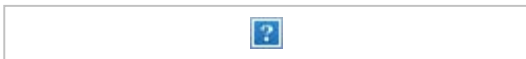


From: evm3@mutaresoftware.com
To: [Sheikhali_Monet](#)
Subject: [EXTERNAL] Voice Message from Outside Caller () on 12/4/21 4:06 PM for 4698
Date: Saturday, December 4, 2021 4:12:58 PM
Attachments: [120421-160643-4698-5690-1.wav](#)



Voice Message from Outside Caller () on 12/4/21 4:06 PM for 4698

MESSAGE:

" Hello, Nancy Connolly and my name is Alex. I am calling regarding second mailing that came to us regarding her and veterans Village. I left a message the last time and I thought to leave a message again and my concern of course is that the area where it is going to be it's extremely crowded area. We really bad rush hour. Sometimes in that area and of course, it's going to get worse, so and while the veterans are they serve the country and do great things. But also also some of them suffer a great deal of pressure or stress or beyond traumatic post, dramatic stress disorder that's very difficult to put them in something crowded. So there are two points here to put them in something very crowded. It just going to cause them perhaps sometimes to trigger I have seen on TV couple of locations were a person did wrong. And then said, I don't know I don't know I saw to his fault he was in the bathroom. Wow. Yeah, I don't know anything about a post, traumatic stress disorder and I don't know if it can just trigger like that from crowds or something. So that's some point to consider for them. They need to be in an area, that's a little more open that of course has the facilities like maybe a grocery store bank a gas station state driving cars transportation if they don't at medical care small sound small levels of course, so somebody was saying we going to do all this stuff not really but somebody can choose it the place where they're living they choose a tool to be close to these amenities or whatever you call them conveniences. That also not so close to crowded areas. So that's my concern really for the fact like how she was a blizzard for the veterans and the second one is how convenient is it for the people working and so on we're seeing here just really who walk out there probably don't have a car walk slowly whatever and somebody about that fatigue triggers of stress and the person, you know kills somebody and then you don't blame them, but you don't play the old woman for going out to try to get some groceries, you know, I don't have a car. Port so these are realistic things know the last thing. I wanted

to say I thought that the route quarter was like a long time ago and some of the things that I've seen on TV, called me actually do not want to watch the news and it was happening from our soldiers whether that was also post dramatic stress disorder from another bathroom or some people said that they had sent mentally ill people to fight the award for heaven's sake. So they are mentally. Ill so they've done things that it's just not the way we do it the us Army and so he was disgraceful. I looked at some things and I thought what I want us. So, I mean if it does go out there friendly, they do things that help people. They don't it got to really really I'm not going to describe how your shoes you probably heard about got to be really disgraceful and horrible and and playing abuse to people they capture and so on so anyways, so that's my concern regarding that and you know, good luck really that's a big project a big thing to try to to do but I don't know something they won't do voice saying these things, but sometimes one person with a very very good points of view a very practical could hopefully help everybody help you and help you find a good location and help these citizens here and help the crowd and the control the congestion and the poor people are going to be walking could be exposed to danger mouse and all this stuff showing it was thank you for listening and I wish you a good day and a good holiday and happy new year, thanks for listening bye bye."



From: [Maloney, Mike](#)
To: [Sheikhali, Monet](#)
Subject: FW: [EXTERNAL] Letter of Support Regarding Agenda Item 9.1
Date: Wednesday, December 8, 2021 5:02:34 PM

Please add to your late correspondence

From: Sweeney,Brendan <Brendan.Sweeney@mail.house.gov>
Sent: Wednesday, December 8, 2021 5:02 PM
To: _PLANCOM - Planning Commission <planningcommission@srcity.org>
Subject: [EXTERNAL] Letter of Support Regarding Agenda Item 9.1

Dear Santa Rosa Planning Commissioners and Staff,

Late this afternoon, Congressman Mike Thompson received a request for a letter of support related to item 9.1 on the Planning Commission's agenda tomorrow. The Congressman is writing in support of the proposed parcel subdivision.

We are currently awaiting approval of the letter from the House Committee on Ethics, but do not expect to receive it until tomorrow. I will send a digital version of the letter once it is approved.

The Congressman wanted to provide the Commission with as much notice of the letter as possible.

Thank you,

Brendan Sweeney

Field Representative

Congressman Mike Thompson (CA-05)

2300 County Center Drive, Suite A100

Santa Rosa, CA 95403

(707) 542-7182 Phone

(202) 360-8332 Cell phone

(707) 542-2745 Fax

www.mikethompson.house.gov | [Sign up for our e-newsletter](#)

Due to public health concerns surrounding COVID-19, our office will be conducting all business over the phone/email and will be unable to meet in-person.

From: [CLARK H. LEWIS](#)
To: [Sheikhali, Monet](#)
Cc: [PLANCOM - Planning Commission](#); [CityCouncilListPublic](#)
Subject: [EXTERNAL] Reject application # MIN21-001A: Hearn Veterans Village
Date: Wednesday, December 8, 2021 8:22:57 AM

Dear Ms. Sheikhali, Planning Commission and City Councilmembers,

I am Clark Lewis and live at 2070 W. Hearn Ave. in Santa Rosa.

You need to reject application # MIN21-001.

You should address the inadequacy of the Combined Technical Appendices and Specific Plan EIR Addendum - Hearn Veterans Village (11.2021). Clearly, the developer and City Planning have decided not to respond to this neighborhood's earlier, clearly articulated concerns, at the least: the overwhelming use of non-permeable paving; the impact on nesting birds including the special-status species that Dr. Smallwood documented in his survey; the increase in street resident population by 50% on one parcel – 50% is staggering; elimination of a fire access road. Our previous comments and biological review clearly show that an EIR is necessary. These issues of safety and land use are at the core of your work as public administrators, and we are interested to see how your jobs with public responsibilities and civic remedies are actually being handled.

You might also note that the developer was directed by the Sonoma County Board of Supervisors on May 8th of 2016 to reach out to the neighborhood and work together to find a solution. After five years – including the pandemic – the developer has never engaged with us in any meaningful way.

The issue is not about support of Veterans. Clearly, it is about this project being wildly out of scale with what's here. Let's tell the truth about what is being planned here and reduce its size and impact to something more in line with what our neighborhood was promised in our agreement with the City during Annexation: to diligently keep this street rural, i.e. not densely populated.

Consequently, I ask that you review the Responses to Comments for IS/MND to see previous concerns sent to you several months ago by our attorney Rebecca Davis, and our biological expert Shawn Smallwood, PhD. before moving forward and insist the developer make changes that reflect these real concerns.

Sincerely,
Clark Lewis

December 8, 2021

Project Name: Hearn Veterans Village, 2149 W. Hearn Ave., Santa Rosa

Dear Ms. Sheikhal, City of Santa Rosa Planning Commission:

Please accept my comments for Hearn Veterans Village.

W. Hearn Ave. is a rural street and was annexed to the City of Santa Rosa. It is part of the Roseland area. It has very limited street lighting. It has no sidewalks. Drainage is by way of culverts. The pavement is poor and quickly deteriorates in the rain and has many cracks, lumps, crumbling edges and repaired potholes; repairs are needed regularly. There are two areas of the street that get a few inches of standing water during heavy rainstorms (not just epic rainstorms), one area in front of the development property. A solo walk, a walk with your dog, a walk with a stroller, or a pedestrian in a wheelchair means one has to walk on the actual rough roadway. Cars need to use the opposite lane to pass safely. During the rainy season and due to the wetness of the dirt areas adjacent to the culverts and the street, one has to be even closer to the center of the street. There are two "blind" sections of the street that increase the risk of being on the street as a pedestrian. With very limited exceptions, the residents are on well and septic systems. The street is approximately a ½ mile long to reach Stony Point Road. It is one way in/out with the exception of the current emergency access road directly adjacent to the proposed development property. The nearest mini market is a 15-20 minute walk on Stony Point Road, which currently does not have contiguous sidewalks, the nearest bus stop is a 10-15 minute walk, the nearest true shopping center or other services are several miles. The new Kaiser campus is an approximate 40-45 minute walk. I've attached photos of the street after a rainstorm.

In 2016, developer Paula Cook sought approval from the Sonoma County Community Development Commission to place an extraordinary number of tiny homes on the property. At that time, Ms. Cook had not done any outreach or engagement with the residents of W. Hearn Ave. The Commission (Board of Supervisors) directed Paula Cook to engage the residents of W. Hearn Avenue on the planned project of that time. That never happened and time passed. Ms. Cook has taken the same approach in 2021 and has not engaged the residents of W. Hearn to hear any concerns or mitigating ideas to what could be an embraced development on the same location. I am stunned that she would take the same approach several years later. Now, we are forced to spend the time, again, to express our concerns for another massive project and plea for denial of the development or significant development modifications.

As W. Hearn Avenue has been described with the poor road conditions and lack of City services, another example of marginalization and being underserved in the Roseland area, is the fact that *just recently, we learned that the City sold the area on which the emergency access road is placed to Ms. Cook's organization.* Not only is this the emergency access road that provides the residents and first responders access and an alternate path off/on W. Hearn Ave., this road serves as the access point to the W. Hearn Ave. residents to a park, sidewalks, and a walking trail. This access is regularly used and is very important to the residents. According to the development plan for Hearn Veterans Village, this access road is no longer accessible and cuts off this access for the residents. In the current design it will become the parking lot and entrance to the proposed property. In the prior public hearing a few months ago for the proposed property, W. Hearn Ave. residents requested that an ADA/bike accessible path be constructed to continue to allow access to these recreational features of the neighboring community. No changes appear to have been made in the proposed development regardless of

these issues being raised to the developer. Without modification, W. Hearn Ave residents will be faced with an additional 40-minute roundtrip to access the recreational resources by having to travel fully down W. Hearn Ave. and backtracking. The alternative is to attempt to disregard the fact that the parking lot and entrance for the Village is now a private property and hope the property manager/property owner/property residents do not mind the use of their property for their neighbors to continue using this thoroughfare to access these desired recreational areas.

During the annexation process, the W. Hearn Ave. residents negotiated in good faith with the County and the City. As a result, this street was given special rural heritage zoning that was intended to maintain the unique character of the street and place limits on larger development and building. Subdividing this property and adding multiple buildings on each subdivided lot completely disregards the outcome and intent of these good faith negotiations.

Generally, it is puzzling to understand why W. Hearn Ave. is an ideal location for a large number of veterans who may not have personal vehicles, or have to rely on ride serves, or public transportation. From what we can glean from the development plan, there would be 40 plus new residents at the Village. What this indicates is that a large number of residents at Hearn Veterans Village may require a significant amount of supportive services for them to thrive in this isolated neighborhood. This one development would essentially double the number of total residents on W. Hearn Ave. It is reasonable to assume that some Village residents will have their own vehicles, there will be staff and supportive services for the residents and visitors, all of which will likely result in essentially doubling the traffic on W. Hearn Ave. As already discussed, the road will not be able to withstand this amount of additional traffic without more frequent resources for repairs or resurfacing. Also and importantly, W. Hearn Ave. is NOT a pedestrian friendly or safe road.

Due to very minimal information in the development plan and no engagement with the existing residents of W. Hearn Ave., many questions are unanswered regarding the operations, services, and future residents of the Village. This is disappointing and frustrating.

Residents rely on groundwater recharging for our wells. In times of drought and alarming climate change, concerns regarding your wells becomes real. We are seeing many new housing developments in Southwest Santa Rosa causing general concern of the risk of groundwater recharge for those of us in the area on wells with no possible access to city water systems. The Village planned development has significant paving through the whole property and contributes to this concern. I know my neighbors have many environmental concerns and I am supportive of those and will not attempt to articulate those. I have chosen to focus on some practicalities of the proposed development.

In summary, this proposed development and consideration thereof should be denied. Ms. Cook should once again be directed to engage the W. Hearn Ave. stakeholders. With this effort, Ms. Cook will find that we are reasonable, support further reasonable additional development on the property, and support more supportive housing and services for our veterans.

Sincerely,

Christina Cramer
2226 W. Hearn Avenue.







From: [Rena](#)
To: [Sheikhali, Monet](#); [_CityCouncilListPublic](#); [_LANCOM - Planning Commission](#)
Subject: [EXTERNAL] proposed development (by the CHSC Veteran's Village on West Hearn ave)
Date: Thursday, December 9, 2021 12:04:09 PM

*Dear Ms. Sheikhali,
Planning Commission and
City Council members,*

Rena Radich here from 2235 west Hearn ave., a longtime resident/owner.

*In light of this proposed development (by the CHSC Veteran's Village on West Hearn ave) to our RR-20-RH Neighborhood,
and the environmental impact on the surrounding wildlife,
We have hired Rebecca L. Davis, Attorney with Lozeau Drury, and Shawn Smallwood PhD in Ecology. Dr. Smallwood, has 35yrs experience to keep you, our City representatives informed of the miss doings of this proposed project so far.*

Please help me to understand your decision to move forward with this project without a proper EIR report on this specific project ?.. Please explain to me how an EIR report done 5 years ago focusing on incorporating 700+ acres of Southwest Santa Rosa, a broad scope be used for a focused 2.01-acre parcel preposing brand new development?

Also please explain to me how a public fire access road can be purchased by a private citizen?

How will this public fire access road be maintained?

Who has the key to the pylons in this public fire access road?

Please help me understand how a developer is not required to perform the necessary EIR that is in place to help us protect our environment and help us live in concert with our environment, not at the expense of it?

I humbly disagree with this development proposal as it stands, not having EIR evidence that it is in compliance with the impact of its specific footprint proposed.

*Sincerely,
LauRina Radich McKrell
2235 west Hearn ave.
Santa Rosa, Ca 95407*

From: [Lennie Moore](#)
To: [Sheikhali, Monet](#); [_PLANCOM - Planning Commission](#)
Cc: [_CityCouncilListPublic](#)
Subject: [EXTERNAL] Comments regarding Hearn Veterans Village (Planning Commission Meeting 12/09/2021)
Date: Tuesday, December 7, 2021 10:59:44 PM
Attachments: [12-07-2021 Meeting Comments LM.pdf](#)

Hi Monet,

Here are my comments regarding the Addendum proposal being reviewed by the Planning Commission. I ask that they review this material in preparation of the meeting on Thursday.

Thank you,

--

Lennie Moore
www.lenniemoore.com
Studio (707) 260-2400

Dear Ms. Sheikhal, Planning Commission and City Councilmembers,

My name is Lennie Moore. I live at 2215 West Hearn Ave. in Santa Rosa. My 1.7 acre parcel is 100' to the West of the applicants site and the proposed project submitted to the Commission. I'm an adjunct professor at the San Francisco Conservatory of Music and a composer of music for media.

I request that you all please review the [Responses to Comments for IS/MND](#) to see previous comments and issues raised by me, my neighbors, our attorney Rebecca Davis, and our biological expert Shawn Smallwood, PhD.

Attorney Davis and Dr. Smallwood will also submit additional responses on behalf of our unincorporated association, the West Hearn Ave. Residents for Rural Integrity. It is our position that **an Addendum is completely inappropriate here in this case**, and our previous comments and biological review should clearly show that **an EIR is necessary**.

The first request we have is that **we want more time for review, dialog, and respond**. We ask that the Planning Commission extend the review period until after the New Year. We understand that CEQA doesn't require more than a 10-day comment period but the act of throwing this at us during Thanksgiving week was particularly deviant. Many of our neighbors are simply unable to attend this meeting and should be heard.

After personally reviewing the Combined Technical Appendices and Specific Plan EIR Addendum - Hearn Veterans Village (11.2021) pdfs, it is clear that **the Developer and City Planning did not take anything we had to say seriously**. They just want to push this proposal forward without any substantial changes, reductions in scope, or attention to the concerns of this neighborhood.

It looks like CEQA and F&W gave them a list of items they had to do. I'm not sure if this was added on after the last Planning Commission meeting or not. I see mostly things like, "Pay the mitigation fees" and having another biological survey performed before breaking ground, along with having a biologist on-site during construction. **None of this truly addresses our concerns and the environmental realities of this area.**

The project proposal design looks like it hasn't been changed at all. It's still four 6-bed units to each main house and four 2-bed ADUs. Non-permeable paving throughout, which doesn't address the groundwater recharging that is so needed in this time of drought.

Nesting birds will definitely be impacted. Nesting season is March-August. There's some confusion here as the construction schedule states it will be June 2022 through June 2023. If this is approved, I would think they are only allowed to do construction between September 2022 through February 2023? The City position is that this project will not result in impacts to bird species? **The City gives no indication as to how this won't create an impact.**

In the last Planning Commission meeting we outlined through our comments (and Dr. Smallwood's report) that **there are several nesting pairs of White-tailed Kites and Red-Shouldered Hawks within 300' of the site** (two Kite pairs and the Hawks are on my property, plus another pair of Kites to the East of the site), including all the special-status species that Dr. Smallwood documented in his survey.

Ground disturbance is listed between April 15 through October 15. **This conflicts again with nesting season.** There's a note that a disturbance free buffer zone for raptors is 200-500 feet. Since we have proof of several species of raptors (nesting White-tailed Kites, Red-shouldered Hawks, various owls, etc.), **construction will clearly be within the 200-500 feet and must follow stricter environmental guidance.**

Section 7.21a is listed as "no substantial change" in "degrading the quality of the environment." I also don't see any environmental conditions of approval required here.

City Planning just doesn't really explain how there will be no impact across the board in their determinations, other than to say it's in line with the 2016 FEIR.

Nothing of this addendum indicates that the City has asked anything of the developer to modify their proposal based on our responses and concerns.

It is crazy to me that both **the Developer and City Planners have wasted the Planning Commission's and our neighborhood's time and energy** with these half-baked proposals. The lack of rigor is mind-boggling.

In my capacity as an educator, I demand that my students be rigorous in their work. It is extremely frustrating to find that **this Developer and the City of Santa Rosa are not interested in doing their due diligence in working with this community to create a reasonable outcome.**

The way they are undertaking the process does not feel like we are being heard at all. We feel under-represented, and we have had to hire an attorney and experts to do what the Developer and the City should have done in the first place. We've had to do an enormous amount of research on our own time and expense, and that frankly pisses us off.

This is not our job. It is the Developer's and The City's job to do their due diligence, for the environment, the community, as well as the Developer. This can't just be for the benefit of the Developer.

The current proposal is unacceptable. I and my neighbors are asking that the Planning Commission direct the Developer and the City Planning to address the following questions and issues before the Planning Commission makes an informed yes or no vote.

1. Did the City submit our competing biological review by Dr. Smallwood and our Attorney's comments to CEQA and The Department of Fish & Wildlife for review?
2. If not, wouldn't that create an inaccurate representation of the environmental impacts if the CEQA and F&W were only given the incomplete and substandard biological review presented by the Developer?
3. Throughout this Addendum the City's position is that this project would create "No substantial change in impact relative to the 2016 EIR." City Planning does not justify any of their conclusions in the Addendum. How does City Planning respond to our position that the Addendum is improper?
4. How does City Planning justify that there will be no substantial impact when we clearly have proof of special-status species?

5. How can City Planning justify a sudden population expansion of at least 50 people (plus staff, visitors and service personnel) on a street with only a population of 100 people?
6. The only access to West Hearn Ave. is through the light at Stony Point Road, and the fire access road on the Western boundary of the Developer's property. During a Zoom Meeting on April 12th, 2021 the Developer, Paula Cook, admitted that CHSC was "given the opportunity to purchase" the fire access road. How was there no public notice of the sale of this fire access road to the Developer?
7. With the inherent danger of wildfires affecting The City as they have over that last 5 years, how can The City and Developer guarantee the safety of the neighborhood residents with this now privately controlled road?
8. The Developer was directed by the Sonoma County Board of Supervisors on May 8th of 2016 to reach out to the neighborhood and work together to find a solution. It's been over 5 years. Why hasn't the Developer worked with our neighborhood to create a balanced project that would garner our support?
9. Why hasn't The City or the Planning Commission directed the Developer to work with us?

If the Developer and City Planning continue to present substandard proposals such as what is before you with this Amendment, the Planning Commission must consider voting NO on this.

We've stated this in the past. I'll restate it again:

We support our Veterans. This particular project is out of scale with what's here. Reducing the subdivisions of this 2.01-acre parcel to two lots would reduce the project to two main houses plus ADUs, which still doubles the population on this site from 15 beds to 31. Another option is to keep the 4-lot subdivision proposed but reduce the design to four single-story 3-bedroom houses with a 1-bedroom ADU.

The Developer will still need to comply with Dr. Smallwood's environmental recommendations, make sure the paving is porous for groundwater recharging, and do real in-ground plantings of trees and vegetation to mitigate the effects of adding these many buildings. This would be a more reasonable fit for the nature of what we've established here on West Hearn Ave.

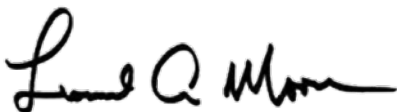
Additionally, the City is trying to use this addendum, but an addendum is only appropriate where: (1) Only minor technical changes or additions are necessary to make the EIR under consideration adequate under CEQA; and (2) The changes to the EIR made by the addendum do not raise important new issues about the significant effects on the environment.

Here, the City is claiming that this project was covered in the prior specific plan EIR. But in reality, the 2016 FEIR makes no mention of this project, let alone the environmental impacts of this project.

Moreover, we already have evidence that this project will create a new significant impact on the environment.

In closing, we understand the pressures placed upon the Commission and the City to build housing, but to rubber-stamp a project such as this one, which has so many troubling issues, is irresponsible towards this community which the City is duty bound to serve and leaves me (and others) to consider what is actionable.

Sincerely,

A handwritten signature in black ink, appearing to read "Lennie Moore". The signature is fluid and cursive, with a long horizontal stroke at the end.

Lennie Moore and Johanna Greenberg, VMD

2215 West Hearn Ave.
Santa Rosa, CA 95407

From: [Maloney, Mike](#)
To: [Cisco, Patti](#)
Cc: [Sheikhali, Monet](#)
Subject: FW: [EXTERNAL] Hearn Veterans" Village
Date: Wednesday, December 8, 2021 1:17:49 PM

Sounds good, Thank you!

Monet, can you please add this to your late correspondence file - I will upload them to legistar as planned tomorrow at 12pm.

Thanks!
MM

From: Cisco, Patti <PCisco@srcity.org>
Sent: Wednesday, December 8, 2021 1:11 PM
To: Maloney, Mike <MMaloney@srcity.org>
Subject: Fwd: [EXTERNAL] Hearn Veterans' Village

Hi Mike. Not sure if all Commissioners got this or not. Thanks, Patti

Sent from my iPad

Begin forwarded message:

From: hammoose <hammoose@sonic.net>
Date: December 8, 2021 at 11:27:10 AM PST
To: "Cisco, Patti" <PCisco@srcity.org>
Subject: [EXTERNAL] Hearn Veterans' Village

Dear Ms. Cisco,

I'm writing regarding the proposed Hearn Veteran's Village project. I have previous written to you regarding this project in May and early June. It is important that I begin this email stating my general support of the project. Yes, I support this project, but not the size and scope of the project. The developer, Community Housing Sonoma County, (CHSC), and the City of Santa Rosa support building a large "Village" for veterans. Please follow the link for more detail. <https://srcity.org/3611/Hearn-Veterans-Village> The community was given the opportunity for public comment in June 2021, and the City has now authored a, "RESPONSE TO COMMENTS ON THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION" paper. <https://srcity.org/DocumentCenter/View/34247/Response-to-Comments-on-Hearn-Draft-IS-MND-112021> In this document the City justifies and discounts all the concerns expressed by the W. Hearn Avenue and Park Meadow Drive residents, as well as Rebecca L. Davis, Attorney with LOZEAU DRURY, LLP, and a biological expert, Kenneth Shawn Smallwood. If there is any doubt to Mr. Smallwood's expertise, please review

his Curriculum Vitae and full report in the “RESPONSE TO COMMENTS ON THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION” document. You will find it labeled as “Exhibit A”. Many of us feel as if our voices are not being heard. I am sure the City’s responses are perfectly legal and justified under current codes, zoning designations, mitigations, addendums, (yes, the developer, CHSC, is now asking the Planning Commission for an “Addendum to Roseland Area/Sebastopol Road Specific Plan Environmental Impact Report (SCH No. 2016012030” <https://srcity.org/DocumentCenter/View/34246/Specific-Plan-EIR-Addendum---Hearn-Veterans-Village-112021>). CHSC wants to change the rules.

During this process, there has not been effective outreach to our W. Hearn Avenue and Park Meadow Drive community. In a letter dated July 26, 2021 to the City Planner, Monet Sheikhal, Paula Cook, Executive Director of CHSC, responds to concerns about the project. In response to concerns regarding CHSC’s outreach to the neighbors she states, “CHSC has diligently attempted to reach out and respond to neighbor fears, concerns, and issues, and has done so with respect and professionalism.” The examples of communication and outreach provided by Paula Cook refer to one scheduled Zoom meeting hosted by Susan Barnes, the representative for CHSC at the time, on 4/12/21...and email communications and conversations with one person who lives on W. Hearn Avenue. Over the last five years, since this project was first discussed with the Sonoma County Supervisors, (5/8/2016), CHSC has engaged the community on one occasion, the 4/12/21 Zoom meeting. In fact, I have unanswered emails addressed to Susan Barnes and Paula Cook. Also, I was unaware of the previously mentioned “response to concerns” document submitted by Paula Cook on 7/26/21. Diligent outreach would have ensured that the affected parties, those of us who will be directly impacted by the Hearn Veterans’ Village project, would have received this document, and other efforts at communication. If CHSC truly wanted to be part of the neighborhood, there would have been more of an attempt to communicate with the neighborhood prior to the development of this project and during the process.

I am also writing to appeal to your sense of vision for what the City wants in a neighborhood or areas designated as a Rural Heritage Combining zoning area, as the W. Hearn Avenue is designated. Since W. Hearn Avenue is the only area with this designation, we can create an image of what we want in Santa Rosa. I equate the Rural Heritage Combining District with the City of Santa Rosa Cultural Heritage Board. The Rural Heritage Combining District was created to, “to recognize, preserve, and enhance Santa Rosa’s rural communities and applies to properties within rural residential areas near the city limits.” (RESPONSE TO COMMENTS ON THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION document, November 2021). “Principal duties of the (Cultural Heritage) Board, include undertaking and updating historic inventories or surveys, recommending designation of Landmarks and Preservation Districts, reviewing proposed alterations to historic buildings, and promoting public awareness of preservation issues.” (City of Santa Rosa website). Both are designed to create a vision of how the City wants to preserve its history. In each, there is a responsibility to determine what areas should be preserved, review alterations to historic areas, and

promote public awareness of preservation issues. What do you hope people see twenty, thirty, forty years from now when reviewing our Rural Heritage? I hope it includes a neighborhood like W. Hearn Avenue, with a successful, appropriate, and visionary development that supports veterans, fits within the character of the existing neighbor, respects the flora and fauna that exist in this unique habitat, and is something that future generations can be proud of. A good start would be to slow the progress of the proposed Hearn Veterans' Village project so that these visions can be articulated. Conversations need to happen.

I am also asking you to can provide leadership how we move away from this adversarial relationship between the neighbors, the City, and Community Housing Sonoma County. This project has an "us" versus "them" dynamic. The City and CHSC saying, there are no impacts with the development of the Hearn Veterans' Village, and the neighbors, attorneys, and biologist saying there are direct impacts from this proposed development. Maybe the difference is that those of us who live on W. Hearn Avenue or Park Meadow Drive will be directly impacted, day by day. I could provide specific examples of concerns, that when looked at from a commonsense perspective, rather than one justified by laws, regulations, and mitigation, etc., are logical in their determination that the Hearn Veterans' Village, as proposed, does not fit with the character of the neighborhood, will impact traffic patterns and safety, will disrupt the current flora and fauna, will add to the light pollution in the neighborhood, etc. I encourage you to read through the list of concerns regarding the project, and the City's responses in the "RESPONSE TO COMMENTS ON THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION" paper, as this document discusses the specific concerns voiced by the participants.

<https://srcity.org/DocumentCenter/View/34247/Response-to-Comments-on-Hearn-Draft-IS-MND-112021>

I am also asking you to be involved. It is time for the the Planning Commission and the City Council to provide leadership on this development and the development of a standard for a Rural Heritage neighborhood. As I stated before, this is a good project. Together let's make it successful, and a model to be replicated. Thank you for your time.

Paul Moosman
W. Hearn Avenue neighbor

From: [hammoose](#)
To: [Sheikhali, Monet](#)
Subject: [EXTERNAL] Hearn Veterans' Village
Date: Wednesday, December 8, 2021 11:22:29 AM

Hello. I'm writing regarding the proposed Hearn Veteran's Village project. I have previously written to you regarding this project in May and early June. It is important that I begin this email stating my general support of the project. Yes, I support this project, but not the size and scope of the project. The developer, Community Housing Sonoma County, (CHSC), and the City of Santa Rosa support building a large "Village" for veterans. Please follow the link for more detail.

<https://srcity.org/3611/Hearn-Veterans-Village> The community was given the opportunity for public comment in June 2021, and the City has now authored a, "RESPONSE TO COMMENTS ON THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION" paper.

<https://srcity.org/DocumentCenter/View/34247/Response-to-Comments-on-Hearn-Draft-IS-MND-112021> In this document the City justifies and discounts all the concerns expressed by the W. Hearn Avenue and Park Meadow Drive residents, as well as Rebecca L. Davis, Attorney with LOZEAU DRURY, LLP, and a biological expert, Kenneth Shawn Smallwood. If there is any doubt to Mr. Smallwood's expertise, please review his Curriculum Vitae and full report in the "RESPONSE TO COMMENTS ON THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION" document. You will find it labeled as "Exhibit A". Many of us feel as if our voices are not being heard. I am sure the City's responses are perfectly legal and justified under current codes, zoning designations, mitigations, addendums, (yes, the developer, CHSC, is now asking the Planning Commission for an "Addendum to Roseland Area/Sebastopol Road Specific Plan Environmental Impact Report (SCH No. 2016012030" <https://srcity.org/DocumentCenter/View/34246/Specific-Plan-EIR-Addendum---Hearn-Veterans-Village-112021>). CHSC wants to change the rules.

During this process, there has not been effective outreach to our W. Hearn Avenue and Park Meadow Drive community. In a letter dated July 26, 2021 to the City Planner, Monet Sheikhali, Paula Cook, Executive Director of CHSC, responds to concerns about the project. In response to concerns regarding CHSC's outreach to the neighbors she states, "CHSC has diligently attempted to reach out and respond to neighbor fears, concerns, and issues, and has done so with respect and professionalism." The examples of communication and outreach provided by Paula Cook refer to one scheduled Zoom meeting hosted by Susan Barnes, the representative for CHSC at the time, on 4/12/21...and email communications and conversations with one person who lives on W. Hearn Avenue. Over the last five years, since this project was first discussed with the Sonoma County Supervisors, (5/8/2016), CHSC has engaged the community on one occasion, the 4/12/21 Zoom meeting. In fact, I have unanswered emails addressed to Susan Barnes and Paula Cook. Also, I was unaware of the previously mentioned "response to concerns" document submitted by Paula Cook on 7/26/21. Diligent outreach would have ensured that the affected parties, those of us who will be directly impacted by the Hearn Veterans' Village project, would have received this document, and other efforts at communication. If CHSC truly wanted to be part of the neighborhood, there would have been more of an attempt to communicate with the neighborhood prior to the development of this project and during the process.

I am also writing to appeal to your sense of vision for what the City wants in a neighborhood or areas designated as a Rural Heritage Combining zoning area, as the W. Hearn Avenue is designated. Since

W. Hearn Avenue is the only area with this designation, we can create an image of what we want in Santa Rosa. I equate the Rural Heritage Combining District with the City of Santa Rosa Cultural Heritage Board. The Rural Heritage Combining District was created to, “to recognize, preserve, and enhance Santa Rosa’s rural communities and applies to properties within rural residential areas near the city limits.” (RESPONSE TO COMMENTS ON THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION document, November 2021). “Principal duties of the (Cultural Heritage) Board, include undertaking and updating historic inventories or surveys, recommending designation of Landmarks and Preservation Districts, reviewing proposed alterations to historic buildings, and promoting public awareness of preservation issues.” (City of Santa Rosa website). Both are designed to create a vision of how the City wants to preserve its history. In each, there is a responsibility to determine what areas should be preserved, review alterations to historic areas, and promote public awareness of preservation issues. What do you hope people see twenty, thirty, forty years from now when reviewing our Rural Heritage? I hope it includes a neighborhood like W. Hearn Avenue, with a successful, appropriate, and visionary development that supports veterans, fits within the character of the existing neighbor, respects the flora and fauna that exist in this unique habitat, and is something that future generations can be proud of. A good start would be to slow the progress of the proposed Hearn Veterans’ Village project so that these visions can be articulated. Conversations need to happen.

I am also asking you to can provide leadership how we move away from this adversarial relationship between the neighbors, the City, and Community Housing Sonoma County. This project has an “us” versus “them” dynamic. The City and CHSC saying, there are no impacts with the development of the Hearn Veterans’ Village, and the neighbors, attorneys, and biologist saying there are direct impacts from this proposed development. Maybe the difference is that those of us who live on W. Hearn Avenue or Park Meadow Drive will be directly impacted, day by day. I could provide specific examples of concerns, that when looked at from a commonsense perspective, rather than one justified by laws, regulations, and mitigation, etc., are logical in their determination that the Hearn Veterans’ Village, as proposed, does not fit with the character of the neighborhood, will impact traffic patterns and safety, will disrupt the current flora and fauna, will add to the light pollution in the neighborhood, etc. I encourage you to read through the list of concerns regarding the project, and the City’s responses in the “RESPONSE TO COMMENTS ON THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION” paper, as this document discusses the specific concerns voiced by the participants. (<https://srcity.org/DocumentCenter/View/34247/Response-to-Comments-on-Hearn-Draft-IS-MND-112021>)

I am also asking you to be involved. It is time for the the Planning Commission and the City Council to provide leadership on this development and the development of a standard for a Rural Heritage neighborhood. As I stated before, this is a good project. Together let’s make it successful, and a model to be replicated. Thank you for your time.

Paul Moosman
W. Hearn Avenue neighbor

From: [Rebecca Davis](#)
To: [_PLANCOM - Planning Commission](#); [Sheikhali, Monet](#)
Cc: [Brian Flynn](#)
Subject: [EXTERNAL] Public Comment on Agenda Item 9.1 - Hearn Veterans Village Addendum
Date: Wednesday, December 8, 2021 4:21:03 PM
Attachments: [2021.12.08 Comment on Addendum Hearn Vet. Village.pdf](#)

Dear Honorable Commissioners and Ms. Sheikhali,

Please find the attached comments of West Hearn Residents for Rural Integrity regarding the Addendum prepared for the Hearn Veterans Village Project, listed as Item 9.1 on tomorrow's planning commission agenda. Please contact me if you have any questions.

Sincerely,

Rebecca Davis

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December 8, 2021

Via Email

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**Re: Public Comment on Hearn Veterans Village (File # MIN21-001)
AGENDA ITEM 9.1 (Planning Commission, Dec. 9, 2021)**

Dear Honorable Planning Commissioners and Ms. Sheikhal:

I am writing on behalf of West Hearn Residents for Rural Integrity (“West Hearn Residents”), including its members living on West Hearn Avenue and in the West Hearn Neighborhood, who are concerned about the proposed Hearn Veterans Village Project proposed for 2149 West Hearn Avenue (“Project”) and the inadequacy of the Addendum to the Roseland Area/Sebastopol Road Specific Plan and Roseland Area Annexation Projects Final Environmental Impact Report (“Addendum”) prepared for the Project.

These comments were prepared with the assistance of expert wildlife biologist Shawn Smallwood, Ph.D. West Hearn Residents previously submitted Dr. Smallwood’s review of the mitigated negative declaration (“MND”), which was previously prepared for the Project and relied on the same biological analysis as the Addendum. Dr. Smallwood’s comment on the MND is attached hereto as Exhibit A (“Smallwood Comment”). Dr. Smallwood also reviewed the Addendum and the City’s responses to his comment on the MND. Dr. Smallwood’s reply to the City’s responses as well as his analysis of the Addendum is attached hereto as Exhibit B. Dr. Smallwood’s review of the Addendum found that the Addendum failed to adequately address the Project’s impacts to birds and other wildlife.

In addition to the inadequacy of the Addendum, the Project is inconsistent with applicable zoning and the rural character of the neighborhood. Without adequate analysis and mitigation, the Project will have a real and significant negative impact on the lives of everyone

living in the West Hearn neighborhood, as well as on the biological resources that make the historically rural neighborhood and Santa Rosa what it is.

As such, the Addendum is not appropriate under CEQA and the City of Santa Rosa (“City”) must prepare an EIR prior to approving the Project to fully analyze the Project’s impacts, and to implement additional mitigation measures that ensure protection of the environment and the neighborhood.

PROJECT DESCRIPTION

The Project site is located on a 2.01-acre parcel at 2149 West Hearn Avenue, in Santa Rosa, California. The Project site consists of two parcels (APN 134-011-012; -013). The larger of the two parcels (APN 134-011-012) is developed with a 17-bed transitional housing facility for veterans, including an existing 4,870 square foot building and a 1,405 square foot building. The City is currently processing a lot line adjustment (LLA20-009) for the larger of the two parcels (APN 134-011-012). The lot line adjustment will result in a 1.04-acre parcel for the existing housing facility, which would be operated separately from the proposed Project.

The remainder of the 2.01-acre lot is biologically rich undeveloped land including non-native grassland, native valley oak, coast live oak, arroyo willow, Himalayan blackberries, poison oak, toyon, and coyote brush. Existing trees and shrubs include ornamental fruit trees, magnolia, palm, and walnut. The Project site also contains two vernal pools along West Hearn Avenue at the southwest portion of the site. Directly north of the Project site is an established wetland preserve, the North Point Mitigation Site. Northwest of the Project site is a FEMA conservation site, which is an established habitat preservation area for rare and endangered plants and the California Tiger Salamander breeding and upland habitat.

The Project would subdivide the remaining property into four individual lots ranging in size from 20,000 to 25,000 square feet. The Project includes four six-bedroom detached residential units and four two-bedroom detached accessory dwelling units, one of each type on each proposed lot. Each residential unit includes bedrooms with individual bathrooms and counter space with a sink. A full kitchen, laundry room, living room, dining room, and office space are provided in each unit and will be shared among occupants. The six-bedroom residential units will be two stories, totaling 3,139 square feet, while the ADUs will be 1,008 square feet. For comparison, most homes in the neighborhood are 1,000-1,200 square feet.

This development will provide housing for 32 residents, one onsite property manager, and four peer managers, for a total of 37 new residents, in addition to the 15 people currently residing at the Project site. The Project also includes onsite amenities such as a basketball court, gathering areas, parking, and landscaping.

For review of the Project pursuant to CEQA, the City is relying on an Addendum to the Final EIR prepared for the Roseland Area/Sebastopol Road Specific Plan and Roseland Area Annexation Projects, which was certified by the City in 2016 (“2016 FEIR”). The 2016 FEIR

analyzed environmental impacts associated with implementation of the Roseland Area/Sebastopol Road Specific Plan, associated General Plan and Zoning amendments, and annexation of five unincorporated County islands in southwest Santa Rosa. The Hearn Veterans Village Project site is located within the West Hearn Avenue annexation area for which the 2016 FEIR included an analysis of the change in land use from Low Density Residential to Very Low Density Residential. The 2016 FEIR concluded that the implementation of the Specific Plan and Annexation would result in significant and unavoidable impacts to traffic and cumulative air quality.

LEGAL STANDARD

CEQA contains a strong presumption in favor of requiring a lead agency to prepare an EIR. This presumption is reflected in the fair argument standard. Under that standard, a lead agency must prepare an EIR whenever substantial evidence in the whole record before the agency supports a fair argument that a project may have a significant effect on the environment. (Pub. Res. Code § 21082.2; *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1993) (“*Laurel Heights IP*”) 6 Cal.4th 1112, 1123; *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75, 82; *Quail Botanical Gardens v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602.)

Preparation of an Addendum Under CEQA

Here, the City has prepared an Addendum to the previously certified 2016 FEIR. Pursuant to the CEQA Guidelines, an addendum to a previous EIR is proper only where “some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.” (14 CCR § 15164(a).) Looking to Guidelines Section 1512, **an addendum is not appropriate when:**

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to **the involvement of new significant environmental effects or a substantial increase** in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) **New information of substantial importance**, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
 - (A) The project will have **one or more significant effects not discussed in the previous EIR or negative declaration;**
 - (B) Significant effects previously examined will be substantially more severe

- than shown in the previous EIR;
- (C) Mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - (D) **Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment**, but the project proponents decline to adopt the mitigation measure or alternative.

(14 CCR § 15162.)

Tiering Under CEQA

CEQA permits agencies to ‘tier’ CEQA documents, in which general matters and environmental effects are considered in a document “prepared for a policy, plan, program or ordinance followed by narrower or site-specific [environmental review] which incorporate by reference the discussion in any prior [environmental review] and which concentrate on the environmental effects which (a) are capable of being mitigated, or (b) were not analyzed as significant effects on the environment in the prior [EIR].” (Cal. Pub. Res. Code (“PRC”) § 21068.5.) “[T]iering is appropriate when it helps a public agency to focus upon the issues ripe for decision at each level of environmental review and in order to exclude duplicative analysis of environmental effects examined in previous [environmental reviews].” (*Id.* § 21093.) CEQA regulations strongly promote tiering of environmental review.

“Later activities in the program must be examined in light of the program [document] to determine whether an additional environmental document must be prepared.” (14 CCR § 15168(c).) The first consideration is whether the activity proposed is covered by the program. (*Id.* § 15168(c)(2).) If a later project is outside the scope of the program, then it is treated as a separate project and the previous environmental review may not be relied upon in further review. (*See Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1320–21.) The second consideration is whether the “later activity would have effects that were not examined in the program.” (14 CCR § 15168(c)(1).) A program environmental review may only serve “to the extent that it contemplates and adequately analyzes the potential environmental impacts of the project” (*Sierra Nevada Conservation v. County of El Dorado* (2012) 202 Cal.App.4th 1156, 1171 [quoting *Citizens for Responsible Equitable Env'tl. Dev. v. City of San Diego Redevelopment Agency* (2005) 134 Cal.App.4th 598, 615].) If the program environmental review does not evaluate the environmental impacts of the project, a tiered [CEQA document] must be completed before the project is approved. (*Id.* at 1184.)

For these inquiries, the “fair argument test” applies. (*Sierra Club*, 6 Cal.App.4th at 1318; *see also Sierra Club v. County of San Diego* (2014) 231 Cal.App.4th 1152, 1164 (“when a prior EIR has been prepared and certified for a program or plan, the question for a court reviewing an agency's decision not to use a tiered EIR for a later project ‘is one of law, i.e., ‘the sufficiency of

the evidence to support a fair argument.” [quoting *Sierra Club*, 6 Cal.App.4th at 1318].) Under the fair argument test, a new EIR must be prepared “whenever it can be fairly argued on the basis of substantial evidence that the project may have significant environmental impact. (*Sierra Club*, 6 Cal.App.4th at 1316 [quotations and citations omitted].) When applying the fair argument test, “deference to the agency’s determination is not appropriate and its decision not to require an EIR can be upheld only when there is no credible evidence to the contrary.” (*Id.* at 1318.) “[I]f there is substantial evidence in the record that the later project may arguably have a significant adverse effect on the environment which was not examined in the prior program EIR, doubts must be resolved in favor of environmental review and the agency must prepare a new tiered EIR, notwithstanding the existence of contrary evidence.” (*Id.* at 1319.)

I. UNDER CEQA’S TIERING PROVISIONS, THE PROJECT REQUIRES AN EIR—NOT AN ADDENDUM—BECAUSE THE PROJECT MAY RESULT IN SIGNIFICANT ENVIRONMENTAL IMPACTS THAT WERE NOT PREVIOUSLY ANALYZED IN THE 2016 FEIR.

As a preliminary matter, the City has improperly relied upon CEQA’s subsequent review provisions (PRC § 21166; 14 CCR §§ 15162, 15164). Where a previous EIR has been certified for a project, CEQA’s subsequent review provisions determine when “[a] subsequent EIR shall be prepared for *that* project.” (14 CCR 15162 [emphasis added].) Here, no specific project has ever been proposed for the Project site. The 2016 EIR merely analyzed a change in the Project site’s land use designation from the change in land use from Low Density Residential to Very Low Density Residential. The 2016 FEIR is not a project-specific document. Rather, the 2016 FEIR describes itself as a “program EIR pursuant to CEQA Guidelines Section 15168” (“PEIR”) (DEIR, 1.0-1), which is subject to CEQA’s tiering standards rather than subsequent review.

A lead agency may tier EIRs where multiple individual projects or phased (or “tiered”) projects are to be undertaken, and the individual projects are linked geographically, temporally, or in an otherwise logical manner. (14 CCR §§ 15165, 15168.) Under Section 15168, “[i]f a later activity would have effects that were not examined in the program EIR, a new initial study would need to be prepared leading to either an EIR or a negative declaration.” (14 CCR § 15168(c)(1) [emphasis added].) Importantly, in reviewing an agency’s decision whether to prepare a tiered EIR, the “fair argument” test applies. (*Sierra Club v. Cnty. of Sonoma* (1992) 6 Cal.App.4th 1307, 1318.) Under the fair argument test, a new EIR must be prepared “whenever it can be fairly argued on the basis of substantial evidence that the project may have a significant environmental impact.” (*Id.* at 1316; see *Friends of Coll. of San Mateo Gardens v. San Mateo Cnty. Comm. College Dist.* (2016) 1 Cal.5th 937, 960.) A PEIR may only serve for subsequent actions “to the extent that it *contemplates and adequately analyzes* the potential environmental impacts of the project. . . .” (*Center for Sierra Nevada Conservation v. County of El Dorado* (2012) 202 Cal.App.4th 1156, 1171 [emphasis added] [citations omitted].) Here, because there is a fair argument that the Project will result in impacts not analyzed in the 2016 FEIR, an EIR is required.

A. An EIR is required because the Project will have significant impacts on birds from collisions with windows that were not previously analyzed in 2016 FEIR.

Neither the Addendum nor the 2016 FEIR addressed the impacts to birds from collisions with glass windows. Due to the special-status species of birds that are known/likely to occur at or near the Project site, the impact that the Project may have on these species should be addressed. Analyzing the potential impact on wildlife of window collisions is especially important because “[w]indow collisions are often characterized as either the second or third largest source of human-caused bird mortality.” (Ex. A, p. 16.) Nevertheless, the Project’s amount of glass façades and panels are inconsistent with the Bird-Safe guidelines reviewed by Dr. Smallwood. As a result, the impacts to birds from window collisions remain potentially significant, unaddressed, and unmitigated by the Addendum.

Dr. Smallwood reviewed a number of studies in order to calculate the number of bird collisions per m² of glass windows per year. (Ex. A, p. 16.) According to his calculations, each m² of glass would result in 0.073 bird deaths per year. (*Id.*) Based on the estimated 368 m² of glass windows and the 0.073 bird deaths per m² of glass windows, Dr. Smallwood estimates that the project could result in 27 bird deaths per year, which would continue until the homes were either renovated to reduce bird collisions, or demolished. (*Id.*)

To mitigate these impacts, Dr. Smallwood suggests adherence to available guidelines on building design intended to minimize collisions hazards to birds, such as those by the American Bird Conservancy (“ABC”). (Ex. A, p. 19.) ABC recommends: (1) minimizing use of glass; (2) placing glass behind some type of screening (grilles, shutters, exterior shades); (3) using glass with inherent properties to reduce collisions, such as patterns, window films, decals or tape; and (4) turning off lights during migration seasons. (*Id.*) Dr. Smallwood also suggests that the City look to the guidelines developed by the City of San Francisco, based on guidelines produced by the New York City Audubon Society, to minimize injuries and fatalities to bird species. (*Id.*)

Because the Addendum and 2016 FEIR did not address this impact, Dr. Smallwood’s analysis provides substantial evidence of a fair argument that the Project will have a significant impact on special status birds from window collisions. As such, the City must prepare an EIR to analyze, disclose, and mitigate this impact.

B. An EIR is required because the Project will have significant impacts on wildlife from loss of reproductive capacity that were not previously analyzed in the 2016 FEIR.

The MND does not analyze the lost reproductive capacity of birds that would result from the loss of 2.01 acres of habitat through construction of the Project. (Ex. A, p. 14.) While habitat loss results in the immediate decline in birds and other animals, it also results in a permeant loss of reproductive capacity. (*Id.*) Dr. Smallwood cites two studies that show that total bird nesting

densities were between 32.8 and 35.8 nests per acre, for an average of 34.3 nests per acre. (*Id.*) When multiplied by the Project's 2.01 acres of habitat that would be lost, Dr. Smallwood predicts a loss of 200 fledglings per year. (*Id.*) This loss would repeat each year. (*Id.*) Based on an average of 2.9 fledglings per nest, and an average generation time of 5 years, "the project would deny California 22,760 birds over the next century due solely to the loss of terrestrial habitat." (*Id.* at p. 15.)

Because the Addendum and 2016 FEIR did not address this impact, Dr. Smallwood's analysis provides substantial evidence of a fair argument that the Project will have a significant impact from loss of reproductive capacity. As such, the City must prepare an EIR to disclose and mitigate this impact.

C. An EIR is required because the Project will have significant impacts on wildlife from house cat predation that were not previously analyzed in the 2016 FEIR.

Neither the Addendum or 2016 FEIR addressed the impacts on wildlife as a result of house cats that may be brought to the Project site by future residents. House cats are one of the largest sources of avian mortality in North America. (Ex. A, p. 17.) Studies show that in the US alone, an estimated 139 million house cats killed an estimated 16.95 billion vertebrate wildlife annually. (*Id.*) Dr. Smallwood made the following calculations based on average cat ownership in the US:

In 2012 there were 0.44 house cats per human, and 122 vertebrate animals were killed per cat, free-ranging members of which killed disproportionately larger numbers of vertebrate wildlife. According to the IS/MND, the proposed project would add 32 new residents and 5 staff. The above rates applied to 37 new residents/staff **would add 16 cats, which would kill 1,952 vertebrate wildlife per year.**

(*Id.*)

Going beyond just the averages, Dr. Smallwood notes that during his three hour site visit, he observed three house cats hunting for wildlife on the Project site, one of which captured a pocket gopher. This observation led Dr. Smallwood to conclude, "Even now, free-roaming house cats are taking a toll on wildlife at the project site. Adding more cats would intensify the impacts." (*Id.*)

Because the Addendum and 2016 FEIR did not address this impact, Dr. Smallwood's analysis provides substantial evidence of a fair argument that the Project will have a significant impact from house cat predation. As such, the City must prepare an EIR to disclose and mitigate this impact.

II. THE PROJECT REQUIRES AN EIR—NOT AN ADDENDUM—BECAUSE NEW INFORMATION SINCE 2016 DEMONSTRATES THAT THERE HAVE BEEN SUBSTANTIAL CHANGES IN CIRCUMSTANCES SINCE CERTIFICATION OF THE 2016 EIR.

Even if the City was not required to tier from the 2016 programmatic FEIR, an addendum would still violate CEQA because new information since the 2016 FEIR was prepared demonstrates that there have been substantial changes in circumstances necessitating an EIR.

Dr. Smallwood identified two significant changes in circumstances that warrant the preparation of an EIR for the Project rather than an Addendum. (Ex. B, p. 15.) First, the California Migratory Bird Protection Act was not enacted until 2019, when the governor signed AB 454. (*Id.*) AB 454 amended the Fish & Game Code section 3513 to read,

It is unlawful to take or possess any migratory nongame bird as designated in the federal Migratory Bird Treaty Act (16 U.S.C. Sec. 703 et seq.), or any part of a migratory nongame bird described in this section, except as provided by rules and regulations adopted by the United States Secretary of the Interior under that federal act.

(*Id.*) This is new information since the 2016 FEIR, yet the Addendum makes no mention of the California Migratory Bird Protection Act nor does it incorporate the Act into its analysis. Due to this new information, an EIR is necessary in order to adequately assess the Project's impacts to the species protected under the California Migratory Bird Protection Act, which were not addressed in the 2016 FEIR or Addendum

Second, it was not until 2019 that new scientific research reported a 29% loss of overall bird numbers across North America during the preceding 48 years. (Ex. B, p. 15.) This new information, which became available after certification of the 2016 FEIR, demonstrates the precarious position that countless wildlife find themselves in and underscores the importance of preserving habitat to the extent possible for these species. As Dr. Smallwood explains, even the removal of 2.01 undeveloped acres results in taking another 3% to 5% of a typical species breeding habitat. (*Id.* at pp. 1-2.) The severity of the decline of the North American avian population was not known in 2016 and could not be incorporated into the analysis provided by the 2016 FEIR. As such, the City must prepare an EIR to disclose this new information and to reassess the Project's impacts to biological resources in light of this new information.

III. THE ADDENDUM'S CONCLUSIONS ABOUT THE PROJECT'S IMPACTS TO BIOLOGICAL RESOURCES ARE NOT SUPPORTED BY SUBSTANTIAL EVIDENCE.

The previous comment on the now-abandoned MND submitted by West Hearn Residents described in detail the shortcomings of the biological report prepared for the Project by Wildlife Research Associates ("2020 WRA Report"). To the extent that the Addendum relies on the 2020

WRA Report in its analysis of the Project's impacts on biological resources, West Hearn Residents incorporate their prior comment and the prior analysis of Dr. Smallwood. Specifically, the 2020 WRA Report failed to provide substantial evidence by (1) failing to establish an accurate baseline for sensitive biological resources, (2) improperly analyzing the Project's impacts on wildlife movement, and (3) failing to analyze the Project's cumulative impact on biological resources.

Dr. Smallwood's review of the Addendum found that the 2020 WRA Report and the subsequent survey performed by WRA in 2021 ("2021 WRA Report") still fail to provide the requisite substantial evidence needed to support the Addendum's conclusions. As Dr. Smallwood concluded, "[T]he biological resources assessment inadequately characterizes existing site conditions . . . [and] the evaluations that are claimed to have been performed were either not performed or their findings inadequately reported." (Ex. B, p. 16.)

First, WRA's attempt to evaluate small mammal burrows on the Project site was inadequate. (Ex. B, p. 16.) The 2020 WRA Report's sole evaluation of small mammal burrows "consisted of the phrase, 'evidence of which [pocket gophers] was observed primarily on the west side of the parcel (Fig. 7),' where Fig. 7 depicted a plugged burrow of a pocket gopher." (*Id.*) The 2021 WRA Report made no further attempt to describe the distribution of pocket gophers on the Project site. (*Id.*) The WRA reports made no attempt to quantify the number of small animal burrows or even to make a qualitative analysis beyond disclosing that burrows were observed "on the west side". (*Id.*)

Second, the 2020 WRA Report seemingly made no attempt to detect birds nesting on the Project site. (Ex. B, p. 16.) The 2021 WRA Report did identify eight bird species over the course of four person-hours, however, this number is shockingly small given the fact that Dr. Smallwood detected *thirty* bird species over the course of only three person-hours. (*Id.*) The WRA reports fail to identify several species observed by Dr. Smallwood including white-tailed kite, red-shouldered hawk, Nuttall's woodpecker, willow flycatcher, and San Francisco common yellowthroat. (*Id.*) The WRA reports also failed to identify several species that were recently added to the US Fish and Wildlife Service's list of Birds of Conservation Concern and have been observed in the Project area, including northern harrier, western screech-owl, wrenit, California thrasher, and Bullock's oriole.

Third, although the Addendum recognized that the Monarch butterfly was designated a Candidate species for listing under the federal Endangered Species Act in 2020 (four years after certification of the 2016 FEIR), WRA's analysis for the Monarch butterfly was inadequate. As Dr. Smallwood explains, "The time to survey for Monarchs in the Santa Rosa area would have been during the fall months." (Ex. B, p. 17.) However, the Addendum's entire analysis of the Project's impacts to the Monarch butterfly is based on the 2021 WRA Report, which surveyed the Project site in *April*—precisely the wrong time of year to survey for Monarch butterfly. As such, the Addendum's conclusions as to the Project's impacts on the Monarch butterfly cannot be relied upon.

Fourth, the WRA reports incorrectly described the denning ecology of several species. (Ex. B, p. 17.) For example, WRA claimed that burrowing owls have high nest fidelity and reuse the same burrows year after year. However, as Dr. Smallwood explains, burrowing owls will typically move to new nests after a few years. (*Id.*) Similarly, WRA incorrectly claimed that American badgers will reuse the same burrow year after year. However, Dr. Smallwood “cannot recall ever finding a den burrow that was used by badgers two years consecutively.” (*Id.*) By mischaracterizing the behavior of these species, WRA’s conclusions as to the impacts to these species cannot be relied upon.

Lastly, the Addendum claims, “No special-status animal species have been mapped or previously recorded on the project site.” (Addendum, p. 48.) This claim is unfounded considering the fact that West Hearn Residents’ previous comment contained Dr. Smallwood’s observations of the Project site, including photographic evidence of special-status species at the Project site, including the turkey vulture, red-shouldered hawk, white-tailed kite, Nuttall’s woodpecker, willow flycatcher, oak titmouse, and San Francisco common yellowthroat. (Ex. A, p. 2.) The picture below was taken by Dr. Smallwood on June 1, 2021 and depicts a white-tailed kite hunting at the western edge of the Project site:



The above shortcomings of the 2020 WRA Report and 2021 WRA Report demonstrate that the City cannot rely on those reports to support the Addendum’s conclusions. The City should provide an updated biological analysis based on updated biological reports in an EIR in order to adequately disclose the Project’s impacts to biological resources to the public and decision makers.

IV. THE CITY’S CONCLUSION THAT THE ENVIRONMENTAL CONDITIONS OF APPROVAL WILL REDUCE THE PROJECT’S IMPACTS TO LESS THAN SIGNIFICANT IS NOT SUPPORTED BY SUBSTANTIAL EVIDENCE.

The City, in an implicit admission that the Project will have significant impacts not covered by the 2016 FEIR, has included an “Environmental Conditions of Approval” to be applied to the Project. However, the Environmental Conditions of Approval are merely a repackaging of the mitigation measures from the now-abandoned MND for the Project. Even if the City has changed the name of the measures (from mitigation to conditions of approval), the measures are still mitigation measures and must meet CEQA’s standards.

CEQA requires public agencies to avoid or reduce environmental damage when “feasible” by requiring “environmentally superior” alternatives and mitigation measures. (14 Cal. Code Regs. § 15002(a)(2), (a)(3).) Mitigation measures must be designed to minimize, reduce, or avoid an identified environmental impact or to rectify or compensate for that impact. (14 Cal. Code Regs. § 15370.) Mitigation measures must be feasible, enforceable, and effective. A public agency may not rely on mitigation measures of uncertain efficacy or feasibility. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 727) [finding groundwater purchase agreement inadequate mitigation measure because no record evidence existed that replacement water was available.] “Feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors. (14 Cal. Code Regs § 15364.)

A lead agency is precluded from making the required CEQA findings unless the record shows that all uncertainties regarding the mitigation of impacts have been resolved; an agency may not rely on mitigation measures of uncertain efficacy or feasibility. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 727.) This approach helps “ensure the integrity of the process of decision making by precluding stubborn problems or serious criticism from being swept under the rug.” (*Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935.)

To ensure mitigation measures are feasible and certain, CEQA disallows deferring the formulation of mitigation measures to post-approval studies. (14 Cal. Code Regs. § 15126.4(a)(1)(B); *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308-09.) Deferral of the development of specific details of a mitigation measure is only permitted when “it is impractical or infeasible to include those details during the project's environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will considered, analyzed, and potentially incorporated in the mitigation measure.” (14 CCR § 15126.)

Moreover, “mitigation measure[s] [that do] no more than require a report be prepared and followed” do not provide adequate information for informed decisionmaking under CEQA. (*Endangered Habitats League v. County of Orange* (2005) 131 Cal.App.4th 777, 794; 14 Cal. Code Regs. § 15126.4(a)(1)(B).) By deferring the development of specific mitigation measures, the City has effectively precluded public input into the development of those measures. CEQA prohibits this approach. As explained by the court in *Communities for a Better Env’t v. Richmond* (2010) 184 Cal.App.4th 70, 92:

[R]eliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA's goals of full disclosure and informed decisionmaking; and[,] consequently, these mitigation plans have been overturned on judicial review as constituting improper deferral of environmental assessment.

A. Many of the Environmental Conditions of Approval Constitute Improperly Deferred Mitigation.

Condition of Approval BIO-1 requires the preparation of a landscaping plan that would offset the loss of grassland habitat for the special-status western bumble bee. (Conditions of Approval ("COA"), p. 2.) The measure requires native shrubs and herbaceous species to be identified in a landscape plan, and plants known to benefit native bees shall be selected, which may include, but are not limited to, coyote brush, sage lupines, various species of Lotus and Acmispon gum plant, and Phacelia. (*Id.*) BIO-1 constitutes deferred mitigation because it defers the formulation of the landscape plan until after the CEQA process is complete, and the City has not shown it is impractical or infeasible to include those details during the City's environmental review process. (*See* 14 CCR § 15126.)

Condition of Approval BIO-3 includes a requirement that the Applicant "prepare and submit a Relocation Plan for the Service/CDFW review and written approval." (COA, p.2.) The Relocation Plan is supposed to contain the method of relocation, a map, and a description of the proposed release site(s) and burrow(s), and written permission from land owners to use their land. (*Id.*) This measure also constitutes deferred mitigation because it defers the formulation of the Release Plan until after the CEQA process is complete, and the City has not shown it is impractical or infeasible to include those details during the City's environmental review process. (*See* 14 CCR § 15126.) There is also no evidence that the City will be able to obtain the required written permission from landowners, making the feasibility of BIO-3 uncertain.

Moreover, deferral of mitigation is also impermissible if it removes the CEQA decision-making body from its decision-making role. The City may not delegate the formulation and approval of mitigation measures to address environmental impacts because an agency's legislative body must ultimately review and vouch for all environmental analysis mandated by CEQA. (*Sundstrom v County of Mendocino* (1988) 202 Cal.App.3d 296, 306-08.) Thus, the Addendum may not rely on programs to be developed and implemented later without approval by the City. Yet that is precisely what BIO-3 does. The lead agency—the City—has improperly delegated its legal responsibility of determining what constitutes adequate mitigation to USFWS and CDFW. BIO-3 calls for USFWS and CDFW to have a final say in mitigation requirements, while the public is given no opportunity to comment. The Addendum may not rely on a Relocation Plan to be developed, approved, and implemented later, at some future time after the Project has been approved. Without valid mitigation, the Project's significant impact on California Tiger Salamanders remains significant.

Condition of Approval GEO-1 requires the Applicant to prepare an Erosion Control Plan

and submit it to the Building Division of the City's Department of Planning and Economic Development. COA, p. 7.) Again, there is no reason that the deferral of the Erosion Control Plan is warranted. Moreover, rather than the legislative body of the lead agency approving the plan, GEO-1 delegates approval of the Erosion Control Plan to City staff who work in the Department of Planning and Economic Development.

Condition of Approval NOI-1 requires the Project Applicant to "[l]imit use of the concrete saw to a distance of 50 feet or greater from residences, *where feasible*," to "[c]onstruct temporary noise barriers, *where feasible*," and to muffle stationary noise-generating equipment with enclosures "*where feasible*." (COA, p. 8 [emphasis added].) There is no standard of guidance for what is or is not "feasible," leaving that determination entirely up to the Applicant. Without standards for what is feasible, there is no evidence that the resulting noise levels after mitigation is implemented that the applicant thinks is "feasible" will be sufficiently low to mitigate the Projects noise impacts.

B. There is no Evidence that the Project's impacts on habitat for California Tiger Salamander and other species have been Mitigated to a Less-Than-Significant Level.

Condition of Approval BIO-3 requires the Applicant to purchase mitigation credit at a 2:1 ratio "from a mitigation bank that is within the Critical Habitat for the species." (COA, p. 2.) Courts have rejected this mitigation, particularly where, as here, there is no evidence that sufficient mitigation credits exist and that the credits are linked to a reasonable plan for mitigation. (*See King & Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 877.)

Moreover, the purchase of mitigation credits does not actually mitigate the loss of habitat, either for CTS or for other species. The Biological Assessment is incorrect when it states that "[t]he mitigation will be purchased from a mitigation bank that is within the Critical Habitat for the species. Therefore, no net loss of CTS Critical Habitat will occur." (Biological Assessment, p. 28.) Dr. Smallwood explains that "The habitat that would be purchased in a conservation bank already exists. The loss of habitat at the project site will not be replaced by new habitat. Therefore, a net loss of habitat will occur." (Ex. A, p. 14; *see* Ex. B, p. 14.) Moreover, purchasing credits for habitat elsewhere outsources the benefits of the Project site to another community. For example, the fire mitigation, flood protection, and groundwater benefits currently provided by the site will be lost to another community.

Second, as Dr. Smallwood explains:

[M]any more special-status species would be significantly and adversely affected by this project. Compensatory mitigation would also be needed for impacts to these other species. Habitat should be permanently protected in the form of fee title or conservation easement, or a combination thereof. Habitat impacts should also be mitigated as near as possible to the project footprint, and

it should be strategically implemented to reduce the effects of habitat fragmentation (Smallwood 2015).

(Ex. A, p. 19.)

Additional mitigation is required to mitigate the Project's impacts on habitat to a less-than-significant level. As currently presented, the Addendum fails to provide substantial evidence that the Project's impacts would be less than significant.

V. THE PROJECT IS NOT CONSISTENT WITH THE CITY'S ZONING CODE AND WILL CHANGE THE CHARACTER OF THE NEIGHBORHOOD.

Per the City of Santa Rosa General Plan 2035 Land Use Diagram (October 18, 2016), the Project site is designated Very Low Density Residential which is intended to accommodate single-family detached units at a density of 0.2 to 2.0 dwelling units per acre. This designation was changed to Very Low Density Residential (allowing 0.2 to 2 units per acre) from Low Density Residential (allowing 2 to 8 units per acre) following lengthy negotiations between the City and the West Hearn Avenue residents prior to approval of the Roseland Area/Sebastopol Road Specific Plan and Roseland Area Annexation Project. West Hearn Avenue residents wanted to ensure that the rural character of the neighborhood was maintained if annexation occurred. In addition to designating the area as Very Low Density Rural Residential, the City also agreed to create a "Rural Heritage combining district," which it applied to the neighborhood. The purpose of the Rural Heritage combining district is "to recognize, preserve, and enhance Santa Rosa's rural communities." (Santa Rosa Mun. Code § 20-28.090(A).) This zoning standard is specifically applied to the West Hearn Avenue neighborhood in which the Project is located. (*Id.* at (C)(1).)

The Project violates both the spirit and the letter of the agreement and the Zoning Code. It would create eight new residential units (four primary residences and four ADUs) on 2.01 acres of land, creating a density of 4 units per acre, which is twice the maximum density permitted on land designated Very Low Density Residential. The Project's violation of the Very Low Density standard is a significant impact under CEQA because density standards are meant to avoid or mitigate a variety of environmental impacts.

In addition, the Project will change the existing character of the neighborhood., which is distinctly rural. Every other property on this street has a single family home that is one-story on parcels of .5 acres, with houses ranging in size between 1,000 and 1,200 square feet. Most have small family farms that include sheep, goats, chicken, pigs, cows, and horses. In contrast, the proposed Project will include four main houses of 3,139 square feet, over two stories, with accessory units being 1,008 square feet. The Project buildings will be massive compared to the existing homes. The Project will house 37 people on 2 acres, or nearly double the population currently living on West Hearn.

By violating the agreed upon land use designation, and failing to protect the rural character of the neighborhood, the City and Applicant are acting in bad faith.

VI. THE PROJECT REQUIRES A MINOR USE PERMIT.

The Addendum improperly states that supportive housing uses are permitted by-right within the RR-20-RH Zoning District. (Addendum, p. 4.) Santa Rosa Municipal Code section 20-22.030 specifies in Note 4 to Table 202 that:

A Minor Use Permit is required for the construction of new multi-family supportive or transitional housing units in an RR or R-1-6 Zoning District, similar to construction of a new traditional multi-family unit in an RR or R-1-6 Zone. The construction of new multi-family supportive housing units does not require a Minor Use Permit when the proposed use meets each of the requirements of Assembly Bill 2161, as specified in Government Code Section 65651.

The exception to the requirement for a Minor Use Permit for supportive housing in Rural Residential zones is not applicable because each of the requirements of Government Code section 65651 are not met. Specifically, Government Code section 65651 applies only when supportive housing is proposed “in zones where multifamily **and** mixed uses are permitted.” Cal. (Govt. Code § 65651(a) [emphasis added].) Mixed uses are not permitted in Rural Residential zones in Santa Rosa. Accordingly, the exception to the requirement that a supportive housing proposed to operate in a Rural Residential zone must obtain a Minor Use Permit. The Project cannot be approved without a Minor Use Permit.

VII. THE PROJECT REQUIRES NEPA REVIEW.

According to the now-abandoned MND prepared for the Project, the Project will be federally funded through the United States Department of Housing and Human Development. (MND, p. 50.) There is no mention of this funding in the Addendum. If the Project is still being funded by the Department of Housing and Human Development, this federal funding triggers the National Environmental Policy Act (“NEPA”), 42 USC §§4321-4370j. An environmental assessment must be prepared to determine if an EIS is required.

CONCLUSION

The West Hearn Residents for Rural Integrity are not opposed to the type of use proposed. Instead, they are opposed to the density of the Project, its failure to maintain the character of the neighborhood, and the Project’s environmental impacts, particularly impacts to the abundant wildlife that uses the Project site. Despite a willingness to discuss their concerns with the Applicant, over the past five years, the applicant never reached out to neighborhood residents. Instead, it waited until the proposal was complete, after decisions had already been

made about density, location, mitigation, etc. Rather than asking for true input, the Applicant is now merely presenting the pre-determined plan to neighbors.

The City and the Applicant similarly ignored the West Hearn Residents' comments on the MND. Again, rather than engage with the residents on their legitimate concerns, the City and Applicant played games with CEQA, switching from an MND to an addendum, in an effort to get a more favorable standard of review if the Project is challenged in court. Making matters worse, the City provided a paltry amount of time for the public to review and comment on the Addendum, with some of the few days allotted falling over the Thanksgiving holiday. Public engagement is key to the CEQA process, but the City appears to have done all it can to avoid public comment on this Project.

The City and Applicant's actions do not help their cause. The Addendum is not appropriate under CEQA because CEQA's tiering provisions require an EIR where there is a fair argument that the Project may result in significant impacts that were not analyzed in the 2016 FEIR. Furthermore, even if the City were allowed to proceed under CEQA's subsequent review provisions rather than its tiering provisions, the Addendum is still improper because of new circumstances since certification of the 2016 EIR. Furthermore, the Project's inconsistency with applicable zoning, the need to obtain a minor use permit, and the need to conduct review under NEPA all preclude approval of the Project at this time.

As such, West Hearn Residents respectfully requests that the Planning Commission refrain from approval of the Project and Addendum at this time. Rather, West Hearn Residents respectfully requests that the Project be sent back to staff to prepare an EIR prior to approval of the Project.

Sincerely,



Rebecca L. Davis

EXHIBIT A

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Monet Sheikhali, City Planner
City of Santa Rosa
Planning and Economic Development Department
100 Santa Rosa Avenue, Room 3
Santa Rosa, CA 95404

7 June 2021

RE: Hearn Veterans Village

Dear Ms. Sheikhali,

I write to comment on the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the proposed Hearn Veterans Village Project (City of Santa Rosa 2021). I understand this project would add 4 single-family homes and an accessory dwelling unit on 2.01 acres. I also reviewed WRA and Jane Valerius Environmental Consulting (2020) (hereafter referred to as WRA 2020).

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 subsequently worked for four years as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, interactions between wildlife and human infrastructure and activities, conservation of rare and endangered species, and on the ecology of invading species. I authored numerous papers on special-status species issues. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and the Raptor Research Foundation, and I've been a part-time lecturer 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-five years, including at many proposed project sites. My CV is attached.

SITE VISIT

I visited the site of the proposed project for 3 hours on 1 June 2021, starting at 17:32 hours. With binoculars, I walked the western perimeter, stopping periodically to perform visual scans for vertebrate wildlife.

Based on my visual scan of the site, its vegetation cover consists of grassland with a dense cluster of oaks and willows in its interior, and shrubs. It is bordered by a remnant streambed to the west. According to the IS/MND, the site also includes wetlands with plant species that grow only on wetlands. Otherwise, the site is surrounded by various densities of housing, and vernal pool/grassland complexes remain intact to the northwest and southwest.

While visiting the site, I detected 34 species of vertebrate wildlife, 7 of which were special-status species (Table 1). The site supports Anna's hummingbirds and hooded orioles (Photos 1 and 2), California towhees and American crows (Photos 3 and 4), black phoebes and bushtits (Photos 5 and 6), and a family of white-tailed kites (Photos 7 - 10), among other species. Evidence of breeding was abundant. The site is rich in wildlife.

Table 1. Species of wildlife I observed during 3 hours on 1 June 2021.

Species	Scientific name	Status (see Table 2)
Mallard	<i>Anas platyrhynchos</i>	
Great egret	<i>Ardea alba</i>	
Snowy egret	<i>Egretta thula</i>	
Ring-billed gull	<i>Larus delawarensis</i>	
Turkey vulture	<i>Cathartes aura</i>	BOP
Red-shouldered hawk	<i>Buteo lineatus</i>	BOP
White-tailed kite	<i>Elanus leucurus</i>	CFP, BOP
Mourning dove	<i>Zenaida macroura</i>	
Rock pigeon	<i>Columba livia</i>	Non-native
Eurasian collared-dove	<i>Streptopelia decaocto</i>	Non-native
Anna's hummingbird	<i>Calypte anna</i>	
Nuttall's woodpecker	<i>Picoides nuttallii</i>	BCC
Willow flycatcher	<i>Empidonax traillii</i>	CE, BCC
Black phoebe	<i>Sayornis nigricans</i>	
Oak titmouse	<i>Baeolophus inornatus</i>	BCC
Bewick's wren	<i>Thryomanes bewickii</i>	
Bushtit	<i>Psaltriparus minimus</i>	
California scrub-jay	<i>Aphelocoma californica</i>	
American crow	<i>Corvus brachyrhynchos</i>	
Violet-green swallow	<i>Tachycineta thalassina</i>	
Barn swallow	<i>Hirundo rustica</i>	
Northern mockingbird	<i>Mimus polyglottos</i>	
MacGillivray's warbler	<i>Oporonus tolmiei</i>	
San Francisco common yellowthroat	<i>Geothlypis trichas sinuosa</i>	SSC3
California towhee	<i>Pipilo crissalis</i>	
House sparrow	<i>Passer domesticus</i>	Non-native
Hooded oriole	<i>Icterus cucullatus</i>	
Great-tailed grackle	<i>Quiscalus mexicanus</i>	
House finch	<i>Carpodacus mexicanus</i>	
American goldfinch	<i>Carduelis tristis</i>	
Bats	<i>Chiroptera</i>	
Botta's pocket gopher	<i>Thomomys bottae</i>	
Gray fox	<i>Urocyon cinereoargenteus</i>	
House cat	<i>Felis catus</i>	Non-native



Shawn Smallwood



Shawn Smallwood

Photos 1 and 2. Anna's hummingbird and hooded oriole on the project site, 1

June 2021.



Shawn Smallwood



Shawn Smallwood

Photos 3 and 4. California towhees and American crow at the project site, 1 June 2021.



Photos 5 and 6. Black phoebe and bushtit at the project site, 1 June 2021.

Photo 7. A family of white-tailed kites, including both parents and 3 fledglings at the site, 1 June 2021. The center of activity is an adult kite dangling a pocket gopher it caught on the project site





Photo 8. A closer view of an adult white-tailed kite using a pocket gopher to train 2 of its fledglings at the site to capture and manage a prey item, 1 June 2021.



Photos 9 and 10. White-tailed kite preparing to pounce (left) and preparing to eat a pocket gopher (right) next the project site, 1 June 2021.

The white-tailed kites nested in a tree located just west of the project site, but the kites hunted on the project site. The adults invested considerable time and effort to train their fledglings on pocket gophers they caught on the site (see Photos 7 through 10). The success of the nest would have been less likely without access to forage on the site proposed for the project.

Another species of raptor also nested in a tree just west of the project site, and that was red-shouldered hawk. I did not determine whether that nest was successful, but the location of the nest near the project site was unlikely a coincidence. Red-shouldered hawks prey on a variety of vertebrate species, but it is known as the species of the genus *Buteo* that most specializes on birds. Because the project site is rich in bird species, the nearness of the red-shouldered hawks' nest site makes sense.

Nesting on or very near the site are most of the bird species listed in Table 1. I saw fledglings or territorial defense or other behaviors indicative of breeding expressed by Anna's hummingbird, hooded oriole, California towhee, black phoebe, mourning dove, oak titmouse, Bewick's wren, American crow, house sparrow and house finch. Other species were less clearly breeding, but probably were doing so. And other species did clearly forage on site, including bushtit, willow flycatcher, Nuttall's woodpecker, California scrub-jay, violet-green swallow, barn swallow, and bats.

A few species simply flew over the project site, such as turkey vulture, great egret, snowy egret, mallard, great-tailed grackle, and ring-billed gull. However, this type of use of the project site can be just as important as any other, because that portion of the aerosphere that composes a species' aerohabitat is essential for home range patrol, foraging, dispersal and migration. If none of these essential functions can be achieved, then an animal in the wild cannot successfully breed. In my experience, volant wildlife select aerohabitat over open spaces more so than over residential rooftops and other impervious surfaces.

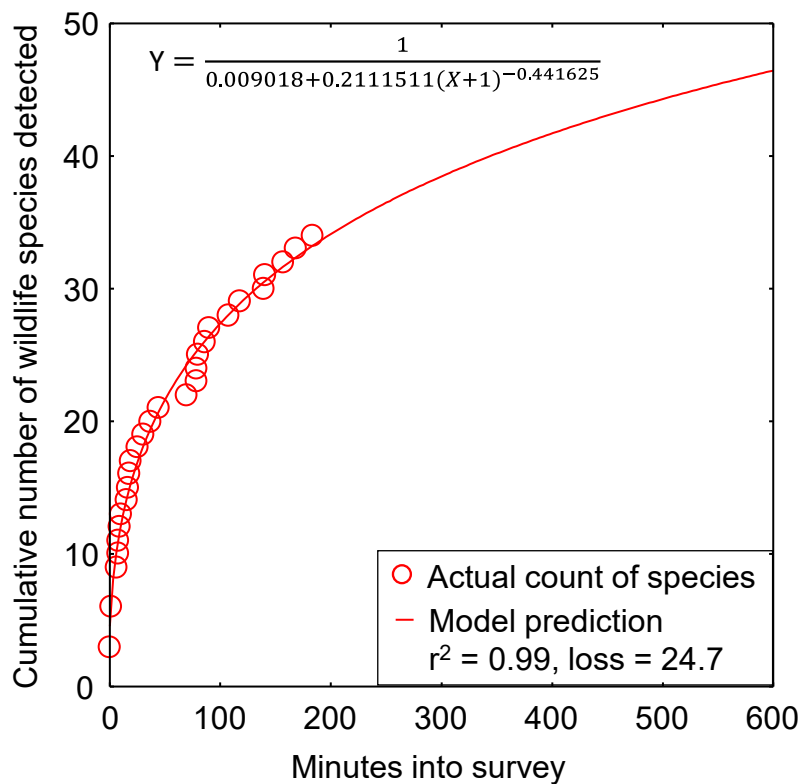
My gray fox identification was uncertain. From the west edge, I saw a large extruded soil mound near the cluster of willows on the site. The soil mound formed a ramp typical of the entrance to a fox den. Locals informed me that a gray fox has been seen in the area recently, so there is a reasonable likelihood that the soil mound I saw had been excavated by gray fox. Another candidate species would be American badger (*Taxidea taxus*), and a third would be coyote (*Canis latrans*).

My detection of 34 species of vertebrate wildlife needs to be interpreted within the context of her survey effort. The results of a single survey qualify as an absurdly thin empirical foundation for characterizing the environmental setting of any given site, including one proposed for a project. A single survey can serve only as a starting point toward characterization of a site's wildlife community. I had only 3 hours available to perform a visual scan survey on 3 June 2021, so there were only so many species I was likely to detect. It would have been inappropriate of me to have reported that the site supports only 34 species of wildlife. However, when a reconnaissance-level survey is diligently performed, and when the outcome is analyzed appropriately and fully reported, the number of species detected within a given reconnaissance survey effort can

inform of the number of species that likely would have been detected with a larger survey effort during the same time of year.

By recording when I detected each species, I was able to forecast the number of species that could have been detected with a longer effort using the same visual scan method. Figure 1 shows my cumulative count of species detected at the site with increasing time into my survey. Just as I have seen for many other survey efforts, a nonlinear regression model fit the data very well, explaining 99% of the variation in the data, and it showed progress towards the inevitable asymptote of the number of species detectable over a longer time period using the same survey method. In this case, my model predicted I would have eventually detected 111 species had I continued performing evening surveys during early June. I actually detected only 30.6% of what the pattern in my data predicts I could have detected with an expanded effort.

Figure 1. Actual and predicted relationships between the number of vertebrate wildlife species detected and the elapsed survey time based on a visual-scan survey on 3 June 2021. Note that the relationship would differ if the survey was based on another method, another time of day, or during another season. Also note the cumulative number of vertebrate species across all methods, times of day, and seasons would increase substantially.

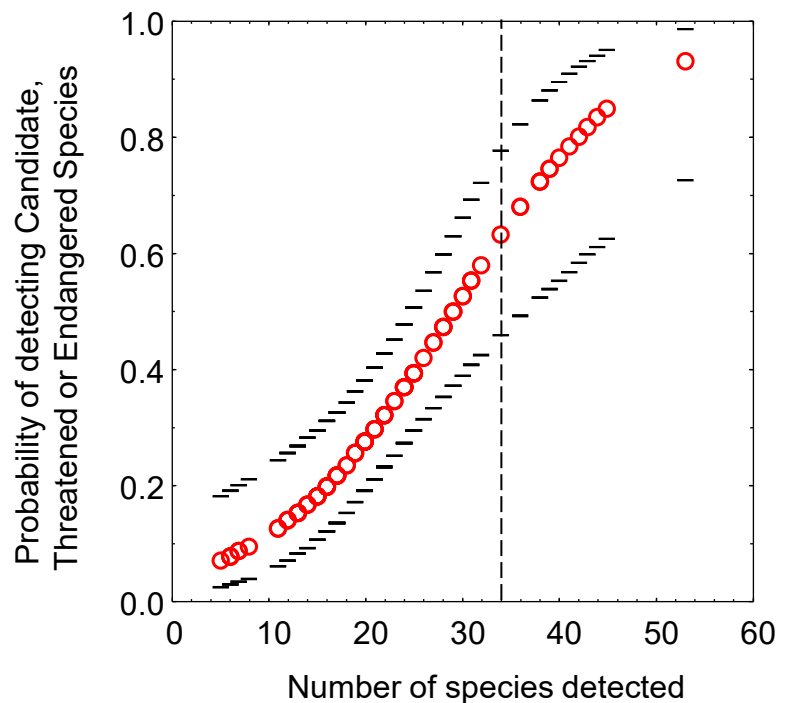


I could have detected many more species than I predicted by also performing surveys at different times of day to detect diurnal, nocturnal and crepuscular species, or surveys in different seasons and years to detect migrants and species with multi-annual cycles of abundance, or surveys of different methods such as use of acoustic detectors or thermal-imaging for bats, owls, and nocturnally migratory birds, and live-trapping for small mammals. My reconnaissance-level survey, performed carefully and analyzed appropriately, informs me that the site is rich in wildlife but also that its environmental setting remains insufficiently characterized as foundation for analysis of impacts to special-status species (more on this later). What my survey does not inform me, and

what detection surveys could, is which of the potentially occurring special-status species actually occur at the site in addition to those I had the good fortune to detect.

The likelihood of detecting special-status species is typically lower than that of more common species. This difference can be explained by the fact that special-status species tend to be rarer than common species. Special-status species also tend to be more cryptic, fossorial, or active during nocturnal periods when reconnaissance surveys are not performed. Another useful relationship from careful recording of species detections and subsequent comparative analysis is the probability of detection of listed species as a function of an increasing number of vertebrate wildlife species detected (Figure 2). (Note that listed species number fewer than special-status species, which are inclusive of listed species.) As demonstrated in Figure 1, the number of species detected is a function of survey effort. Therefore, greater survey effort increases the likelihood that listed species will be detected (which is the first tenet of detection surveys for special-status species). Based on the outcomes of 106 previous surveys that I performed at sites of proposed projects, my survey effort at the project site carried a 63% chance of detecting a listed species. As it turned out, I beat the odds by detecting not only one, but two listed species at the site: willow flycatcher (California Endangered) and white-tailed kite (California Fully Protected).

Figure 2. Probability of detecting ≥ 1 Candidate, Threatened or Endangered Species of wildlife listed under California or federal Endangered Species Acts, based on survey outcomes that I logit-regressed on the number of wildlife species I detected as an expert witness during 106 site visits throughout California. The short-dashed vertical line represents the cumulative number of species I detected on 3 June 2020, and the long-dashed line represents the cumulative number of species both WRA (2020) and I detected.



I am confident that with greater survey effort, including surveys during other times of year and using additional methods, and including the appropriate detection survey protocols, multiple additional special-status species would be detected, including merlin, burrowing owl, multiple additional species of bats, and most of the species listed in Table 2. A larger survey effort is needed to inform the public and decision-makers about the potential project impacts to wildlife and how to mitigate them.

BASELINE CONDITIONS AND BIOLOGICAL IMPACTS ASSESSMENT

On the one hand, City of Santa Rosa (2021) appears to understand the biological values of the project site, and on the other hand to have given little effort toward analyzing potential project impacts to biological resources. According to the IS/MND (p. 39), “The City of Santa Rosa and Planning Area contains streams, creeks, and associated tributaries, vernal pools, grasslands, hillsides, and woodlands, all of which serve as important habitats for a variety of plant and animal species.” And, “...the project site is identified as an area potentially containing sensitive species and potentially containing high quality vernal pool habitat.” But after acknowledging the importance of the site, the IS/MND’s conclusions are based on a highly cursory site survey and a weak analysis of potential impacts.

Other than reporting the date of the survey (27 April 2020) and how biologists walked over the site (“meandering”), WRA (2020) neglected to report the most basic information needed to assess the rigor and focus of the biological survey. The reader needs to know what time of day the survey took place, and how long the biologists were on site. All the reader knows is that the biologists who performed the survey did not see much in the way of plants and wildlife. However, as I pointed out earlier, the number of wildlife species detected is largely a function of survey effort. WRA (2020) should have reported the level of effort committed to the site.

The reporting of the field survey should be improved, but the only remedy for an unreliable survey outcome is to perform appropriate surveys. Given what I saw at the site during my 3-hour visit, I found it astounding that the two biologists who surveyed the site on 27 April 2020 detected a mere 7 species of wildlife (WRA 2020). The two biologists who surveyed the site – and who had direct access to it – detected a fifth of the species I saw and heard in only 3 hours on the evening of June 3rd. Perhaps the two visiting biologists were not experienced with wildlife, or perhaps they were focused on plants or soils, but for whatever reason they did not see more than a tiny fraction of the wildlife community that uses the site. Admittedly, I also detected only a fraction of the species that compose the local wildlife community but at least I put my findings in context of the survey effort. WRA’s (2020) findings regarding wildlife are not credible.

The biologists who visited the site likely knew that their wildlife species list was too short. WRA (2020:13) added the caveat, “The reconnaissance-level site visit was intended only as an evaluation of on-site and adjacent habitat types, and no special status animal species surveys were conducted as part of this effort.” Indeed, no detection surveys were performed; and by detection surveys I mean the types of surveys that were formulated by species’ experts and natural resource agencies to ensure reasonable likelihood of detection at reasonable cost. Detection surveys have been developed to detect a species that is present, to support absence determinations, and to inform preconstruction surveys to minimize take and to inform compensatory mitigation. Detection survey protocols are available for California tiger salamander, burrowing owl, Swainson’s hawk, and multiple other special-status species with potential to occur at the site. Additionally, methods are available for detecting classes of

wildlife that WRA's field visit neglected. Acoustic detectors, thermal-imaging cameras, mist-netting and evening visual scans would enable detections of bats. Live-trapping would have enabled detections of small terrestrial mammals. Point counts would have helped with birds.

The inexperience hypothesis for WRA's short list of detected wildlife species gained support upon my review of WRA's (2020) list of potentially occurring species. Multiple species and subspecies were considered even though they do not occur in the region. WRA considered subspecies with special-status because they are endemic to San Clemente Island, for example. WRA also misapplied the US Fish and Wildlife Service's lists of Bird Species of Conservation Concern, including species that are listed for other regions of the USA. It would help to assign an experienced biologist to those performing the field survey and to those analyzing potential impacts.

The analysis of potential impacts also went astray in the determinations of species' occurrence likelihoods. I identified 63 special-status species of vertebrate wildlife with potential to use the site (Table 2). I identified these species through my own observations and by reviewing eBird and iNaturalist for sighting records in the area. Of the 63 species in Table 2, 15 have been seen either directly on the project site or on property immediately adjacent to it. WRA considered the occurrence potential of only a third of these 15 species documented on or next to the site, and of the 5 species considered, WRA determined 3 to have no potential (white-tailed kite, Nuttall's woodpecker, and San Francisco common yellowthroat) and one to have low potential (Cooper's hawk). The biologists who visited the site saw Cooper's hawk next to it, and yet WRA still determined it has only low potential to occur. They were aware of the white-tailed kites, and yet WRA still determined the species has no occurrence potential. These determinations defy reality.

In all, WRA determined the occurrence potentials of only 18 (29%) of the 63 species I listed in Table 2. Nearly all of the 18 species considered by WRA were also determined to have no occurrence likelihood. These determinations are inconsistent with my own experience and with the occurrence records that are publicly available on data bases of sightings records. One plausible explanation for WRA's determinations was that they were based narrowly on whether the species is likely to breed on site. However, no animal can successfully breed at any location without also surviving the non-breeding season and migration, and without having found sufficient forage and opportunities in refugia, stopover during migration, staging, mate-selection and all the other functions the animal must perform to successfully breed. If WRA determined occurrence potential based on whether a species would breed on site, then WRA made its determinations based on an unrealistic view of wildlife habitat.

Table 2. Occurrence likelihoods of special-status species at the project site, based on WRA's assessments and by records of sightings in eBird and iNaturalist and actual site visits by biologists.

Species	Scientific name	Status ¹	Occurrence likelihood	
			WRA	eBird, iNaturalist, site visits
California tiger salamander	<i>Ambystoma californiense</i>	FT, CT	High	Recent nearby
California red-legged frog	<i>Rana draytonii</i>	FT, SSC	None	Nearby
Foothill yellow-legged frog	<i>Rana boylei</i>	CE, SSC	None	Nearby
Western pond turtle	<i>Emys marmorata</i>	SSC	None	Nearby
Caspian tern	<i>Hydroprogne caspia</i>	BCC		Nearby
California gull	<i>Larus californicus</i>	WL		Very close
Turkey vulture	<i>Cathartes aura</i>	BOP		On site
Osprey	<i>Pandion haliaetus</i>	WL, BOP	None	Nearby
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA, BCC, CE, CFP		Nearby
Golden eagle	<i>Aquila chrysaetos</i>	BGEPA, BCC, CFP	None	Nearby
Red-tailed hawk	<i>Buteo jamaicensis</i>	BOP		Adjacent
Ferruginous hawk	<i>Buteo regalis</i>	BCC, WL, BOP		Nearby
Swainson's hawk	<i>Buteo swainsoni</i>	BCC, CT		Nearby
Rough-legged hawk	<i>Buteo regalis</i>	BOP		Nearby
Red-shouldered hawk	<i>Buteo lineatus</i>	BOP		Adjacent
Sharp-shinned hawk	<i>Accipiter striatus</i>	WL, BOP		Adjacent
Cooper's hawk	<i>Accipiter cooperi</i>	WL, BOP	Low	Adjacent
Northern harrier	<i>Circus cyaneus</i>	SSC3, BOP		Adjacent
White-tailed kite	<i>Elanus leucurus</i>	CFP, BOP	None	On site
American kestrel	<i>Falco sparverius</i>	BOP		Adjacent
Merlin	<i>Falco columbarius</i>	WL, BOP		Nearby
Prairie falcon	<i>Falco mexicanus</i>	BCC, WL, BOP		Nearby
Peregrine falcon	<i>Falco peregrinus</i>	BCC, CFP		Adjacent
Burrowing owl	<i>Athene cunicularia</i>	BCC, SSC2	None	Nearby
Great-horned owl	<i>Bubo virginianus</i>	BOP		Nearby
Long-eared owl	<i>Asio otus</i>	SSC3, BOP		In region
Short-eared owl	<i>Asio flammeus</i>	SSC3, BOP		Nearby
Barn owl	<i>Tyto alba</i>	BOP		Nearby
Western screech-owl	<i>Megascops kennicotti</i>	BOP		Nearby

Species	Scientific name	Status ¹	Occurrence likelihood	
			WRA	eBird, iNaturalist, site visits
Costa's hummingbird	<i>Calypte costae</i>	BCC		Nearby
Allen's hummingbird	<i>Selasphorus sasin</i>	BCC	None	Nearby
Rufous hummingbird	<i>Selasphorus rufus</i>	BCC	None	Nearby
Nuttall's woodpecker	<i>Picoides nuttallii</i>	BCC	None	On site
Lewis's woodpecker	<i>Melanerpes lewis</i>	BCC		Nearby
Vaux's swift	<i>Chaetura vauxi</i>	SSC2		Nearby
Willow flycatcher	<i>Epidomax trailii</i>	CE, BCC		On site
Olive-sided flycatcher	<i>Contopus cooperi</i>	BCC, SSC2		Nearby
Oak titmouse	<i>Baeolophus inornatus</i>	BCC	High	On site
Horned lark	<i>Eremophila alpestris</i>	WL		Nearby
Loggerhead shrike	<i>Lanius ludovicianus</i>	BCC, SSC2		Nearby
Yellow-billed magpie	<i>Pica nuttalli</i>	BCC		In region
San Francisco common yellowthroat	<i>Geothlypis trichas sinuosa</i>	SSC3	None	On site
Yellow warbler	<i>Setophaga petechia</i>	BCC, SSC2		Nearby
Yellow-breasted chat	<i>Icteria virens</i>	SSC3		Nearby
Oregon vesper sparrow	<i>Poocetes gramineus affinis</i>	SSC2		In region
Grasshopper sparrow	<i>Ammodramus savannarum</i>	SSC2		Nearby
Summer tanager	<i>Piranga rubra</i>	SSC1		Nearby
Tricolored blackbird	<i>Agelaius tricolor</i>	CT, BCC	None	Nearby
Yellow-headed blackbird	<i>X. xanthocephalus</i>	SSC3		In region
Lawrence's goldfinch	<i>Spinus lawrencei</i>	BCC		Nearby
Pallid bat	<i>Antrozous pallidus</i>	SSC, WBWG H	None	Nearby
Townsend's big-eared bat	<i>Plecotus t. townsendii</i>	SSC, WBWG H		Nearby
Silver-haired bat	<i>Lasionycteris noctivagans</i>	WBWG:M		In region
Western red bat	<i>Lasiurus blossevillii</i>	SSC, WBWG H		Nearby
Little brown bat	<i>Myotis lucifugus</i>	WBWG:M		Very close
Canyon bat	<i>Parastrellus hesperus</i>	WBWG:M		In region
Small-footed myotis	<i>Myotis ciliabrum</i>	WBWG M		In region
Miller's myotis	<i>Myotis evotis</i>	WBWG M		In region
Fringed myotis	<i>Myotis thysanodes</i>	WBWG H		In region

Species	Scientific name	Status ¹	Occurrence likelihood	
			WRA	eBird, iNaturalist, site visits
Long-legged myotis	<i>Myotis volans</i>	WBWG H		In range
Yuma myotis	<i>Myotis yumanensis</i>	WBWG LM		In range
Hoary bat	<i>Lasiurus cinereus</i>	WBWG LM	None	In region
American badger	<i>Taxidea taxus</i>	SSC	None	Nearby

¹ Listed as FT or FE = federally Threatened or Endangered, BGEPA = Bald and Golden Eagle Protection Act, BCC = US Fish and Wildlife Service's Bird Species of Conservation Concern, CT or CE = California Threatened or Endangered, CFP = California Fully Protected (California Fish and Game Code §3511 – birds; §4700 – mammals), BOP = California Fish and Game Code 3503.5 (Birds of prey), and SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3 (Shuford and Gardali 2008), WL = Taxa to Watch List (Shuford and Gardali 2008), WBWG = Western Bat Working Group with low, medium and high conservation priorities.

I disagree with WRA's (2020) analysis of potential impacts to California tiger salamander (CTS). According to WRA (2020:26), "Suitable breeding habitat for CTS are water bodies that typically support inundation during winter/spring and hold water for a minimum of 12 consecutive weeks in a year of average rainfall, which results in water remaining until May or longer. None of the drainage ditches within the proposed project area supported that type of ponding. As a result, the site is only suitable for upland habitat." The first problem with this conclusion is that its characterization of ponding on the site was based on a single site visit in late April during a drought year. I monitored many ponds for CTS. In one study (Smallwood and Morrison 2007), I monitored 64 ponds for CTS over two years. Whether ponds remained inundated through May varied between years. In the second year I found CTS larvae in ponds that did not remain inundated through May of the previous year. Therefore, ponds that were dry when WRA visited them in April 2020 could be inundated in another year, and they could support CTS. A single site visit is insufficient for determining the potential of the site for supporting breeding CTS.

I also disagree with WRA's (2020:27) assertion that "the small size of the parcel and the lack of tall trees preclude the potential for raptors to nest on the site." In my experience over several decades, I have often found raptors nesting in trees of stature similar to those on the project site, and on parcels even smaller than that of the project site. One can look to the successful nest of white-tailed kites right next door on an even smaller parcel and in a tree no larger than the trees on the project site. WRA's assertion lacks credibility.

Furthermore, I disagree with WRA's (2020:28) assertion that "The mitigation will be purchased from a mitigation bank that is within the Critical Habitat for the species. Therefore, no net loss of CTS Critical Habitat will occur." The habitat that would be purchased in a conservation bank already exists. The loss of habitat at the project site will not be replaced by new habitat. Therefore, a net loss of habitat will occur.

WRA's characterization of the wildlife community at the project site was grossly incomplete and misleading. A fair argument can be made for the need to prepare an EIR to more appropriately characterize the environmental setting, analyze impacts and formulate mitigation measures.

HABITAT LOSS

The project would eliminate 2.01 acres of wildlife habitat. Habitat loss not only results in the immediate numerical decline of wildlife, but also in permanent loss of productive capacity (Smallwood 2015). For example, grassland/wetland/woodland complexes at two study sites had total bird nesting densities of 32.8 and 35.8 nests per acre (Young 1948, Yahner 1982) for an average 34.3 nests per acre. Applying this density to the project site, then 34.3 nests/acre multiplied against 2.01 acres would predict a loss of 69 bird nests. 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 200 fledglings per year.

After 100 years and assuming an average generation time of 5 years, the lost capacity of both breeders and annual fledgling production can be estimated from the following formula: $\{(nests/year \times chicks/nest \times number\ of\ years) + ((2\ adults/nest \times nests/year) \times (number\ of\ years \div years/generation))\}$. In the case of this project, this formula would predict **the project would deny California 22,760 birds over the next century due solely to loss of terrestrial habitat**. This predicted loss would be substantial, and would qualify as significant impacts that have yet to be addressed by the IS/MND. A fair argument can be made for the need to prepare an EIR.

WILDLIFE MOVEMENT

Based on WRA's (2020) analysis, the IS/MND's determination of less than significant impacts to wildlife in the region is flawed. For example, WRA (2020:16) concludes, "The study area is not located in an Essential Connectivity Area (defined as areas that are essential for ecological connectivity between blocks) (Spencer et al. 2010)." However, WRA misapplied the California Essential Habitat Connectivity Project. At [https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18486 &inline](https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18486), the California Essential Habitat Connectivity Project very specifically pointed out that it is not: "A California Department of Fish and Game or US Fish and Wildlife Service response to potential impacts to a habitat or species from a project subject to the California Environmental Quality Act (CEQA)," nor "Fine scale, with every important piece of habitat identified" nor "Essential", meaning the only places of importance" nor "A solution by itself for how to provide necessary linkages for any given species of plant or animal... Linkage designs will vary depending on focal species chosen and the goal of providing connected habitat for a chosen species might be met several different ways" nor "The final word on connectivity for California." With analytical grid cells of 2,000 acres, the spatial grain of the California Essential Habitat Connectivity Project is much too coarse for the conclusion drawn from it by WRA (2020).

In another example, WRA (2020:16) asserts, "The proposed construction will not be an impediment to any movement corridors in this area based on the separated nature of the individual units and a lack of fencing around the proposed development." WRA (2020) implies that whether a project would interfere with wildlife movement depends on whether it occurs within a movement corridor. This implication invokes a false CEQA standard. 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 proposed project site is critically important for wildlife movement because it composes an increasingly diminishing expanse of open space within a growing expanse of anthropogenic uses, forcing more species of volant wildlife to use the site as stopover and staging habitat during migration, dispersal, and home range patrol (Warnock 2010, Taylor et al. 2011, Runge et al. 2014). The project would cut wildlife off from stopover and staging habitat, forcing volant wildlife to travel even farther between remaining patches of stopover habitat. The project would interfere with wildlife movement in the region. An EIR needs to be prepared to more carefully analyze this impact.

WINDOW COLLISIONS

The IS/MND includes no analysis of potential impact so birds that would be caused by bird-window collisions. Window collisions are often characterized as either the second or third largest source of human-caused bird mortality. The numbers behind these characterizations are often attributed to Klem's (1990) and Dunn's (1993) estimates of about 100 million to 1 billion bird fatalities in the USA, or more recently by Loss et al.'s (2014) estimate of 365-988 million bird fatalities in the USA or Calvert et al.'s (2013) and Machtans et al.'s (2013) estimates of 22.4 million and 25 million bird fatalities in Canada, respectively. The proposed project would impose windows in the airspace normally used by birds.

Other factors can add to bird-window collision risk. For example, homes with birdfeeders are associated with higher rates of window collisions than are homes without birdfeeders (Kummer and Bayne 2015, Kummer et al. 2016a), so the developed area might pose even greater hazard to birds if it includes numerous birdfeeders.

Project Impact Prediction

By the time of these comments, I had reviewed and processed results of bird collision monitoring at 213 buildings and façades for which bird collisions per m² of glass per year could be calculated and averaged (Johnson and Hudson 1976, O'Connell 2001, Somerlot 2003, Hager et al. 2008, Borden et al. 2010, Hager et al. 2013, Porter and Huang 2015, Parkins et al. 2015, Kahle et al. 2016, Ocampo-Peñuela et al. 2016, Sabo et al. 2016, Barton et al. 2017, Gomez-Moreno et al. 2018, Schneider et al. 2018, Loss et al. 2019, Brown et al. 2020, City of Portland Bureau of Environmental Services and Portland Audubon 2020, Riding et al. 2020). These study results averaged 0.073 bird deaths per m² of glass per year (95% CI: 0.042-0.102). This average and its 95% confidence interval provide a robust basis for predicting fatality rates at a proposed new project, because the basis includes a variety of building sizes and heights and various window glass and window settings.

The IS/MND provides no information on the types and extents of windows that would be built into the dwelling units, but it does provide the square footage (s.f.) of floorspace of the homes. I therefore applied my own measurements of 0.0147368 m² of glass window extent per s.f. of floorspace in modern homes to the 25,000 s.f. of the proposed new home floorspace. Based on my measured rate, the proposed project would add 368 m² of new glass windows. Applying the mean fatality rate (above) to my estimate of 368 m² of glass windows predicts **27 bird deaths per year (95% CI: 16-38)**. The 100-year toll from this average annual fatality rate would be 2,700 bird deaths (95% CI: 1,600-3,800). The vast majority of these deaths would be of birds protected under the Migratory Bird Treaty Act and under the recently revised California Fish and Game Code section 3513, thus causing significant unmitigated impacts. Given the predicted level of bird-window collision mortality, and the absence of proposed mitigation in the IS/MND, it is my opinion that the project would result in potentially significant adverse biological impacts. An EIR needs to be prepared to appropriately address this impact.

Given the magnitude of bird-window collision impacts, there are obviously great opportunities for reducing and minimizing these impacts going forward. Proposed new structures can be more carefully sited, designed, and managed to minimize impacts. However, the costs of some of these measures can be high and can vary greatly, but most importantly the efficacies of many of these measures remain uncertain. Both the costs and effectiveness of all of these measures can be better understood through experimentation and careful scientific investigation. Post-construction fatality monitoring should be an essential feature of any new building project.

HOUSE CATS

House cats likely would be brought to the project site by residents of the proposed residential units. However, the IS/MND does not address the impacts of house cats on wildlife. House cats serve as one of the largest sources of avian mortality in North America (Dauphiné and Cooper 2009, Blancher 2013, Loss et al. 2013, Loyd et al. 2017). Loss et al. (2013) estimated 139 million cats in the USA in 2013 (range 114 to 164 million), which killed an estimated 16.95 billion vertebrate wildlife annually (range 7.6 to 26.3 billion). In 2012 there were 0.44 house cats per human, and 122 vertebrate animals were killed per cat, free-ranging members of which killed disproportionately larger numbers of vertebrate wildlife. According to the IS/MND, the proposed project would add 32 new residents and 5 staff. The above rates applied to 37 new residents/staff **would add 16 cats, which would kill 1,952 vertebrate wildlife per year.**

If the above prediction seems unrealistic, I will add my own observations of the site while I visited it. I watched 3 house cats hunting for wildlife on the site while I was there. There were likely others I did not see. One captured a pocket gopher and carried it to a neighboring home. Even now, free-roaming house cats are taking a toll on wildlife at the project site. Adding more cats would intensify the impacts.

House cats also contribute to downstream loading of *Toxoplasma gondii*. According to a UC Davis wildlife health research program, "*Toxoplasma gondii is a parasite that can infect virtually all warm-blooded animals, but the only known definitive hosts are cats – domesticated and feral house cats included. Cats catch the parasite through hunting rodents and birds and they offload it into the environment through their feces... and ...rain that falls on cement creates more runoff than rain that falls on natural earth, which contributes to increased runoff that can carry fecal pathogens to the sea*" (<http://www.evotis.org/toxoplasma-gondii-sea-otters/>). An EIR needs to be prepared to address the impacts of house cats to wildlife.

CUMULATIVE IMPACTS

The IS/MND characterizes cumulative effects as simply residual impacts of incomplete mitigation of project-level impacts. It asserts that environmental review performed for the City's General Plan will serve as an umbrella review to ensure adequate protection and management of biological resources in the City of Santa Rosa. If this was CEQA's standard, then cumulative effects analysis would be merely an analysis of mitigation

efficacy. And if that was the standard, then I must point out that few of the project-level impacts would be offset to any degree by the proposed mitigation measures. But the IS/MND's implied standard is not the standard of analysis of cumulative effects. CEQA defines cumulative impacts, and it outlines two general approaches for performing the analysis. Neither approach is implemented in the IS/MND. An EIR needs to be prepared to address potential cumulative impacts.

MITIGATION

The proposed mitigation measures are largely premature and incomplete, having not been informed by adequate characterization of the environmental setting and analysis of potential impacts. Whether special-status species occur on site needs to be better established, as well as approximately how many of each species. Whether vernal pools occur on the project site needs to be determined. Whether bats roost on site needs to be determined.

The formulations of multiple mitigation measures are deferred to unspecified later dates, thereby precluding meaningful public participation with one of the most important aspects of CEQA review. An EIR should be prepared, and it should include more details of each mitigation measure.

BIO-4 – Preconstruction surveys for nesting birds and raptors. Whereas I agree that preconstruction surveys would be appropriate, I must add that preconstructions should not be performed without first having performed detection surveys, as I explained earlier. Preconstruction surveys are no substitute for detection surveys. Prior to certification of an EIR, which I suggest needs to be prepared, species detection surveys are needed to (1) support negative findings of species when appropriate, (2) inform preconstruction surveys to improve their efficacy, (3) estimate project impacts, and (4) inform compensatory mitigation and other forms of mitigation. Detection survey protocols and guidelines are available from resource agencies for most special-status species. Otherwise, professional standards can be learned from the scientific literature and species' experts.

Preconstruction surveys ought also to be performed for bats, but the IS/MND proposes no such surveys.

It should be understood that preconstruction surveys, although warranted, actually achieve very little. Birds are very capable of hiding nest sites, and bats are very capable of hiding roost sites. Most bird nests and bat roost sites would be missed by preconstruction surveys. For this reason, compensatory mitigation is needed for those bird nests and bat roosts that will be missed by preconstruction surveys. Additionally, preconstruction surveys accomplish nothing in terms of mitigating mortality caused by collisions with windows and automobiles, predation by house cats, and by habitat loss. Compensatory mitigation is needed for these types of project impacts to wildlife.

RECOMMENDED MITIGATION

Habitat Protection

The IS/MND promises that CTS habitat would be conserved by payment of a compensatory mitigation fee to a conservation bank. However, many more special-status species would be significantly and adversely affected by this project. Compensatory mitigation would also be needed for impacts to these other species. Habitat should be permanently protected in the form of fee title or conservation easement, or a combination thereof. Habitat impacts should also be mitigated as near as possible to the project footprint, and it should be strategically implemented to reduce the effects of habitat fragmentation (Smallwood 2015).

I also recommend that 15 years of monitoring be performed for targeted special-status species on and around the conserved lands and within the neighborhood itself to further assess cumulative impacts. If the project goes forward, we should at least learn of the cumulative impacts as well as the performance of mitigation measures.

Guidelines on Home Design to Minimize Bird-Window Collisions

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

Monitoring and the use of compensatory mitigation should be incorporated at any new building project because the measures recommended in the available guidelines remain of uncertain efficacy. Also, even if these measures are effective, they will not reduce collision fatalities to zero. The only way to assess mitigation efficacy and to quantify post-construction fatalities is to monitor the project for fatalities at residential homes.

House Cats

If the project goes forward, a fund should be established for long-term management of house cats in the project. Management could include public education about the

environmental effects of outdoor and free-ranging cats. It could also include a program to spade and neuter cats, especially free-ranging cats. It could also involve some removals of feral cats.

Measures to Rectify Impacts

Compensatory mitigation ought also to include funding contributions to wildlife rehabilitation facilities to cover the costs of injured animals that would be delivered to these facilities for care. Most of the injuries likely would be caused by collisions with windows and automobiles, and by attacks by house cats. Many of these animals would need treatment by wildlife rehabilitation facilities.

Thank you for your attention,



Shawn Smallwood, Ph.D.

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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

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

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

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

the County on how to reduce wildlife fatalities.

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

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

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

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

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

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

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

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

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

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

to receive mitigation funds for habitat easements and restoration.

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

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

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

Projects

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Peer Reviewed Publications

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

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

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

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

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

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

Smallwood, K. S., L. Neher, and D. A. Bell. 2017. Siting to Minimize Raptor Collisions: an example from the Repowering 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

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.

Mete, A., N. Stephenson, K. Rogers, M. G. Hawkins, M. Sadar, D. Guzman, D. A. Bell, J. Shipman, A. Wells, K. S. Smallwood, and J. Foley. 2014. Emergence of Knemidocoptic mange in wild Golden Eagles (*Aquila chrysaetos*) in California. *Emerging Infectious Diseases* 20(10):1716-1718.

Smallwood, K. S. 2013. Introduction: Wind-energy development and wildlife conservation.

- Wildlife Society Bulletin 37: 3-4.
- Smallwood, K. S. 2013. Comparing bird and bat fatality-rate estimates among North American wind-energy projects. *Wildlife Society Bulletin* 37:19-33. + Online Supplemental Material.
- Smallwood, K. S., L. Neher, J. Mount, and R. C. E. Culver. 2013. Nesting Burrowing Owl Abundance in the Altamont Pass Wind Resource Area, California. *Wildlife Society Bulletin*: 37:787-795.
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- Bell, D. A., and K. S. Smallwood. 2010. Birds of prey remain at risk. *Science* 330:913.
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- Smallwood, K. S., L. Neher, and D. A. Bell. 2009. Map-based repowering and reorganization of a wind resource area to minimize burrowing owl and other bird fatalities. *Energies* 2009(2):915-943. <http://www.mdpi.com/1996-1073/2/4/915>
- Smallwood, K. S. and B. Nakamoto. 2009. Impacts of West Nile Virus Epizootic on Yellow-Billed Magpie, American Crow, and other Birds in the Sacramento Valley, California. *The Condor* 111:247-254.
- Smallwood, K. S., L. Rugge, and M. L. Morrison. 2009. Influence of Behavior on Bird Mortality in Wind Energy Developments: The Altamont Pass Wind Resource Area, California. *Journal of Wildlife Management* 73:1082-1098.
- Smallwood, K. S. and B. Karas. 2009. Avian and Bat Fatality Rates at Old-Generation and Repowered Wind Turbines in California. *Journal of Wildlife Management* 73:1062-1071.
- Smallwood, K. S. 2008. Wind power company compliance with mitigation plans in the Altamont Pass Wind Resource Area. *Environmental & Energy Law Policy Journal* 2(2):229-285.
- Smallwood, K. S., C. G. Thelander. 2008. Bird Mortality in the Altamont Pass Wind Resource Area, California. *Journal of Wildlife Management* 72:215-223.
- Smallwood, K. S. 2007. Estimating wind turbine-caused bird mortality. *Journal of Wildlife Management* 71:2781-2791.
- Smallwood, K. S., C. G. Thelander, M. L. Morrison, and L. M. Rugge. 2007. Burrowing owl mortality in the Altamont Pass Wind Resource Area. *Journal of Wildlife Management* 71:1513-1524.
- Cain, J. W. III, K. S. Smallwood, M. L. Morrison, and H. L. Loffland. 2005. Influence of mammal activity on nesting success of Passerines. *J. Wildlife Management* 70:522-531.

- Smallwood, K.S. 2002. Habitat models based on numerical comparisons. Pages 83-95 in Predicting species occurrences: Issues of scale and accuracy, J. M. Scott, P. J. Heglund, M. Morrison, M. Raphael, J. Haufler, and B. Wall, editors. Island Press, Covello, California.
- Morrison, M. L., K. S. Smallwood, and L. S. Hall. 2002. Creating habitat through plant relocation: Lessons from Valley elderberry longhorn beetle mitigation. *Ecological Restoration* 21: 95-100.
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Comments on Environmental Documents (Year; pages)

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

- Replies on UCSF Comprehensive Parnassus Heights Plan EIR (2021; 13);
- 14 Charles Hill Circle Design Review (2021; 11);
- SDG Commerce 217 Warehouse IS, American Canyon (2021; 26);
- Mulqueeney Ranch Wind Repowering Project DSEIR (2021; 98);
- Clawiter Road Industrial Project IS/MND, Hayward (2021; 18);
- Garnet Energy Center Stipulations, New York (2020);
- Heritage Wind Energy Project, New York (2020: 71);
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- Cambria Hotel Project Staff Report, Dublin (2020; 19);
- Central Pointe Mixed-Use Staff Report, Santa Ana (2020; 20);
- Oak Valley Town Center EIR Addendum, Calimesa (2020; 23);
- Coachillin Specific Plan MND Amendment, Desert Hot Springs (2020; 26);
- Stockton Avenue Hotel and Condominiums Project Tiering to EIR, San Jose (2020; 19);
- Cityline Sub-block 3 South Staff Report, Sunyvale (2020; 22);
- Station East Residential/Mixed Use EIR, Union City (2020; 21);
- Multi-Sport Complex & Southeast Industrial Annexation Suppl. EIR, Elk Grove (2020; 24);
- Sun Lakes Village North EIR Amendment 5, Banning, Riverside County (2020; 27);
- 2nd comments on 1296 Lawrence Station Road, Sunnyvale (2020; 4);
- 1296 Lawrence Station Road, Sunnyvale (2020; 16);
- Mesa Wind Project EA, Desert Hot Springs (2020; 31);
- 11th Street Development Project IS/MND, City of Upland (2020; 17);
- Vista Mar Project IS/MND, Pacifica (2020; 17);
- Emerson Creek Wind Project Application, Ohio (2020; 64);
- Replies on Wister Solar Energy Facility EIR, Imperial County (2020; 12);
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- Crimson Solar EIS/EIR, Mojave Desert (2020, 35) not submitted;
- Sakioka Farms EIR tiering, Oxnard (2020; 14);
- 3440 Wilshire Project IS/MND, Los Angeles (2020; 19);
- Replies on 2400 Barranca Office Development Project EIR, Irvine (2020; 8);
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- Replies on Heber 2 Geothermal Repower Project IS/MND, El Centro (2020; 4);
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- Heber 2 Geothermal Repower Project IS/MND, El Centro (2020; 3);
- Lots 4-12 Oddstad Way Project IS/MND, Pacifica (2020; 16);
- Declaration on DDG Visalia Warehouse project (2020; 5);
- Terraces of Lafayette EIR Addendum (2020; 24);
- AMG Industrial Annex IS/MND, Los Banos (2020; 15);
- Replies to responses on Casmalia and Linden Warehouse (2020; 15);
- Clover Project MND, Petaluma (2020; 27);
- Ruby Street Apartments Project Env. Checklist, Hayward (2020; 20);
- Replies to responses on 3721 Mt. Diablo Boulevard Staff Report (2020; 5);
- 3721 Mt. Diablo Boulevard Staff Report (2020; 9);
- Steeno Warehouse IS/MND, Hesperia (2020; 19);
- UCSF Comprehensive Parnassus Heights Plan EIR (2020; 24);
- North Pointe Business Center MND, Fresno (2020; 14);
- Casmalia and Linden Warehouse IS, Fontana (2020; 15);
- Rubidoux Commerce Center Project IS/MND, Jurupa Valley (2020; 27);
- Haun and Holland Mixed Use Center MND, Menifee (2020; 23);
- First Industrial Logistics Center II, Moreno Valley IS/MND (2020; 23);
- GLP Store Warehouse Project Staff Report (2020; 15);
- Replies on Beale WAPA Interconnection Project EA & CEQA checklist (2020; 29);
- 2nd comments on Beale WAPA Interconnection Project EA & CEQA checklist (2020; 34);

- Beale WAPA Interconnection Project EA & CEQA checklist (2020; 30);
- Levine-Fricke Softball Field Improvement Addendum, UC Berkeley (2020; 16);
- Greenlaw Partners Warehouse and Distribution Center Staff Report, Palmdale (2020; 14);
- Humboldt Wind Energy Project DEIR (2019; 25);
- Sand Hill Supplemental EIR, Altamont Pass (2019; 17);
- 1700 Dell Avenue Office Project, Campbell (2019, 28);
- 1180 Main Street Office Project MND, Redwood City (2019; 19);
- Summit Ridge Wind Farm Request for Amendment 4, Oregon (2019; 46);
- Shafter Warehouse Staff Report (2019; 4);
- Park & Broadway Design Review, San Diego (2019; 19);
- Pinnacle Pacific Heights Design Review, San Diego (2019; 19);
- Pinnacle Park & C Design Review, San Diego (2019; 19);
- Preserve at Torrey Highlands EIR, San Diego (2019; 24);
- Santana West Project EIR Addendum, San Jose (2019; 18);
- The Ranch at Eastvale EIR Addendum, Riverside County (2020; 19);
- Hageman Warehouse IS/MND, Bakersfield (2019; 13);
- Oakley Logistics Center EIR, Antioch (2019; 22);
- 27 South First Street IS, San Jose (2019; 23);
- 2nd replies on Times Mirror Square Project EIR, Los Angeles (2020; 11);
- Replies on Times Mirror Square Project EIR, Los Angeles (2020; 13);
- Times Mirror Square Project EIR, Los Angeles (2019; 18);
- East Monte Vista & Aviator General Plan Amend EIR Addendum, Vacaville (2019; 22);
- Hillcrest LRDP EIR, La Jolla (2019; 36);
- 555 Portola Road CUP, Portola Valley (2019; 11);
- Johnson Drive Economic Development Zone SEIR, Pleasanton (2019; 27);
- 1750 Broadway Project CEQA Exemption, Oakland (2019; 19);
- Mor Furniture Project MND, Murietta Hot Springs (2019; 27);
- Harbor View Project EIR, Redwood City (2019; 26);
- Visalia Logistics Center (2019; 13);
- Cordelia Industrial Buildings MND (2019; 14);
- Scheu Distribution Center IS/ND, Rancho Cucamonga (2019; 13);
- Mills Park Center Staff Report, San Bruno (2019; 22);
- Site visit to Desert Highway Farms IS/MND, Imperial County (2019; 9);
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- ExxonMobil Interim Trucking for Santa Ynez Unit Restart SEIR, Santa Barbara (2019; 9);
- Olympic Holdings Inland Center Warehouse Project MND, Rancho Cucamonga (2019; 14);
- Replies to responses on Lawrence Equipment Industrial Warehouse, Banning (2019; 19);
- PARS Global Storage MND, Murietta (2019; 13);
- Slover Warehouse EIR Addendum, Fontana (2019; 16);
- Seefried Warehouse Project IS/MND, Lathrop (2019; 19)
- World Logistics Center Site Visit, Moreno Valley (2019; 19);
- Merced Landfill Gas-To-Energy Project IS/MND (2019; 12);
- West Village Expansion FEIR, UC Davis (2019; 11);
- Site visit, Doheny Ocean Desalination EIR, Dana Point (2019; 11);

- Replies to responses on Avalon West Valley Expansion EIR, San Jose (2019; 10);
- Avalon West Valley Expansion EIR, San Jose (2019; 22);
- Sunroad – Otay 50 EIR Addendum, San Diego (2019; 26);
- Del Rey Pointe Residential Project IS/MND, Los Angeles (2019; 34);
- 1 AMD Redevelopment EIR, Sunnyvale (2019; 22);
- Lawrence Equipment Industrial Warehouse IS/MND, Banning (2019; 14);
- SDG Commerce 330 Warehouse IS, American Canyon (2019; 21);
- PAMA Business Center IS/MND, Moreno Valley (2019; 23);
- Cupertino Village Hotel IS (2019; 24);
- Lake House IS/ND, Lodi (2019; 33);
- Campo Wind Project DEIS, San Diego County (DEIS, (2019; 14);
- Stirling Warehouse MND site visit, Victorville (2019; 7);
- Green Valley II Mixed-Use Project EIR, Fairfield (2019; 36);
- We Be Jammin rezone MND, Fresno (2019; 14);
- Gray Whale Cove Pedestrian Crossing IS/ND, Pacifica (2019; 7);
- Visalia Logistics Center & DDG 697V Staff Report (2019; 9);
- Mather South Community Masterplan Project EIR (2019; 35);
- Del Hombre Apartments EIR, Walnut Creek (2019; 23);
- Otay Ranch Planning Area 12 EIR Addendum, Chula Vista (2019; 21);
- The Retreat at Sacramento IS/MND (2019; 26);
- Site visit to Sunroad – Centrum 6 EIR Addendum, San Diego (2019; 9);
- Sunroad – Centrum 6 EIR Addendum, San Diego (2018; 22);
- North First and Brokaw Corporate Campus Buildings EIR Addendum, San Jose (2018; 30);
- South Lake Solar IS, Fresno County (2018; 18);
- Galloo Island Wind Project Application, New York (not submitted) (2018; 44);
- Doheny Ocean Desalination EIR, Dana Point (2018; 15);
- Stirling Warehouse MND, Victorville (2018; 18);
- LDK Warehouse MND, Vacaville (2018; 30);
- Gateway Crossings FEIR, Santa Clara (2018; 23);
- South Hayward Development IS/MND (2018; 9);
- CBU Specific Plan Amendment, Riverside (2018; 27);
- 2nd replies to responses on Dove Hill Road Assisted Living Project MND (2018; 11);
- Replies to responses on Dove Hill Road Assisted Living Project MND (2018; 7);
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- Deer Ridge/Shadow Lakes Golf Course EIR, Brentwood (2018; 21);
- Pyramid Asphalt BLM Finding of No Significance, Imperial County (2018; 22);
- Amáre Apartments IS/MND, Martinez (2018; 15);
- Petaluma Hill Road Cannabis MND, Santa Rosa (2018; 21);
- 2nd comments on Zeiss Innovation Center IS/MND, Dublin (2018; 12);
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- City of Hope Campus Plan EIR, Duarte (2018; 21);
- Palo Verde Center IS/MND, Blythe (2018; 14);
- Logisticenter at Vacaville MND (2018; 24);
- IKEA Retail Center SEIR, Dublin (2018; 17);

- Merge 56 EIR, San Diego (2018; 15);
- Natomas Crossroads Quad B Office Project P18-014 EIR, Sacramento (2018; 12);
- 2900 Harbor Bay Parkway Staff Report, Alameda (2018; 30);
- At Dublin EIR, Dublin (2018; 25);
- Fresno Industrial Rezone Amendment Application No. 3807 IS (2018; 10);
- Nova Business Park IS/MND, Napa (2018; 18);
- Updated Collision Risk Model Priors for Estimating Eagle Fatalities, USFWS (2018; 57);
- 750 Marlborough Avenue Warehouse MND, Riverside (2018; 14);
- Replies to responses on San Bernardino Logistics Center IS (2018; 12);
- San Bernardino Logistics Center IS (2018; 19);
- CUP2017-16, Costco IS/MND, Clovis (2018; 11);
- Desert Land Ventures Specific Plan EIR, Desert Hot Springs (2018; 18);
- Ventura Hilton IS/MND (2018; 30);
- North of California Street Master Plan Project IS, Mountain View (2018; 11);
- Tamarind Warehouse MND, Fontana (2018; 16);
- Lathrop Gateway Business Park EIR Addendum (2018; 23);
- Centerpointe Commerce Center IS, Moreno Valley (2019; 18);
- Amazon Warehouse Notice of Exemption, Bakersfield (2018; 13);
- CenterPoint Building 3 project Staff Report, Manteca (2018; 23);
- Cessna & Aviator Warehouse IS/MND, Vacaville (2018; 24);
- Napa Airport Corporate Center EIR, American Canyon (2018, 15);
- 800 Opal Warehouse Initial Study, Mentone, San Bernardino County (2018; 18);
- 2695 W. Winton Ave Industrial Project IS, Hayward (2018; 22);
- Trinity Cannabis Cultivation and Manufacturing Facility DEIR, Calexico (2018; 15);
- Shoe Palace Expansion IS/MND, Morgan Hill (2018; 21);
- Newark Warehouse at Morton Salt Plant Staff Report (2018; 15);
- Northlake Specific Plan FEIR “Peer Review”, Los Angeles County (2018; 9);
- Replies to responses on Northlake Specific Plan SEIR, Los Angeles County (2018; 13);
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- Bogle Wind Turbine DEIR, east Yolo County (2017; 48);
- Ferrante Apartments IS/MND, Los Angeles (2017; 14);
- The Villages of Lakeview EIR, Riverside (2017; 28);
- Data Needed for Assessing Trail Management Impacts on Northern Spotted Owl, Marin County (2017; 5);
- Notes on Proposed Study Options for Trail Impacts on Northern Spotted Owl (2017; 4);
- Pyramid Asphalt IS, Imperial County (Declaration) (2017; 5);
- San Geronio Crossings EIR, Riverside County (2017; 22);
- Replies to responses on Jupiter Project IS and MND, Apple Valley (2017; 12);
- Proposed World Logistics Center Mitigation Measures, Moreno Valley (2017, 2019; 12);
- MacArthur Transit Village Project Modified 2016 CEQA Analysis (2017; 12);
- PG&E Company Bay Area Operations and Maintenance HCP (2017; 45);
- Central SoMa Plan DEIR (2017; 14);
- Suggested mitigation for trail impacts on northern spotted owl, Marin County (2016; 5);
- Colony Commerce Center Specific Plan DEIR, Ontario (2016; 16);

- Fairway Trails Improvements MND, Marin County (2016; 13);
- Review of Avian-Solar Science Plan (2016; 28);
- Replies on Pyramid Asphalt IS, Imperial County (2016; 5);
- Pyramid Asphalt IS, Imperial County (2016; 4);
- Agua Mansa Distribution Warehouse Project Initial Study (2016; 14);
- Santa Anita Warehouse MND, Rancho Cucamonga (2016; 12);
- CapRock Distribution Center III DEIR, Rialto (2016: 12);
- Orange Show Logistics Center IS/MND, San Bernardino (2016; 9);
- City of Palmdale Oasis Medical Village Project IS/MND (2016; 7);
- Comments on proposed rule for incidental eagle take, USFWS (2016, 49);
- Replies on Grapevine Specific and Community Plan FEIR, Kern County (2016; 25);
- Grapevine Specific and Community Plan DEIR, Kern County (2016; 15);
- Clinton County Zoning Ordinance for Wind Turbine siting (2016);
- Hallmark at Shenandoah Warehouse Project Initial Study, San Bernardino (2016; 6);
- Tri-City Industrial Complex Initial Study, San Bernardino (2016; 5);
- Hidden Canyon Industrial Park Plot Plan 16-PP-02, Beaumont (2016; 12);
- Kimball Business Park DEIR (2016; 10);
- Jupiter Project IS and MND, Apple Valley, San Bernardino County (2016; 9);
- Revised Draft Giant Garter Snake Recovery Plan of 2015 (2016, 18);
- Palo Verde Mesa Solar Project EIR, Blythe (2016; 27);
- Reply on Fairview Wind Project Natural Heritage Assessment, Ontario, Canada (2016; 14);
- Fairview Wind Project Natural Heritage Assessment, Ontario, Canada (2016; 41);
- Reply on Amherst Island Wind Farm Natural Heritage Assessment, Ontario (2015, 38);
- Amherst Island Wind Farm Natural Heritage Assessment, Ontario (2015, 31);
- Second Reply on White Pines Wind Farm, Ontario (2015, 6);
- Reply on White Pines Wind Farm Natural Heritage Assessment, Ontario (2015, 10);
- White Pines Wind Farm Natural Heritage Assessment, Ontario (2015, 9);
- Proposed Section 24 Specific Plan Agua Caliente Band of Cahuilla Indians DEIS (2015, 9);
- Replies on 24 Specific Plan Agua Caliente Band of Cahuilla Indians FEIS (2015, 6);
- Willow Springs Solar Photovoltaic Project DEIR, Rosamond (2015; 28);
- Sierra Lakes Commerce Center Project DEIR, Fontana (2015, 9);
- Columbia Business Center MND, Riverside (2015; 8);
- West Valley Logistics Center Specific Plan DEIR, Fontana (2015, 10);
- Willow Springs Solar Photovoltaic Project DEIR (2015, 28);
- Alameda Creek Bridge Replacement Project DEIR (2015, 10);
- World Logistic Center Specific Plan FEIR, Moreno Valley (2015, 12);
- Elkhorn Valley Wind Power Project Impacts, Oregon (2015; 143);
- Bay Delta Conservation Plan EIR/EIS, Sacramento (2014, 21);
- Addison Wind Energy Project DEIR, Mojave (2014, 32);
- Replies on the Addison Wind Energy Project DEIR, Mojave (2014, 15);
- Addison and Rising Tree Wind Energy Project FEIR, Mojave (2014, 12);
- Palen Solar Electric Generating System FSA (CEC), Blythe (2014, 20);
- Rebuttal testimony on Palen Solar Energy Generating System (2014, 9);
- Seven Mile Hill and Glenrock/Rolling Hills impacts + Addendum, Wyoming (2014; 105);

- Rising Tree Wind Energy Project DEIR, Mojave (2014, 32);
- Replies on the Rising Tree Wind Energy Project DEIR, Mojave (2014, 15);
- Soitec Solar Development Project PEIR, Boulevard, San Diego County (2014, 18);
- Oakland Zoo expansion on Alameda whipsnake and California red-legged frog (2014; 3);
- Alta East Wind Energy Project FEIS, Tehachapi Pass (2013, 23);
- Blythe Solar Power Project Staff Assessment, California Energy Commission (2013, 16);
- Clearwater and Yakima Solar Projects DEIR, Kern County (2013, 9);
- West Antelope Solar Energy Project IS/MND, Antelope Valley (2013, 18);
- Cuyama Solar Project DEIR, Carrizo Plain (2014, 19);
- Desert Renewable Energy Conservation Plan (DRECP) EIR/EIS (2015, 49);
- Kingbird Solar Photovoltaic Project EIR, Kern County (2013, 19);
- Lucerne Valley Solar Project IS/MND, San Bernardino County (2013, 12);
- Tule Wind project FEIR/FEIS (Declaration) (2013; 31);
- Sunlight Partners LANDPRO Solar Project MND (2013; 11);
- Declaration in opposition to BLM fracking (2013; 5);
- Blythe Energy Project (solar) CEC Staff Assessment (2013;16);
- Rosamond Solar Project EIR Addendum, Kern County (2013; 13);
- Pioneer Green Solar Project EIR, Bakersfield (2013; 13);
- Replies on Soccer Center Solar Project MND (2013; 6);
- Soccer Center Solar Project MND, Lancaster (2013; 10);
- Plainview Solar Works MND, Lancaster (2013; 10);
- Alamo Solar Project MND, Mojave Desert (2013; 15);
- Replies on Imperial Valley Solar Company 2 Project (2013; 10);
- Imperial Valley Solar Company 2 Project (2013; 13);
- FRV Orion Solar Project DEIR, Kern County (PP12232) (2013; 9);
- Casa Diablo IV Geothermal Development Project (2013; 6);
- Reply on Casa Diablo IV Geothermal Development Project (2013; 8);
- Alta East Wind Project FEIS, Tehachapi Pass (2013; 23);
- Metropolitan Air Park DEIR, City of San Diego (2013;);
- Davidon Homes Tentative Subdivision Rezoning Project DEIR, Petaluma (2013; 9);
- Oakland Zoo Expansion Impacts on Alameda Whipsnake (2013; 10);
- Campo Verde Solar project FEIR, Imperial Valley (2013; 11pp);
- Neg Dec comments on Davis Sewer Trunk Rehabilitation (2013; 8);
- North Steens Transmission Line FEIS, Oregon (Declaration) (2012; 62);
- Summer Solar and Springtime Solar Projects Ism Lancaster (2012; 8);
- J&J Ranch, 24 Adobe Lane Environmental Review, Orinda (2012; 14);
- Replies on Hudson Ranch Power II Geothermal Project and Simbol Calipatria Plant II (2012; 8);
- Hudson Ranch Power II Geothermal Project and Simbol Calipatria Plant II (2012; 9);
- Desert Harvest Solar Project EIS, near Joshua Tree (2012; 15);
- Solar Gen 2 Array Project DEIR, El Centro (2012; 16);
- Ocotillo Sol Project EIS, Imperial Valley (2012; 4);
- Beacon Photovoltaic Project DEIR, Kern County (2012; 5);
- Butte Water District 2012 Water Transfer Program IS/MND (2012; 11);

- Mount Signal and Calxico Solar Farm Projects DEIR (2011; 16);
- City of Elk Grove Sphere of Influence EIR (2011; 28);
- Sutter Landing Park Solar Photovoltaic Project MND, Sacramento (2011; 9);
- Rabik/Gudath Project, 22611 Coleman Valley Road, Bodega Bay (CPN 10-0002) (2011; 4);
- Ivanpah Solar Electric Generating System (ISEGS) (Declaration) (2011; 9);
- Draft Eagle Conservation Plan Guidance, USFWS (2011; 13);
- Niles Canyon Safety Improvement Project EIR/EA (2011; 16);
- Route 84 Safety Improvement Project (Declaration) (2011; 7);
- Rebuttal on Whistling Ridge Wind Energy Power DEIS, Skamania County, (2010; 6);
- Whistling Ridge Wind Energy Power DEIS, Skamania County, Washington (2010; 41);
- Klickitat County's Decisions on Windy Flats West Wind Energy Project (2010; 17);
- St. John's Church Project DEIR, Orinda (2010; 14);
- Results Radio Zone File #2009-001 IS/MND, Conaway site, Davis (2010; 20);
- Rio del Oro Specific Plan Project FEIR, Rancho Cordova (2010;12);
- Results Radio Zone File #2009-001, Mace Blvd site, Davis (2009; 10);
- Answers to Questions on 33% RPS Implementation Analysis Preliminary Results Report (2009; 9);
- SEPA Determination of Non-significance regarding zoning adjustments for Skamania County, Washington (Second Declaration) (2008; 17);
- Draft 1A Summary Report to CAISO (2008; 10);
- Hilton Manor Project Categorical Exemption, County of Placer (2009; 9);
- Protest of CARE to Amendment to the Power Purchase and Sale Agreement for Procurement of Eligible Renewable Energy Resources Between Hatchet Ridge Wind LLC and PG&E (2009; 3);
- Tehachapi Renewable Transmission Project EIR/EIS (2009; 142);
- Delta Shores Project EIR, south Sacramento (2009; 11 + addendum 2);
- Declaration in Support of Care's Petition to Modify D.07-09-040 (2008; 3);
- The Public Utility Commission's Implementation Analysis December 16 Workshop for the Governor's Executive Order S-14-08 to implement a 33% Renewable Portfolio Standard by 2020 (2008; 9);
- The Public Utility Commission's Implementation Analysis Draft Work Plan for the Governor's Executive Order S-14-08 to implement a 33% Renewable Portfolio Standard by 2020 (2008; 11);
- Draft 1A Summary Report to California Independent System Operator for Planning Reserve Margins (PRM) Study (2008; 7.);
- SEPA Determination of Non-significance regarding zoning adjustments for Skamania County, Washington (Declaration) (2008; 16);
- Colusa Generating Station, California Energy Commission PSA (2007; 24);
- Rio del Oro Specific Plan Project Recirculated DEIR, Mather (2008: 66);
- Replies on Regional University Specific Plan EIR, Roseville (2008; 20);
- Regional University Specific Plan EIR, Roseville (2008: 33);
- Clark Precast, LLC's "Sugarland" project, ND, Woodland (2008: 15);
- Cape Wind Project DEIS, Nantucket (2008; 157);
- Yuba Highlands Specific Plan EIR, Spenceville, Yuba County (2006; 37);
- Replies to responses on North Table Mountain MND, Butte County (2006; 5);

- North Table Mountain MND, Butte County (2006; 15);
- Windy Point Wind Farm EIS (2006; 14 and Powerpoint slide replies);
- Shiloh I Wind Power Project EIR, Rio Vista (2005; 18);
- Buena Vista Wind Energy Project NOP, Byron (2004; 15);
- Callahan Estates Subdivision ND, Winters (2004; 11);
- Winters Highlands Subdivision IS/ND (2004; 9);
- Winters Highlands Subdivision IS/ND (2004; 13);
- Creekside Highlands Project, Tract 7270 ND (2004; 21);
- Petition to California Fish and Game Commission to list Burrowing Owl (2003; 10);
- Altamont Pass Wind Resource Area CUP renewals, Alameda County (2003; 41);
- UC Davis Long Range Development Plan: Neighborhood Master Plan (2003; 23);
- Anderson Marketplace Draft Environmental Impact Report (2003; 18);
- Negative Declaration of the proposed expansion of Temple B'nai Tikyah (2003; 6);
- Antonio Mountain Ranch Specific Plan Public Draft EIR (2002; 23);
- Replies on East Altamont Energy Center evidentiary hearing (2002; 9);
- Revised Draft Environmental Impact Report, The Promenade (2002; 7);
- Recirculated Initial Study for Calpine's proposed Pajaro Valley Energy Center (2002; 3);
- UC Merced -- Declaration (2002; 5);
- Replies on Atwood Ranch Unit III Subdivision FEIR (2003; 22);
- Atwood Ranch Unit III Subdivision EIR (2002; 19);
- California Energy Commission Staff Report on GWF Tracy Peaker Project (2002; 20);
- Silver Bend Apartments IS/MND, Placer County (2002; 13);
- UC Merced Long-range Development Plan DEIR and UC Merced Community Plan DEIR (2001; 26);
- Colusa County Power Plant IS, Maxwell (2001; 6);
- Dog Park at Catlin Park, Folsom, California (2001; 5);
- Calpine and Bechtel Corporations' Biological Resources Implementation and Monitoring Program (BRMIMP) for the Metcalf Energy Center (2000; 10);
- Metcalf Energy Center, California Energy Commission FSA (2000);
- US Fish and Wildlife Service Section 7 consultation with the California Energy Commission regarding Calpine and Bechtel Corporations' Metcalf Energy Center (2000; 4);
- California Energy Commission's Preliminary Staff Assessment of the proposed Metcalf Energy Center (2000: 11);
- Site-specific management plans for the Natomas Basin Conservancy's mitigation lands, prepared by Wildlands, Inc. (2000: 7);
- Affidavit of K. Shawn Smallwood in Spirit of the Sage Council, et al. (Plaintiffs) vs. Bruce Babbitt, Secretary, U.S. Department of the Interior, et al. (Defendants), Injuries caused by the No Surprises policy and final rule which codifies that policy (1999: 9).
- California Board of Forestry's proposed amended Forest Practices Rules (1999);
- Sunset Sky ranch Airport Use Permit IS/MND (1999);
- Ballona West Bluffs Project Environmental Impact Report (1999; oral presentation);
- Draft Recovery Plan for Giant Garter Snake (Fed. Reg. 64(176): 49497-49498) (1999; 8);
- Draft Recovery Plan for Arroyo Southwestern Toad (1998);
- Pacific Lumber Co. (Headwaters) HCP & EIR, Fortuna (1998; 28);
- Natomas Basin HCP Permit Amendment, Sacramento (1998);

- San Diego Multi-Species Conservation Program FEIS/FEIR (1997; 10);

Comments on other Environmental Review Documents:

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

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

- Recommended that the California Department of Fish and Game prioritize the extermination of the introduced southern water snake in northern California. The Wildlife Society--Western Section (2001);
- Recommended that The Wildlife Society—Western Section appoint or recommend members of the independent scientific review panel for the UC Merced environmental review process (2001);
- Opposed the siting of the University of California's 10th campus on a sensitive vernal pool/grassland complex east of Merced. The Wildlife Society--Western Section (2000);
- Opposed the legalization of ferret ownership in California. The Wildlife Society--Western Section (2000);
- Opposed the Proposed "No Surprises," "Safe Harbor," and "Candidate Conservation Agreement" rules, including permit-shield protection provisions (Fed. Reg. Vol. 62, No.

103, pp. 29091-29098 and No. 113, pp. 32189-32194). This statement was signed by 188 scientists and went to the responsible federal agencies, as well as to the U.S. Senate and House of Representatives.

Posters at Professional Meetings

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

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

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

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

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

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

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

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

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

Presentations at Professional Meetings and Seminars

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

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

Developing methods to reduce bird mortality in the Altamont Pass Wind Resource Area, 1999-

2007. Altamont Symposium, The Wildlife Society – Western Section, 5 February 2017.

Conservation and recovery of burrowing owls in Santa Clara Valley. Santa Clara Valley Habitat Agency, Newark, California, 3 February 2017.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Siting Repowered Wind Turbines to Minimize Raptor Collisions. Raptor Symposium, The Wildlife

Society - Western Section, Riverside, California, February 2011.

Wildlife mortality caused by wind turbine collisions. Ecological Society of America, Pittsburgh, Pennsylvania, 6 August 2010.

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

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

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

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

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

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

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

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

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

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

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

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

Ecological solutions for avian collisions with wind turbines in the Altamont Pass Wind Resource Area. The Wildlife Society—Western Section Annual Meeting, Sacramento, California, January 19, 2005.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Ecology Graduate Student Seminars, U.C. Davis, 1985-1990: Social behavior of the mountain lion;

Mountain lion control; Political status of the mountain lion in California.

Other forms of Participation at Professional Meetings

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

Printed Mass Media

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

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

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

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

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

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

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

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

Radio/Television

PBS News Hour,

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Journal	Journal
Environmental Management	Southwestern Naturalist
Functional Ecology	The Wildlife Society--Western Section Trans.
Journal of Zoology (London)	Proc. Int. Congress on Managing for Ecosystem Health
Journal of Applied Ecology	Transactions in GIS
Ecology	Tropical Ecology
Wildlife Society Bulletin	Peer J
Biological Control	The Condor

Committees

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

Other Professional Activities or Products

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

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

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

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

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

Memberships in Professional Societies

The Wildlife Society
Raptor Research Foundation

Honors and Awards

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

Community Activities

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

Representative Clients/Funders

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

Representative special-status species experience

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

EXHIBIT B

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Monet Sheikhali, City Planner
City of Santa Rosa
Planning and Economic Development Department
100 Santa Rosa Avenue, Room 3
Santa Rosa, CA 95404

6 December 2021

RE: Hearn Veterans Village

Dear Ms. Sheikhali,

I write to reply to responses to my comments on the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the proposed Hearn Veterans Village Project, and I write to respond to an Addendum to a 2016 EIR. I begin with my replies, which are organized in the order of the responses. I end with comments on the Addendum.

Response regarding *Presence of a remnant streambed to the west* (paragraph 4, page 1). **According to WRA**, “There is no stream course to the west of the project site.”

Reply: Whatever WRA wishes to call it, there is a water channel where I described, and it is densely lined by vegetation. In 1994 aerial imagery, a depression is visible from the **site’s northwest corner and extending** to the northeast. Slough or swale, it appears that water sometimes flowed along the west side of the project site and veering to the northeast from the northwest corner of the project site. Later development eliminated most of that wetland feature, and all that remains is a very clearly defined channel along the west side of the project site. According to WRA (2020), the USACE took jurisdiction over it as a Section 404 waters of the U.S.

Response regarding *The success of the (white-tailed kite) nest would have been less likely without access to forage on the site proposed for the project.* (Paragraph 1, page 6). The 2.01-acre parcel is a small portion of the larger grasslands in the area. Based on walking transect surveys spaced 10-15 feet apart conducted in 2021, the site does not contain a higher proportion of pocket gophers than the surrounding habitats to the north and west. It is likely that white-tailed kites foraging on the 2.01-acre parcel are more easily observed by neighbors than on the more open grasslands to the west and north.

Reply: The response is the typical claim that taking a little more habitat is not going to cause any adverse effects to white-tailed kite or to [name your species]. The result of many actions justified by this same reasoning has been the continued decline of white-tailed kites and the continued decline of avian abundance across North America (Rosenberg et al. 2019). Taking another 2 acres is taking another 3% to 5% of a typical

breeding territory, which is even more of a problem in this case due to the severe habitat fragmentation that these white-tailed kites have already had to face.

The response reports that pedestrian transects were used to quantify pocket gopher abundance both on and off the project site, and that pocket gopher density was no higher on the project site as compared to the areas to the north and west of the site. If such data exists, it would help for WRA to provide a summary of them, or better yet, the complete data set. Until I see the data, I will remain skeptical that WRA actually counted pocket gophers. I have counted and mapped the locations of pocket gophers at many locations and over many years going back to the 1980s (Smallwood and Erickson 1995, Smallwood 1997, Smallwood and Morrison 2013, 2018, Smallwood et al. 2001, 2009) as part of my efforts to understand pocket gopher density (Smallwood and Morrison 1999a) and their contributions to soil bioturbation (Smallwood and Morrison 1999b). Throughout all of my efforts to quantify pocket gopher density and distribution, I have encountered similar concurrent efforts from absolutely nobody else. Again, if WRA counted gophers, it would help for WRA to share the data, or at least share summaries of the data.

Even if WRA actually counted and compared gopher densities, I fail to see the significance of gopher density being no higher on the project site than in grasslands near the site. Even if gopher density on site is half that off site, so what? The loss of the site would still result in the loss of an important food source for breeding white-tailed kites, and the loss would occur right next to site where white-tailed kites successfully bred and produced at least 3 fledglings.

Likewise, I fail to see the relevance of white-tailed kites being more visible to neighbors while they forage on the project site compared to their foraging elsewhere. I did not base my comments on what neighbors see of the white-tailed kites; I based them on what I saw.

Response regarding *This type of use (aerohabitat) of the project site can be just as important as any other, because that portion of the aerosphere that **composes a species' aerohabitat is essential for home range patrol, foraging, dispersal and migration*** (paragraph 4, page 6). "...value of aerohabitat is not based on undeveloped areas alone."

Reply: True. But the value of aerohabitat over open space is usually more valuable to volant wildlife than is that portion of the aerosphere over built areas. Of course, species of volant wildlife vary in their use of the aerosphere, with some species making ample use of the aerosphere over built areas and others making more use of it over open space. And the type of use varies. Where I study white-tailed kites, for example, white-tailed kites fly over residential areas from nest sites in town to foraging areas outside of town. I have carefully tracked these kites from their foraging areas to their nest sites, because doing so has been the principal means for me to locate their nest sites. As a rule, white-tailed kites maximize their time over available open space while in route to and from their foraging areas, and they do this by carefully selecting their flight routes. In another example, my colleagues and I are quantifying golden eagle flight routes as a

function of available open space compared to built-over portions of the landscape. We have not yet quantified use of open space versus availability, but we have noticed time and again that our GPS-telemetered golden eagles thread the needle to fly over open spaces rather than over residential, commercial and industrial spaces.

Response regarding *Rigor and focus of the biological survey not reported* (paragraph 2, page 9). **“Time spent on site on April 27, 2020, was to determine what habitats are present and if they could be occupied by special status species”**

Reply: **Given that habitat is defined by a species’ use of the environment** (Hall et al. 1997, Morison et al. 1998, Krausman 2016), the most effective habitat assessment of a site is to detect species using the site. The main purpose of reconnaissance-level surveys is to document as many of the species using the site as reasonably feasible. Each species **detected on site confirms the site’s use as habitat by that species. This approach is far** more efficient than cross-walking onsite vegetation cover with vegetation cover types that are associated with a species in some canned table, because this approach relies on assumptions, qualitative judgements about how to categorize vegetation cover, and guesswork. Actual sightings of members of a species cut through the guesswork and bypass the assumptions, because they go directly to sound interpretation of what is habitat.

For the reasons just stated, it is routine of reconnaissance-level surveys to culminate with the reporting of species detected during the survey. And for these reasons, WRA reported **a list of species detected at the project site. A problem with WRA’s** (2020) species list was that it was reported without meeting the minimum professional standards of the profession. Another problem with it was that it was unbelievably short.

Response regarding *Rigor and focus of the biological survey not reported* (paragraph 2, page 9). WRA also quotes from CEQA Guidelines Section 15125(a) on the definition of environmental setting and what constitutes baseline environmental conditions.

Reply: The quoting of §15125(a) is unsatisfactory. One should also look to the definition of environment, which can be found in §15360. According to CEQA, **““Environment” means the physical conditions which exist within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved shall be the area in which significant effects would occur either directly or indirectly as a result of the project. The “environment” includes both natural and man-made conditions.”** Furthermore, under §15125(c), “Knowledge of the regional setting is critical to the assessment of environmental impacts. Special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by the project. The EIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed and it must permit the significant effects of the project to be considered in the full environmental context.” I cannot think of a site attribute that is more likely to uniquely represent the environmental setting of the site than its suite of resident and visiting biological species.

And I cannot think of a more effective means to demonstrate satisfactory investigation of a site than to describe the survey methods that were used.

Response regarding *Rigor and focus of the biological survey not reported* (paragraph 2, page 9). “The survey involved searching all habitats on the site and recording all wildlife species observed.”

Reply: But this is part of the problem I addressed in my comments. Reporting the species observed without describing methods used, time on site, and time of arrival prevents sound interpretation of the list of species reported. The way the 2020 reconnaissance-level survey was reported, the reader cannot tell whether the biologists visited the site for 5 hours or 5 minutes, or whether the survey was at dawn, noon or dusk. Reporting of the 2021 survey is much improved, but the list of species detected remains unbelievably short.

Response regarding *Two biologists only came up with 7 species not good biology not enough time spent on site to determine all species e.g., Smallwood 34 species vs 7 species in Biological Resource Assessment*. (Paragraph 2, page 9). “**Time spent on the site is not to determine how many species** one can see when standing on the site, or how many may be flying overhead.”

Reply: The purpose of time spent on site is to detect as many of species using the site as possible. If survey personnel are not using their time to detect what occurs on a project site, then they are not pursuing the principal objective of a reconnaissance-level survey that is performed to inform a CEQA review.

Response regarding *Two biologists only came up with 7 species not good biology not enough time spent on site to determine all species e.g., Smallwood 34 species vs 7 species in Biological Resource Assessment*. (Paragraph 2, page 9). “Of the 34 species observed by Smallwood, several species were flying overhead and would never use the site (i.e., ring-billed gull (*Larus delawarensis*), mallard (*Anas platyrhynchos*), great-tailed grackle (*Quiscalus mexicanus*), etc.).”

Reply: But the species at issue *did* use the site. They used that portion of the aerosphere that exists at the site. Again, **habitat is defined by a species’ use of the environment** (Smallwood 2002), and part of the environment is atmosphere. Every species on Earth is morphologically adapted through thousands of generations of life and death to exist within environmental media such as water, soil, air and other organisms. The species mentioned in the response happen to have wings, which is the morphological adaptation that suits these species to thrive by moving through the medium of the aerosphere, which is obviously a very important medium of life (Davy et al. 2017, Diehl et al. 2017). Indeed, an entire discipline of ecology has emerged to study this essential aspect of habitat – the discipline of aeroecology (Kunz et al. 2008).

Perhaps the response goes to whether the three species mentioned would use resources on the ground at the site. If so, this narrowly defined value of the site to wildlife is

contrived. However, all 3 of the species that were singled-out likely do, at times, use resources on the ground at the site. Although the response characterizes great-tailed grackle as a water-dependent species, it is not tied to water bodies to the degree claimed in the response. And besides, there are sources of water in the area; otherwise, I would not have seen great-tailed grackles at the project site. Whereas I have seen great-tailed grackles at water bodies, I have also recorded them at considerable distances from water. As for ring-billed gull and mallard, I see no reason why these species would not use resources on the ground at the project site, especially over winter and spring months when water may pool at the site. Where I live, mallards daily feed on dry ground, and where I worked for 20 years in Alameda County and Contra Costa County, ring-billed gulls routinely exploited resources on dry ground.

Response regarding *Two biologists only came up with 7 species not good biology not enough time spent on site to determine all species e.g., Smallwood 34 species vs 7 species in Biological Resource Assessment.* (Paragraph 2, page 9). “The assessment was to determine what habitats were present on the site and to assess whether special status species could occupy those habitats based on surrounding habitats. This is the appropriate focus under CEQA Guidelines Section 15125(a), which requires that the CEQA document prepared for a project discuss **the “baseline” environmental** conditions at and in the vicinity of the project site.” **And** in the **next paragraph**, “Of the 34 species observed by Smallwood, several are of interest because of the habitats they are typically associated with, such as great-tailed grackle, a species that has only been observed at large water bodies such as Roberts Lake in Rohnert Park or Spring Lake Regional Park (eBird), where they are associated with wetlands with water.”

Reply: This logical flow from premise to conclusion exemplifies the need to perform habitat assessments that are based on observations of species at a site. In this example, the responder dismisses what I saw – great-tailed grackles – because my sighting did **not comport with responder’s assumption about where great-tailed grackles should be located. Responder’s assumption is not entirely correct, but** instead of questioning the incorrect assumption, responder questions my sighting. The absurdity of the approach taken by responder is that the very habitat association upon which responder trusts could not have been formulated without observations of the species. The habitats assignments and rankings in Wildlife Habitat Relationships (WHR), which WRA also reportedly relies, were also ultimately based on sightings of wildlife. Descriptions of habitat follow from observations of the species, not the other way around (there actually is no other way around unless one is simply speculating). If habitat was assigned to species in the absence of observations, then there certainly would be no need for reconnaissance-level surveys to inform CEQA reviews, and WRA would have wasted **their client’s money for having performed an unneeded survey. But the survey was needed because it is the species’ use of the environment that informs** us of their habitat.

As to the habitat association that responder trusts, it is often repeated in the scientific literature that water bodies are important to great-tailed grackle, but it is also true that great-tailed grackles are also often seen far from water bodies. Great-tailed grackles make use of chaparral, woodlands and open fields, as well as residential yards and

urban parks. In my surveys, I have recorded great-tailed grackles far from water, as well as at the sides of ponds. I saw great-tailed grackles at the project site.

Response regarding *Two biologists only came up with 7 species not good biology not enough time spent on site to determine all species e.g., Smallwood 34 species vs 7 species in Biological Resource Assessment.* (Paragraph 2, page 9). “The other species of interest is the willow flycatcher (*Empidonax traillii*) which has never been known to breed in Sonoma County (Sonoma County Breeding Bird Atlas) (Grinnell and Miller 1944) and has only been identified as an autumn migrant only in Sonoma County, based on sightings in eBird. In addition, one species, the gray fox (*Urocyon cinereoargenteus*), was an assumption and not an actual sighting.”

Reply: I appreciate the challenges of the species I reported having detected at the project site. This is the type of debate that should further inform a CEQA review, rather than a debate over whether surveys should be performed at all, or whether a reasonable effort was committed to detect the species that make use of a project site. No matter how experienced, our sightings are not always how we interpret them nor are they always as relevant as we first believe they are.

The above said, I made no claim that the willow flycatcher I saw was breeding, but I certainly would not rely on a reference that is nearly a century old to make my case that the species never breeds in Sonoma County. I agree that willow flycatchers are rarely seen in spring in the area of Santa Rosa. But I am not alone in seeing one there in spring. According to eBird records, one was seen in May 2015 only a few miles from the project site. Towards where I live, which is not very far from the site as the flycatcher flies, sightings in spring have been more common. All this said, whether the bird I saw was breeding is not terribly important. To breed successfully, willow flycatchers must survive long enough to do so.

As for the gray fox, I honestly reported my uncertainty of the species assignment, but I also described the sign I relied upon to do it. Having surveyed for fossorial mammals over decades, I bring more experience to my species assignment than most biologists, but I acknowledge that my species assignment could be wrong. And if it was not a gray fox den, then – as I reported – it was likely the den of an American badger or coyote. Whatever it was, it was another species that WRA did not detect, not even in 2021.

Response regarding *No detection surveys were conducted* (paragraph 3, page 9). “No ground nesting birds were observed in April 2020 (Wildlife Research Associates) or in June 2021 (Smallwood).”

Reply: The response tries to have it both ways. After earlier claiming that reconnaissance-level surveys were not performed for the purpose of detecting species, the response now reports that **no ground-nesting birds were observed in WRA’s survey.** If WRA did not look for ground-nesting birds, then it stands to reason that WRA would not have seen any. And certainly, the short list of wildlife species WRA saw at the site fails to instill confidence that WRA was looking for ground-nesting birds.

The response adds into evidence my own failure to detect ground-nesting birds. This is unfair, because I did not have access to the site, so I did not search for nest sites on the ground. I might have seen birds that had nested on the ground, but I did not have the means to confirm that any of them had done so.

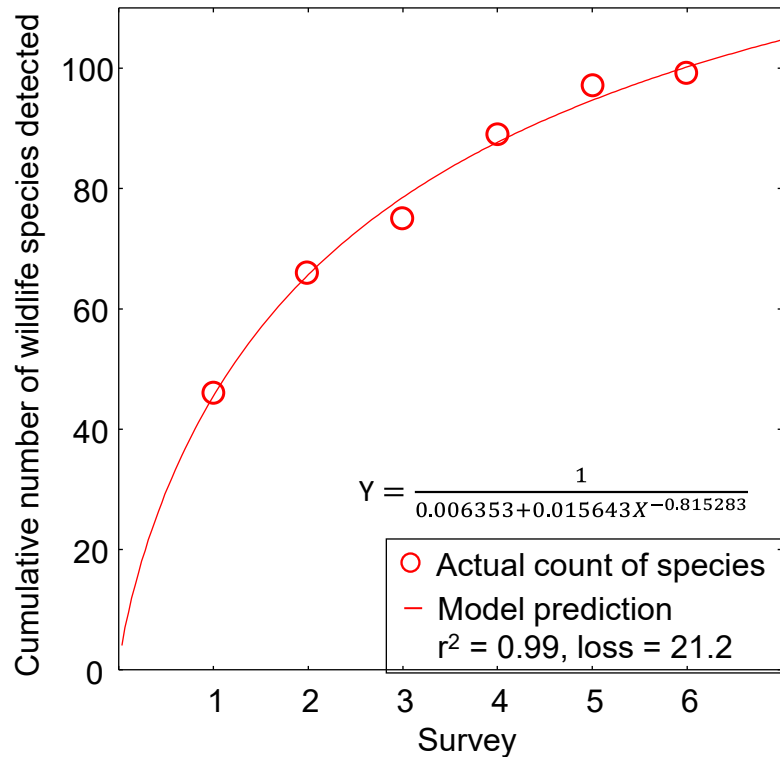
Response regarding *No detection surveys were conducted* (paragraph 3, page 9). “There is no need for exhaustive focused surveys as Smallwood stated (i.e., thermal imaging for bats)”

Reply: I made no such statement. The response mischaracterizes what I wrote by taking it out of context and attaching to it an unintended meaning. The point I was making was that reconnaissance-level surveys, although necessary for informing CEQA review, need to be interpreted carefully. Any biologist performing a visual scan for wildlife on a particular day at a particular site will detect only a fraction of the species that use the site. Knowing this, one can choose from several options to more carefully investigate how many species and which species make use of a site.

For example, one can choose to perform additional surveys to detect more of the species that use the site. I have done this, including at a site near Sacramento, California (Figure 1), and I have done it in the context of research and involving many repeat surveys at many sites. This approach is more rigorous than the single site visit that typifies the reconnaissance-level surveys performed by WRA, and it is not overly expensive. It offers diminishing returns on species detections with each successive search, but this very pattern also provides the means to predict how many species likely use the site and how many have yet to be detected. For example, the number of species predicted at the Sacramento site in Figure 1 was 157. My initial survey outcome of 46 species was many fewer than the 157 species predicted by the pattern in the data from multiple surveys. However, Figure 1 is based on only one survey method. Adding other methods as well as nocturnal surveys can add to the species list. Therefore, one could also choose to perform surveys using multiple methods to approach the true list of species that make use of the site. This approach is more expensive, but more thorough and more likely to approach the true list of species that use the site.

A third option is to forego additional surveys, but to carefully interpret the outcome of the reconnaissance-level survey. The third option is to acknowledge the shortcomings of the survey, and to acknowledge that many more species occur at the site than were detected during the survey. The third option is to more often assume presence of each conceivable species because insufficient effort was made to prove absence.

Figure 1. Cumulative number of species detected as a function of the number of visual-scan surveys performed through one year at one site near Sacramento, California.



Response regarding *No detection surveys were conducted* (paragraph 3, page 9). “Foraging habitat for birds is not protected unless the species is State listed. Standard protections are provided for all nesting birds pursuant to California Fish and Game Code Sections 3503 and 3503.5 and the federal Migratory Bird Treaty Act; however, the protection is for the occupied nest, eggs, nestlings and adults during the nesting season. Although the white-tailed kite is State listed as a fully protected species, the foraging habitat is not protected and CDFW has not established protections for foraging habitat for this species.” **And**, “Merely observing sensitive birds flying over a property (as Dr. Smallwood reported), or foraging over or on the site, does not warrant protection because the sightings are not of permanent breeding/nesting/larval development habitat (dependent on what type of animal it is).”

Reply: I do not see how the response addresses the issue at hand – that detection surveys were not performed. **Certain conclusions of species’ absences were unfounded** and certain mitigation measures should not be passed off as detection surveys when they are only preconstruction take-avoidance surveys.

Nevertheless, the response raises the issue of whether foraging habitat is of concern under CEQA, so I will reply to it. AB 454 was signed into law in 2019, enacting the California Migratory Bird Protection Act. According to California Fish and Game Code §3513, “**It** is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under **provisions of the Migratory Treaty Act.**” **The Code amended by AB 454 reads**, “It is

unlawful to take or possess any migratory nongame bird as designated in the federal Migratory Bird Treaty Act (16 U.S.C. Sec. 703 et seq.), or any part of a migratory nongame bird described in this section, except as provided by rules and regulations adopted by the United States Secretary of the Interior under that federal act.” **Under the Code, ““Bird” means a wild bird or part of a wild bird,” and ““Wildlife” means and** includes all wild animals, birds, plants, fish, amphibians, reptiles, and related ecological communities, including the habitat upon which the wildlife depends for its continued viability.” It looks to me like the habitat of most birds in California is protected.

Let’s take a look at whether the habitat of white-tailed kite, in particular, is protected. According to California Fish and Game Code §3503.5, “It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted thereto.” **And according to §3511**, “a fully protected bird may not be taken or possessed at any time.” The word *take* applies to animate and inanimate entities, and all of us in the business of wildlife conservation understand what it means to take a nest. Taking a nest translates into taking the reproductive capacity of birds that would have relied on that nest. The nest is a critical component of the life of a bird; without the nest there is no bird, or worse yet, there are no birds for years to come. Furthermore, the nest cannot succeed without successful foraging, so the areas over which white-tailed kites forage constitute an essential component of any given nest site. I submit that the land over which breeding white-tailed kites forage is protected, but I encourage the responder to cite the Code that states it is not.

Response to *Multiple species and subspecies were considered even though they do not occur in the region. WRA also misapplied the US Fish and Wildlife Service’s lists of Bird Species of Conservation Concern, including species that are listed for other regions of the USA.* (Paragraph 2, page 10). “The Bird Species of Conservation Concern (BCC) list was created from the US Fish and Wildlife Service Information for Planning and Conservation. Wildlife Research Associates did not generate the BCC list.”

Reply: I agree that WRA did not generate the BCC list. WRA misapplied it. The BCC list includes many birds that would never occur at Santa Rosa, so addressing them in the CEQA review is misleading. The BCC, like the **CNDDB’s** special animals list, needs to be used with discretion.

Response to *Identification of more species based on eBird and iNaturalist for sighting records in the area.* (Paragraph 3, page 10). “Both eBird and iNaturalist are citizen-based applications for documenting bird observations. There are inherent differences in these checklists (e.g., time spent surveying, distance covered, observer skills).”

Reply: The response does not expound on the inherent differences alleged between CNDDDB and the more publicly accessible data bases of eBird and iNaturalist. However, I have studied these data bases a bit, so I can speak to them. Before I do, I must note that differences are often helpful. The **CNDDB’s care** towards sightings records is

helpful, but the vastly larger numbers of participants contributing records to eBird and iNaturalist is also helpful.

Compared to eBird and iNaturalist, CNDDDB is less available to the public because the CDFW subscription for it is too expensive for those of us working outside government agencies and environmental consulting firms. Like eBird and iNaturalist, CNDDDB relies on volunteer reporting, and is limited in its spatial coverage by the access of biologists to private properties. Another limitation of its coverage, in my opinion, are the nondisclosure agreements often required of biologists working on private properties. These nondisclosure agreements conflict with Scientific Collecting Permits issued by CDFW to biologists who perform surveys for special-status species. The specific conflict **is with CDFW's requirement of reporting detections of special-status species to CNDDDB.** I have discovered spectacular examples of biologists not reporting their findings to CNDDDB, but so far without consequence as far as I know.

Also like eBird and iNaturalist, the findings reported to CNDDDB are not from any sort of randomized or systematic sampling across California. There is no study design underlying the findings, although the results of location-specific studies can be reported, and those can be based on a randomized study design that is specific to the location. And because there is no California-wide study design, and because of the wording on Scientific Collecting Permits, there is no reporting to CNDDDB of negative findings. By not reporting negative findings, there is no means to weight survey outcomes for survey effort among sites. All CNDDDB can do is to show a trail of detections wherever biologists happened to survey, wherever they were fortunate enough to detect the species, and from wherever the biologists were allowed to – or from wherever they opted to – issue reports of their findings to CNDDDB.

Another limitation of CNDDDB is its focus on special-status species. Most members of **any of California's wildlife communities are not reported to CNDDDB, because CNDDDB is** not interested in them and Scientific Collecting Permits do not require reporting of them. This means that any species recently designated with special status will not be as well represented in CNDDDB as are other species that were assigned special status decades ago. Unlike CNDDDB, records in eBird and iNaturalist can be of any species of wildlife, and can therefore more comprehensively represent the wildlife community at a site. eBird has the added advantage of the public being able to report sightings of birds using private properties that the birder cannot access. So long as line-of-sight or sound permits, a birder can detect a bird 200 m distant on private property, and a record of that detection can end up reported to eBird. And because eBird and iNaturalist are so much more accessible to the public, these data bases include many more observations than does CNDDDB.

As to the issue of credibility, CNDDDB deserves credit for the screening it requires of posted records. The standards are appropriately high. However, postings to eBird and iNaturalist are also scrutinized by built-in filters and by other users of the data bases. Documentation of observations are also often provided in the form of photographs and written notes. I have found a few errors in both data bases, usually involving immature birds mistaken as other species. Overall, however, accuracy has been high and

sufficiently trustworthy to have resulted in a large and growing list of papers published in the peer-reviewed scientific literature. Hundreds of peer-reviewed papers have resulted from analysis of eBird data over the past decade (<https://ebird.org/science/research-and-conservation/publications>). The same cannot be said of CNDDDB.

Response to *Identification of more species based on eBird and iNaturalist for sighting records in the area*. (Paragraph 3, page 10). “**Smallwood’s Table 2** also includes species *that are listed for other regions of the USA* and do not occur in Sonoma County, such as...” **vesper sparrow and yellow-billed magpie**.

Reply: I will concede the yellow-billed magpie as a species unlikely to occur in Santa Rosa, even though there is an eBird record of the species nearby. My usual standard is to rely on more than a single eBird record, so in hindsight I should not have included yellow-billed magpie in Table 2. Oregon vesper sparrow, on the other hand, has been reported at multiple times and locations near the project site.

Response to *Identification of more species based on eBird and iNaturalist for sighting records in the area*. (Paragraph 3, page 10). “If detections were conducted by professionals, they would have been reported to the California Natural Diversity Data Base (CNDDDB) for the habitats that they occupied at the time of the observation.”

Reply: I disagree. As a professional, I used to report my sightings to CNDDDB, and I have reported hundreds of sightings to it, but I stopped doing so years ago. The process is too time-consuming and I get nothing back from the effort. Much of the potential scientific value of CNDDDB is lost by not including the reporting of survey attributes underlying the sightings, and by not reporting negative findings. Furthermore, project proponents often abuse CNDDDB without consequence, and so doing they diminish the value that many professionals used to see in it. I often see postings by professionals to eBird and iNaturalist.

As an example of the type of abuse I often see of CNDDDB, WRA (2020) used CNDDDB records to weight the occurrence likelihoods that WRA assigned to species at the project site. A species with CNDDDB records within 5 miles of the site could be assigned a high likelihood of occurrence, but those without CNDDDB records within 5 miles of the site could be assigned likelihoods of moderate, low or none. WRA is using absence of CNDDDB records within 5 miles of the site to determine occurrence likelihoods of special-status species. This practice is inappropriate for the reasons I explained earlier – that sightings records are not weighted by survey effort nor are negative findings recorded. The limitations of CNDDDB are well-known, and summarized by California Department of Fish and Wildlife in a warning presented on its CNDDDB web site (<https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>): “*We work very hard to keep the CNDDDB and the Spotted Owl Database as current and up-to-date as possible given our capabilities and resources. However, we cannot and do not portray the CNDDDB as an exhaustive and comprehensive inventory of all rare species and natural communities statewide. Field verification for the presence or absence of sensitive species will always be an important obligation of our customers...*” **WRA’s** use of CNDDDB records to filter out

species from its characterization of the environmental setting is inconsistent with **CNDDDB's purpose.**

Response to *Species with no occurrence potential were based narrowly on whether the species is likely to breed on site and is based on an unrealistic view of wildlife habitat.* (Paragraph 4, page 10). “As stated above, the habitats to be impacted (non-native grasslands) were evaluated for their occupancy by special status species.”

Reply: Without having implemented detection surveys, the grassland was inadequately evaluated for occupancy by special-status species. Without detection surveys, the evaluation was speculative. Occupancy can be determined only by surveys to detect the species or by assuming presence. Absence, on the other hand, can only be determined by implementation of protocol-level detection surveys, and cannot be assumed.

Response to *Species with no occurrence potential were based narrowly on whether the species is likely to breed on site and is based on an unrealistic view of wildlife habitat.* (Paragraph 4, page 10). “Occupancy, under CEQA, relates to breeding habitat, not foraging habitat and the analysis for the overall suitability of a site for other wildlife requirements is not required.”

Reply: It would help for the response to cite the portion of CEQA that supposedly requires analysis of impacts onto to breeding habitat. Also note that the distinction between breeding and foraging habitat is more of a contrivance than scientific. Habitat is habitat, as recently noted again by Krausman (2016).

Response to *Species with no occurrence potential were based narrowly on whether the species is likely to breed on site and is based on an unrealistic view of wildlife habitat.* (Paragraph 4, page 10). “All nesting birds, except non-native, invasive bird species, such as English house sparrow (*Passer domesticus*), rock dove (*Columba livia*) and European starling (*Sturnus vulgaris*), are protected under the federal Migratory Bird Treaty Act (16 U.S.C. 703 et seq.) and California Department of Fish and Wildlife (CDFW) Codes 3503 (passerines = perching birds) and 3503.5 (raptors = birds of prey).”

Reply: The protections cited do not distinguish nesting and foraging habitat. They refer to nesting birds, but nesting birds must also be foraging birds, and birds forage so that they can successfully nest.

I will also add the most recent protection is that of California Fish and Game Code §3513: the California Migratory Bird Protection Act.

Response to *Characterization of ponding on the site was based on a single site visit in late April during a drought year and pools could support California tiger salamander.* (Paragraph 1, page 14). “There is no ponding of water on the site. None of the wetlands are deep enough to support ponding. There were no plants associated with deeper water that could support California tiger salamander.”

Reply: Ponds where I recorded California tiger salamanders, including at Concord Naval Weapons Station (Smallwood and Morrison 2006) and elsewhere, were not always regularly inundated, nor were the ponds always very deep. I found California tiger salamander larvae in ankle-deep ephemeral ponds such as in **rain pools**. What's needed are for ponds to remain inundated long enough into the spring for larvae to reach maturity, but this need not happen every year. I suggest that the responder is **defining conditions that are too narrow for California tiger salamander, and that WRA's** one visit in April was unsatisfactory for determining whether sufficient ponding occurs at the project site.

WRA (2020) reports having found common lippia (*Phyla nodiflora*) and lots of creeping wildrye (*Elymus triticoides*) where historical imagery shows a wetlands feature. WRA (2020) reports that these plant species are not typically associated with vernal pools. However, this lack of association with vernal pools does not mean the site is something other than a wetland and that pooling never happens there. WRA (2020) also reports the soils of the site to be Wright loams, which are "typically associated with vernal pool type wetlands." In fact, WRA's (2020) Figure 2 depicts the northwest corner of the project site as a "wetland."

Response to *Successful nest of white-tailed kites right next door and in a tree no larger than the trees on the project site would have been less likely without access to forage on the site.* (Paragraph 2, page 14). "This statement is disingenuous. The white-tailed kite nesting tree is a Monterey pine more than twice the height of the oak trees on the site. The nest is not next door, it is more than 350 feet to the west. In addition, of the four pictures of the kites food exchanging, only one is showing the kites over the project area, based on Smallwood being on the west side of the project area. Three of the four kite photographs show the birds with the sun behind them, to the west, compared to the sun behind Smallwood and the birds to the east, on the project site. The kites are not conducting a food transference over the project site, but over the mitigation lands to the north and west."

Reply: My statement was not disingenuous. I have performed research on white-tailed kites for many years, beginning in 1989 (Ericksen et al. 1996, Smallwood et al. 1996). Over the past two years I have surveyed intensively for white-tailed kite nest sites as a repeat effort to Ericksen et al. (1996). White-tailed kites nest in a variety of tree species, including in oaks, and in trees of various heights. Based on the patterns of nest-site selection I have seen, the white-tailed kites next door to the project site could nest in the Monterey pine this next year, or they might very well nest in the oaks on the project site. And *next door* they were. The response points out the nest site was 350 feet to the west, although I have the distance at 310 feet. Either way, these distances are of no significance to white-tailed kites, which can casually traverse 350 feet in 14 seconds.

Next, the response challenges my comment based on where the white-tailed kites must have been located when I took the photographs I shared in my comment letter. The response implies that my photographs define the locations where I observed the white-tailed kites. In fact, I happened to take the photographs where the birds are shown

because I ran into a problem with my camera's focusing point. I typically use center-point focus for wildlife photography, but my center-point somehow got moved from the center of the framing window to the upper-left portion of it. It took me 15 or 20 minutes of frustrating time to identify and adjust for the problem, and all the while the white-tailed kites foraged over the project site without my getting anything other than blurry photos. Just because I shared no photos of the white-tailed kites foraging on the project site does not mean I failed to observe them doing so. I did see them there, and I saw them capture prey items on the project site. The photo I shared of an adult training its young on a pocket gopher was as I reported – a gopher that had been captured on the project site. This gopher was carried all over the place by an adult white-tailed kite, usually with fledgling white-tailed kites in tow.

Response to *The loss of habitat (for California tiger salamander) at the project site will not be replaced by new habitat.* (Paragraph 3, page 14). “mitigation credits purchased according to parameters stated in Conservation Strategy will compensate for loss of habitat. The overall philosophy of the approved mitigation requirements by federal and State regulators is beyond the scope of the BRA.”

Reply: The response does not refute my comment. The habitat would not be replaced.

Response to *Habitat loss* (paragraph 5, page 14). “Dr. Smallwood cites two studies on bird nesting densities (Young 1948 and Yahner 1982) that are irrelevant to the proposed project site.”

Reply: The studies I cited are relevant. Scientists routinely draw inferences from studies such as the studies I cited. This is how science works, and it is why such studies are performed. For example, the habitat associations that WRA is so fond of, and which WRA lists in its Appendices A and B, originated from inferences drawn from various studies performed elsewhere.

Regardless, and more important than which studies I cited, I demonstrated an approach to predicting the numerical impacts of habitat loss. I do not claim that my analysis is the best possible analysis for the project site, but I do assert that an analysis of the impacts of habitat loss is feasible and that it is necessary to inform the CEQA review. I further submit that WRA provides no such analysis. If WRA believes my analysis compares apples and oranges, then instead of complaining about it, WRA can perform its own analysis. If WRA believes that the true nesting density at the project site is some fraction of the mean from the two studies I cited, then WRA ought to apply that fraction and recalculate the predicted loss of birds as a result of the project. Instead, WRA speculates wildly about the effect of house cats on nesting birds.

Response to *Wildlife movement corridor* (paragraph 2, page 15). “The CA Essential Habitat was a collaboration of CDFW and 62 other agencies.”

Reply: Whereas I am sure many wonderful people worked on the California Essential **Habitat Connectivity Project, this fact does not justify using it to dismiss the site's** importance to wildlife movement in the region. As I pointed out in my comment, the

minimum grid cell size of the Essential Habitat Connectivity Map was 2,000 acres. The project size is 2 acres. One thousand projects the size of the proposed project would fit into a single grid cell of the Essential Habitat Connectivity Map. The Essential Habitat Connectivity Project is intended for analyses at much larger spatial scales than that of the project site. It is grossly unsuitable for the purpose WRA uses it.

Response to *Bird-window collisions not addressed in development design* (paragraph 1, page 16). “**Smallwood references Dunn’s (1993) study** that analyzed winter data from homes with bird feeders, which found that the frequency distribution of birds at the feeders closely paralleled the distribution of species killed by nearby windows.”

Reply: **I’m gratified that the one reference was read by** the responder. Dunn (1993) was an important contribution to the literature on bird-window collisions. I cited Dunn (1993) for her nation-wide estimate of annual mortality caused by window collisions, but the responder found additional value in the reference, which is great. But in my original comment letter, I also cited another 25 research papers and guidelines documents that go into much greater detail of the factors contributing to bird-window collisions and how to minimize and reduce them. Much more is needed than the banning of bird-feeders in the project, the use of window screens, and the promise to apply tape to windows should a problem arise. The latter measure is meaningless without fatality monitoring and a threshold level of mortality that would prompt the application of tape.

Response to *Whether special-status species occur on site and whether vernal pools occur on the project site*. (Paragraph 2, page 18). “The non-native grasslands do not support ground nesting birds (as a nursery site), therefore nesting use will not be impeded.”

Reply: This response is unfounded. No suitable surveys were performed to detect ground-nesting birds. There is no basis for concluding that the site does not support ground-nesting birds.

COMMENTS ON THE ADDENDUM TO THE 2016 EIR

The Addendum (page 43) identifies statutes protecting biological resources, but it makes no mention of the California Migratory Bird Protection Act which was enacted in 2019 but did not exist at the time of the 2016 EIR. ABA 454 was signed by the Governor in 2019 to enact the California Migratory Bird Protection Act. This Act came into being at about the same time that Rosenberg et al. (2019) reported a 29% loss of overall bird numbers across North America during the preceding 48 years. The ecological and economic impacts of this decline have yet to be quantified, but are likely substantial. The revelation of Rosenberg et al. (2019) and the timely enactment of the California Migratory Bird Protection Act are both new circumstances since the 2016 EIR. They warrant a closer look at the proposed project, and the preparation of a project-specific EIR.

The Addendum (page 44) **reports**, “A site-specific Biological Resources Assessment was prepared by Wildlife Research Associates for the Hearn Veterans Village property and characterizes the existing site conditions and evaluates potential impacts to biological resources that would result from the proposed development. The Assessment includes a review of available data from the California Natural Diversity Database (CNDDDB), USFWS, California Department of Fish and Wildlife (CDFW), and the California Native Plant Society (CNPS), and also included a reconnaissance-level site survey which was conducted on April 27, 2020 and included an evaluation of the property for small mammal burrows, potential habitat for nesting birds, and seasonal protocol level surveys for special status plants.” **Based on only one site** visit in April 2020 and only one visit in April 2021, the biological resources assessment inadequately characterizes existing site conditions. Furthermore, as detailed below, the evaluations that are claimed to have been performed were either not performed or their findings inadequately reported.

WRA’s (2020) evaluation of the property for small mammal burrows consisted of the **phrase**, “evidence of which [pocket gophers] was observed primarily on the west side of the parcel (Fig. 7),” **where Fig. 7 depicted a plugged burrow of a pocket gopher. This is** no evaluation of small mammal burrows; it is merely an unsurprising finding that small mammal burrows are present. The 2021 report provides no additional insight into the distribution of pocket gophers at and around the site. There has been no reported quantification of small mammal burrows, nor has there been even a qualitative assessment of relative abundance other than to report that most gopher burrows were on the west side. No linkage has been attempted between the numbers and distribution of small mammal burrows and whether and to what degree California tiger salamanders might find aestivation opportunities on the project site.

WRA’s (2020) evaluation of the potential habitat for nesting birds was summarized by **the sentence**, “Non-native grasslands typically provide foraging, hunting and nesting habitat for a wide variety of wildlife species.” **Otherwise, the evaluation consisted of** speculated species that might nest on the ground and in tree cavities. It does not appear that WRA attempted to detect nesting birds. Even if WRA did search for nesting birds, doing so on one day was hardly a committed effort. The 2021 survey effort was no better, having detected only 8 species of birds in 6 person-hours. (I detected 30 species of birds in 3 person-hours.) Searching for nesting birds while also searching the ground for pocket gopher burrows would have been difficult.

The Addendum (page 46) lists 6 special-status species of birds it says have potential to occur on site. This list is short. It fails to include white-tailed kite, which nested only 310 feet west of the site last spring, and it fails to include special-status species I saw at the project site, including red-shouldered hawk, which is protected by California Fish and Game Code 3503.5, and **Nuttall’s woodpecker, willow flycatcher, and San Francisco common yellowthroat.** It also fails to include multiple additional species identified in Table 2 of my comment letter. Additionally, it fails to include species of birds that were **recently added to the US Fish and Wildlife Service’s list of Birds of Conservation Concern (BCC).** The 2021 list of BCC added northern harrier, western screech-owl, **wrentit, California thrasher, and Bullock’s oriole. All of these species have been**

reported to eBird as occurring in the area of the project. Northern harrier was reported on the grassland across the street, northwest of the project site. The Addendum is incomplete and needs to be revised.

WRA (2021) and the Addendum (page 47) address Monarch butterfly (*Danaus plexippus*), which in 2020 was designated a Candidate species for listing under the federal Endangered Species Act. WRA and the Addendum address Monarchs because the Candidate designation is a new circumstance since the 2016 EIR, but the effort to address this new circumstance is rushed, and as a consequence it is inadequate. Discussion of the occurrence likelihood of Monarchs is based on a site visit in April 2021. However, WRA (2021) visited the site to assess monarch occurrence likelihood at the wrong time of year. The time to survey for Monarchs in the Santa Rosa area would have been during the fall months. Based on iNaturalist records, monarchs have recently been detected in the area of the project as close as Bayer Park.

WRA (2021) reportedly relied upon the “survey protocol Western Monarch Overwintering Habitat Assessment of the Xerces Society(www.xerces.org).” At the website that is cited, I found instructions for recording data, but there were no instructions on how to assess the collected data. The protocol appears designed to contribute to a larger data set that will presumably be analyzed by someone at the Xerces Society. The protocol does not recommend a range of dates during which to assess overwintering habitat, but the Thanksgiving Count identifies 9 January as the latest date for that count. WRA (2021) surveyed the site on 16 April 2021, which was in spring, not winter. Finally, **WRA’s conclusion** that no winter aggregating habitat occurs at the project site might be premature. The survey protocol appears designed to acquire sufficient data to eventually identify the range of overwintering habitat conditions used by Monarchs. WRA (2021) cited no source for their conclusion, nor have I seen one that would support **WRA’s finding**.

WRA (2021) surveyed the site again to assess occurrence likelihood of burrowing owl. Citing outdated references, WRA mischaracterizes burrowing owl habitat and nesting ecology. Burrowing owls do not have high nest site fidelity, nor do breeding burrowing owls reuse the same burrows year after year. Burrows might be reused for several years, but then burrowing owls typically shift to new nest sites (Smallwood unpublished data collected inclusive of and since Smallwood et al. 2013).

WRA (2021) surveyed the site again to assess occurrence likelihood of American badger. Like with burrowing owl, the denning ecology of badgers is mischaracterized. In my experience in California, American badgers do not reuse the same den burrow year after year. I cannot recall ever finding a den burrow that was used by badgers two years consecutively. Den locations typically shift between years.

WRA (2021) reportedly found no burrows suitable for burrowing owl or American badger on 16 April 2021. On 1 June 2021, I observed the soil ramp of a large burrow on the site (Photo 1). I could not access the site, so I could not view the burrow up close, but I know from experience that the mound was piled from a burrow that was excavated

by a mammalian Carnivore. I guessed that the species was a gray fox, but I also suggested in my original comment letter that it could have been excavated by an American badger. Most likely the burrow was excavated after WRA's **site visit**, because otherwise WRA would have detected and reported this burrow.



Photo 1. Soil ramp piled by the excavation of a burrow by a mammalian Carnivore, possibly by an American badger, which is a California Species of Special Concern and known to occur in the area.

Given the burrow that occurred on the site on 1 June 2021 (Photo 1), the site obviously supports at least one burrow that can be use by nesting burrowing owls. In 2021 the burrow was used by a Carnivore, but in 2022 it very likely would be available for use by nesting burrowing owls. A detection survey is warranted for burrowing owl at the site, consistent with the available survey guidelines (CDFW). The WRA (2021) survey came nowhere close to meeting the minimum standards of CDFW (2021).

Finally, **on page 48, the Addendum claims**, “No special-status animal species have been mapped or previously recorded on the project site.” **But this is not true. I recorded** multiple special-status species of wildlife on the project site, including white-tailed kite (Photo 2).



Photo 2. White-tailed kite hunting at the western edge of the project site, 1 June 2021.

Thank you for your attention,

Shawn Smallwood

Shawn Smallwood, Ph.D.

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From: [Sheikhali, Monet](#)
To: "Lennie Moore"
Subject: RE: [EXTERNAL] Comments regarding Hearn Veterans Village (Planning Commission Meeting 12/09/2021)
Date: Thursday, December 9, 2021 10:49:00 AM

Lennie,

Thank you for your email. I will include your comment in Late Correspondence, which will be provided to the Planning Commission in advance of today's public hearing. Staff is unable to post your video comment to the Planning Commission in the agenda for tonight, however I will mention your video comment during my presentation today.

Thanks,

Monet Sheikhali | City Planner

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Counter Hours

Monday/Tuesday/Thursday: 8 a.m. – 4:30 p.m.

Wednesday: 10:30 a.m. – 4:30 p.m. (No new permits are accepted after 3:30 p.m.)

Friday: 8 a.m. to noon (No new permits are accepted after 11:00 a.m.)

From: Lennie Moore <lennie@lenniemoore.com>
Sent: Tuesday, December 7, 2021 10:59 PM
To: Sheikhali, Monet <msheikhali@srcity.org>; _PLANCOM - Planning Commission <planningcommission@srcity.org>
Cc: _CityCouncilListPublic <citycouncil@srcity.org>
Subject: [EXTERNAL] Comments regarding Hearn Veterans Village (Planning Commission Meeting 12/09/2021)

Hi Monet,

Here are my comments regarding the Addendum proposal being reviewed by the Planning Commission. I ask that they review this material in preparation of the meeting on Thursday.

Thank you,

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Lennie Moore
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Studio (707) 260-2400