 spaces for truck trailer parking. The Project expects to generate 2,798 daily passenger vehicle trips, including 203 a.m. peak hour trips (124 inbound, 79 outbound) and 255 p.m. peak hour trips (110 inbound, 145 outbound) for passenger vehicles. Another 680 daily truck trips also are expected, including 95 a.m. peak hour trips and 45 p.m. peak hour trips.

## II. LEGAL STANDARD

To achieve its objectives of environmental protection, CEQA has a three-tiered structure. 14 CCR § 15002(k); *Committee to Save the Hollywoodland Specific Plan v. City of Los Angeles* (2008) 161 Cal.App.4th 1168, 1185-86 (“*Hollywoodland*”). First, if a project falls into an exempt category, or it can be seen with certainty that the activity in question will not have a significant effect on the environment, no further agency evaluation is required. *Id.* Second, if there is a possibility the project will have a significant effect on the environment, the agency must perform an initial threshold study. *Id.*; 14 CCR § 15063(a). If the study indicates that there is no substantial evidence that the project or any of its aspects may cause a significant effect on the environment the agency may issue a negative declaration. *Id.*; 14 CCR §§ 15063(b)(2), 15070. Finally, if the project will have a significant effect on the environment, an environmental impact report (“EIR”) is required. *Id.*

Here, since the City purports to exempt the Project from CEQA entirely, the first step of the CEQA process applies. “Exemptions to CEQA are narrowly construed and ‘[e]xemption categories are not to be expanded beyond the reasonable scope of their statutory language.” *Mountain Lion Foundation v. Fish & Game Com.* (1997) 16 Cal.4th 105, 125. The determination as to the appropriate scope of an exemption is a question of law subject to independent, or de novo, review. *San Lorenzo Valley Community Advocates for Responsible Education v. San Lorenzo Valley Unified School Dist.*, (2006) 139 Cal. App. 4th 1356, 1375 (“[Q]uestions of interpretation or application of the requirements of CEQA are matters of law. Thus, for example, interpreting the scope of a CEQA exemption presents ‘a question of law, subject to de novo review by this court.’”)

Here, the City proposes that the Project is exempt from CEQA review under Section 15183 and PRC § 21083.3. However, as discussed below, the use of these streamlining provisions is improper, and instead, a full CEQA analysis, such as an EIR, must be prepared for this Project.

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### **III. DISCUSSION**

#### **a. The City Incorrectly Applied CEQA's Section 15183 Categorical Exemption to the Project and Thus a Full CEQA Analysis is Required.**

Section 15183 of the California Environmental Quality Act allows a project to avoid environmental review if it is "consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified . . . **except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site.**" 14 CCR 15183 (emphasis added). See PRC § 21083.3(b). The intention of this section is to "streamline[]" CEQA review for projects and avoid the preparation of repetitive documents. While the City refers to these provisions as exemptions from CEQA, environmental review is still required for various types of impacts, including those "peculiar to the project or parcel on which the project would be located," those which "were not analyzed as significant effects in a prior EIR," "are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR," or "[a]re previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR."

Section (f) of section 15183 states that a Project's environmental effects are not peculiar to a project if "uniformly applied development policies or standards have been previously adopted" which serve to mitigate environmental impacts, "unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect." The standard set forth by the statute for this analysis is substantial evidence.

Here, there is substantial evidence demonstrating that the Project will have significant impacts which were not addressed in the EIR prepared for the 2022 General Plan Update. Section 15183 therefore does not apply, and the City must prepare appropriate CEQA documents for this Project.

#### **b. The City Must Prepare a Statement of Overriding Considerations With Regard to This Project.**

The 2022 General Plan Update concluded that several of the impacts identified as a result of the General Plan Update project were significant and unavoidable. These impacts included agricultural resources, air quality, greenhouse gas, and traffic noise impacts. In the Environmental Checklist prepared for the Project, the City acknowledges these significant and unavoidable impacts, but states that:

Impacts from buildout of the General Plan including cumulative impacts associated with development and buildout of the CLSP Phase 2 plan area

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and the warehouse Project site, as proposed, were fully addressed in the General Plan EIR (State Clearinghouse No. 2021100139), and implementation of the proposed project would not result in any new or altered impacts beyond those addressed in the General Plan EIR.

Env't Checklist, p. 13. Similar statements are repeated for each of the specific unavoidable significant impacts. This conclusion does not, however, address all of the City's obligations to grapple with acknowledged significant and unavoidable cumulative impacts.

In the case of *Communities for a Better Environment v. Cal. Resources Agency*, the court of appeal held that, although tiering may allow a later project to rely on the environmental analysis contained in a prior program-level EIR, that procedure does not relieve the agency of acknowledging the significant and unavoidable impacts and reconsidering its statement of overriding considerations. As the Court explained:

The section appears to allow an agency, in approving a later project that has significant unavoidable impacts, to forego making a statement of overriding considerations *specifically tied to that project*. This is contrary to CEQA law. CEQA section 21094, subdivision (d) requires agencies that approve a later project to comply with CEQA section 21081. Under CEQA section 21081, an agency approving a project with significant environmental effects must find that each effect will be mitigated or avoided, or "that *specific* overriding economic, legal, social, technological, or other benefits of *the project* outweigh the ... effect[] ..." <sup>65</sup> The requirement of a statement of overriding considerations is central to CEQA's role as a public accountability statute; it requires public officials, in approving environmentally detrimental projects, to justify their decisions based on counterbalancing social, economic or other benefits, and to point to substantial evidence in support. <sup>66</sup> Under Guidelines section 15152(f)(3)(C), however, an agency apparently could adopt one statement of overriding considerations for a prior, more general EIR, and then avoid future political accountability by approving later, more specific projects with significant unavoidable impacts pursuant to the prior EIR and statement of overriding considerations. Even though a prior EIR's *analysis* of environmental effects may be subject to being incorporated in a later EIR for a later, more specific project, the responsible public officials must still go on the record and explain specifically why they are approving the later project despite *its* significant unavoidable impacts.

*Communities for a Better Env't v. California Res. Agency*, 103 Cal. App. 4th 98, 124–25, 126 Cal. Rptr. 2d 441 (2002), *as modified* (Nov. 21, 2002), and *disapproved of on other grounds by Berkeley Hillside Pres. v. City of Berkeley*, 60 Cal. 4th 1086, 343 P.3d 834 (2015).



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The same reasoning applies to the implementation of Pub. Res. Code § 21083.3 and 14 Cal. Admin. Code § 15183. The Project, based on its reliance on the 2022 General Plan Update EIR, will have cumulative impacts on agricultural resources, air quality, greenhouse gas emissions, and traffic noise. Although sections 21083 and 15183 provide for streamlining of the environmental review of a subsequent project, neither section relieves the City from its obligation to make a statement of overriding considerations for the Project. PRC § 21081. Prior to recommending the Project and applying the streamlining provisions, the Planning Commission should prepare a statement of overriding considerations supported by substantial evidence and which evaluates whether any additional feasible mitigation measures applicable to this specific project should be required in order to address the acknowledged cumulative impacts.

**c. The Project Will Have Project-Specific Significant Effects Which Were Not Addressed in the 2022 General Plan Update EIR.**

LIUNA is concerned that a number of significant environmental impacts peculiar to the Project were not addressed in the 2022 General Plan Update EIR. As a result, Pub. Res. Code § 21083.3 and 14 Cal. Admin. Code § 15183 do not apply and either a mitigated negative declaration or EIR must be prepared to address these unanalyzed impacts.

**i. Biological Resources**

According to the 2022 General Plan EIR, the federally-listed, endangered valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) did not occur within one-mile of the planning area. GP EIR, p. 3.4-15. As a result, there is no focused discussion in the 2022 General Plan EIR on any impacts to this federally-listed species. In general, the 2022 General Plan EIR concludes that there will be no significant impacts to listed species from the General Plan's implementation. GP EIR, p. 2.4-28 – 3.4-29. The valley elderberry longhorn beetle relies on a particular host plant for its survival – the red or blue elderberry. See Biological Resources Analysis Report, p. 18. The reconnaissance survey conducted for the Biological Resources Analysis observed a 6-foot by 15-foot elderberry shrub on the property. *Id.*, p. 19. The presence of that host plant, the enhanced likelihood of the presence of the endangered valley elderberry longhorn beetle, and the heightened risk of adverse affects on the host plant or potentially present beetles are not addressed as a significant impact in the 2022 General Plan EIR and these effects are peculiar to the Project site. Pub. Res. Code § 21083.3. Given these facts peculiar to the site, it “might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site.” 14 CCR 15183.

Likewise, the observed presence of a Swainson's hawk foraging on the project site and nesting within 20 feet of the site also results in obvious effects peculiar to the

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project site, including not only the direct loss of foraging habitat but also disturbances from construction activities at the site and a dramatic increase in vehicles using Dos Reis Road to access the project once it is operational. Because impacts to Swainson's hawks were not addressed as significant impacts in the 2022 General Plan EIR and impact to a Swainson's hawk is peculiar to the site, those potential impacts must be addressed in a proper CEQA environmental review document and reliance on Pub. Res. Code § 21083.3 and 14 Cal. Admin. Code § 15183 is inappropriate.

Given the very limited reconnaissance-level survey performed on a single day at the Project site on May 5, 2021, LIUNA is concerned that there are numerous other listed and sensitive species foraging or located at the Project site. No effort has been made to determine the current presence of burrowing owls at the site. The past presence of red-tailed hawks and white-tailed kites foraging at the site also excludes the proposed streamlining exemption. A current and more robust survey of the Project site is necessary for the City to make any decision on these potential impacts based on substantial evidence.

In addition, the 2022 General Plan EIR does not identify the significant potential impact of the Project's thousands of trucks and car trips on wildlife from vehicle collisions with wildlife. This impact is peculiar to the Project given its proposed 2,798 daily passenger vehicle trips and 680 daily truck trips which will lead to wildlife collisions in the vicinity of the Project. Because this project-specific direct and cumulative effect was not addressed at all in the 2022 General Plan EIR, it must be addressed in an EIR or potentially a mitigated negative declaration for the Project. See PRC § 21083.3(c) ("Nothing in this section affects any requirement to analyze potentially significant offsite impacts and cumulative impacts of the project not discussed in the prior environmental impact report with respect to the general plan").

## **ii. Energy**

The 2022 General Plan EIR's discussion of the General Plan's energy impacts boils down to stating that by complying with California's Building Energy Efficiency Standards ("CalGreen"), promoting the use of renewable energy sources and encouraging public transportation and bicycle use, and the fact that PG&E will generally make progress on adding new renewable energy sources to its portfolio, projects within the planning area will not have energy impacts. GP EIR, p. 3.7-41 – 3.7-42. The Environmental Checklist focuses on the Ashley Furniture Project's compliance with CalGreen and PG&E's long-term efforts. Env't Checklist, p. 66. None of these considerations address the energy effects that are peculiar to a 1.4 million square feet furniture distribution and retail center.

The standard under CEQA is whether the Project would result in wasteful, inefficient, or unnecessary consumption of energy resources. Failing to undertake "an investigation into renewable energy options that might be available or appropriate for a

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project” violates CEQA. *California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 213. Energy conservation under CEQA is defined as the “wise and efficient use of energy.” CEQA Guidelines, app. F, § I. The “wise and efficient use of energy” is achieved by “(1) decreasing overall per capita energy consumption, (2) decreasing reliance on fossil fuels such as coal, natural gas and oil, and (3) increasing reliance on renewable energy resources.” *Id.*

Noting compliance with the California Building Energy Efficiency Standards (Cal.Code Regs., tit. 24, part 6 (Title 24) does not constitute an adequate analysis of energy impacts. *Ukiah Citizens for Safety First v. City of Ukiah* (2016) 248 Cal.App.4th 256, 264-65. Similarly, the court in *City of Woodland* held unlawful an energy analysis that relied on compliance with Title 24, that failed to assess transportation energy impacts, and that failed to address renewable energy impacts. *California Clean Energy Committee v. City of Woodland*, 225 Cal.App.4th 173, 209-13. As such, the General Plan EIR’s reliance on Title 24 compliance does not address the proposed furniture warehouse Project’s energy impacts. The energy effects of the Project are, by definition, peculiar to the Project. Given the vast expanse of roofing provided by the proposed Project, any evaluation of its energy impacts cannot ignore the obvious feasibility of an array of solar panels on the roof or covering the extensive parking proposed at the site. Energy efficiency, in the context of the Proposed project and site would require the consideration and implementation of sufficient solar panels to meet all of the Project’s direct electricity demand, as well as solar power that would offset the considerable GHG and other air pollution emissions that will result from the thousands of trucks and cars driving to and from the Project every day once it’s operational.

The Environmental Checklist contains no discussion of the project's cost effectiveness in terms of energy requirements. There is no discussion of energy consuming equipment and processes that will be used during the construction or operation of the project. The project's energy use efficiencies by amount and fuel type for each stage of the project including construction and operation were not identified. The effect of the project on peak and base period demands for electricity has not been addressed. As such, the Environmental Checklist’s conclusions are unsupported by the necessary discussions of the Project’s energy impacts under CEQA. An EIR or possibly a mitigated negative declaration must be prepared to assess these impacts.

### **iii. Greenhouse Gases and Air Quality.**

The 2022 General Plan EIR did not project air pollution emissions for any given project that would be allowed by the plan. Instead, it identifies the implementation measure in the General Plan that the City “[review development, infrastructure, and planning projects for consistency with SJVAPCD requirements during the CEQA review process.” GP EIR, p. 3.3-35 (RR-6a). The General Plan and the EIR go on to further require that:

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Require project applicants to prepare air quality analyses to address SJVAPCD and General Plan requirements, which include analysis and identification of:

- A. Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions.
- B. Potential exposure of sensitive receptors to toxic air contaminants.
- C. Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions.
- D. Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

*Id.* Although the Environmental Checklist purports to describe these evaluation efforts, the Checklist does not provide any of the input files for the air pollution modeling conducted for the proposed Project. Only the output files are provided. Environmental Checklist, Attachment I, p. 162. Given the size of the warehouse and the number of expected daily truck trips, LIUNA is skeptical that the emissions forecasts identified for its construction and operation can be substantiated. Before making a recommendation to the Council, the Planning Commission should require staff and the applicant to share their input files for the CalEEMod modeling in order for the public to be able to assess the accuracy of the model outputs and whether or not the Project's may have a significant effect on air quality and GHG emissions and the extent of necessary mitigation measures as required by the General Plan.

#### **IV. CONCLUSION**

In light of the above comments, the City must prepare an EIR or, if appropriate, a mitigated negative declaration for the Project. LIUNA reserves its right to submit additional comments and evidence for any subsequent Planning Commission hearing or the City Council's consideration of the Project. Thank you for considering these comments.

Sincerely,



Michael R. Lozeau  
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