4.0 RESPONSES TO COMMENT LETTERS ON THE RDEIR

4.1 INTRODUCTION

This chapter includes copies of written comments received by hand-delivered mail or electronic mail during the public review and comment period on the RDEIR between December 31, 2020, and March 8, 2021. Specific responses to the individual comments in each correspondence follow each letter.

Each correspondence is identified by an alphabetical designator (e.g., "A"). Multiple letters from same senders are labeled with the alphabetic designator, name of sender, and a numeric designator (e.g., "A-SENDER-1"). Specific comments within each correspondence are identified by a numeric designator that reflects the numeric sequence of the specific comment within the correspondence (e.g., "A-SENDER-1" for the first comment in Comment Letter A).

Responses focus on comments that pertain to the adequacy of the analysis in the RDEIR or to other aspects pertinent to the potential effects of the Project on the environment pursuant to CEQA. Comments that address topics beyond the purview of this EIR or CEQA are noted as such for the public record. Where comments have triggered changes to the RDEIR, these changes are indicated in the response, and all changes to the RDEIR are consolidated in **Chapter 5.0, Revisions to the Revised Draft EIR**.

Master Responses to recurring comments may be found in the prior Chapter 3.0 of this document, and individual responses that are addressed by a Master Response are cross-referenced.

List of Comment Letters

The following is a list of letters received by the City, commenting on the RDEIR.

Letter Number	Commentor and Date of Comment
Public Agencies	
Letter A-USFWS	U.S. Fish and Wildlife Service – Ryan Olah / 03-02-2021
Letter A-CDFW-1	California Department of Fish and Wildlife – James Hansen / 01-16/2019
Letter A-CDFW-2	California Department of Fish and Wildlife – James Hansen / 03-10-2021
Letter A-SCRP	Sonoma County Regional Parks – Bert Whitaker / 03-15/2021
Letter A-SCAGOP	Sonoma County AG + Open Space – Jennifer Kuszmar / 02-11-2021
City Officials	
Letter C-Barnacle	Councilmember Brian Barnacle / 03-15-2021
Letter C-Fischer	Councilmember D'Lynda Fischer / 03-15-2021

Organizations	
Letter O-350 Petaluma	350 Petaluma - Annie Stuart / 03-15-2021
Letter O-BARTC	Bay Area Ridge Trail Council – Janet McBride / 02-18-2021
Letter O-NOC	Neighbors of Oxford Court - Rob and Donna Shepard; Larry and Chey Moore; Jerry and Mary Beene; Susan and Mark Jaderstrom; Bob and Kathleen Billings; Aaron Edmonson and Pat Spitzig; Thom Knudsen; Jeff Marcia; Pam and Jim Granger; Sharon Vallej / 02-09-2021
Letter O-PLAN-1	Paula Lane Action Network (PLAN) - Susan Kirks / 02-09-2021
Letter O-PLAN-2	Paula Lane Action Network (PLAN) – Susan Kirks / 03-10-2021
Letter O-PRP-1	Petalumans for Responsible Planning - Susan Jaderstrom / 01-28-2021
Letter O-PRP-2	Petalumans for Responsible Planning / 02-09-2021
Letter O-PRP-3	Petalumans for Responsible Planning - kathleen kestelyn / 03-09-2021
Letter O-PRP-4	Petalumans for Responsible Planning / 03-10-2021
Letter O-PRP-5	Petalumans for Responsible Planning / 03-10-2021
Letter O-PRP-6	Petalumans for Responsible Planning - Susan Jaderstrom / 03-11-2021
Letter O-PRP-7	Petalumans for Responsible Planning / 03-11-2021
Individuals	
I-Abolfathi	Amir Bolfathi / 3-11-21
I-Adepas	Samantha Pascoe / 3-14-21
I-Ahmed	Kris Ahmed / 2-9-21
I-Album	Bernie Album / 3-13-21
I-Alexander	Bev Alexander / 3-12-21
I-Alfrey-1	Peggy Alfrey / 2-21-21
I-Alfrey-2	Peggy Alfrey / 3-13-21
I-Anderman	Jennifer and Menahem Anderman / 3-15-21
I-Anders	Tina Anders / 3-10-21
I-Applegarth	Katherine Applegarth / 2-8-21
I-Ayre-1	Lori Ayre / 1-27-21
I-Ayre-2	Lori Ayre / 3-4-21
I-Beene-1	Mary Beene / 2-9-21
I-Beene-2	Mary Beene / 3-8-21
I-Betts	Emily Betts / 3-13-21
I-Billings	Kathleen Billings / 3-15-21
I-Bock	Annette Bock / 3-15-21
I-Booth	Sam Booth / 1-28-21
I-Bordiga	Pete and Patty Bordiga / 3-14-21
I-Brown_K	Karen Brown / 3-12-21
I-Brown_R	Rick Brown / 3-12-21
I-Burnett	Gail Burnett / 12-30-20
I-Clap	Candace Clapp / 2-24-21
I-Clark	Dustin Clark / 3-15-21
I-Colvin	Chris Colvin / 3-8-21
I-Corbett	Tom Corbett / 3-5-21
I-Davy	Sue Davy / 3-13-21
I-Destiny	Zen Destiny / 3-15-21

Individuals (continued)	
I-Dollar_M-1	Michael Dollar / 1-2-21
I-Dollar_M-2	Michael Dollar / 3-4-21
I-Dollar_M-3	Michael Dollar / 5-22-20
I-Dollar_V	Victoria Xela Dollar / 2-24-21
I-Driscoll	Amber Driscoll / 2-5-21
I-Ducy	Elizabeth Ducy / 2-8-21
I-Duskin	David Duskin / 2-24-21
I-Eber_A-1	Andy Eber / 2-8-21
I-Eber_A-2	Andy Eber / 3-10-21
I-Eber_C-1	Carol Eber / 2-6-21
I-Eber_C-2	Carol Eber / 2-7-21
I-Eber_C-3	Carol Eber / 3-10-21
I-Eklof	Paul and Sherry Eklof / 2-11-21
I-Elias	Julie Elias / 3-5-21
I-Emerson	Donna Emerson / 2-18-21
I-Emerson-Colvin	Juliet Emerson-Colvin / 2-17-21
I-Fabre-Marcia	Sherri Fabre-Marcia / 3-11-21
I-Gander-1	Forrest Gander / 2-8-21
I-Gander-2	Forrest Gander / 3-5-21
I-Gang	Pete Gang / 2-4-21
I-Gaylord	Ali Gaylord / 3-13-21
I-Gentile-1	Diane Gentile / 2-9-21
I-Gentile-2	Diane Gentile / 3-15-21
I-Gomez	Diana Gomez / 3-9-21
I-Goulden	Phoebe Goulden / 3-4-21
I-Grubaugh-1	Joseph Grubaugh and Sigrun Seifert / 2-9-21
I-Grubaugh-2	Joseph Grubaugh and Sigrun Seifert / 3-11-21
I-Hansel	Alicia Hansel / 3-15-21
I-Heal	Helen Heal / 3-14-21
I-Humphries_J	Joel Humphries / 3-7-21
I-Humphries_R	Rentia Humphries / 3-13-21
I-Jacobs	Wendy Jacobs / 3-13-21
I-Jahns	Claire Jahns / 3-15-21
I-Johnson	Bruce Johnson / 3-8-21
I-Jorgensen	Ted and Diana Jorgensen / 3-9-21
I-Kambampati	Ravi Kambampati / 3-11-21
I-Kaplan	Rachel Kaplan / 1-29-21
I-Kestelyn	Kathleen Kestelyn / 3-9-21
I-Kierstead_Sheeter	Christine Kierstead_Sheeter / 3-14-21
I-Kingsley	Kate Kingsley / 3-15-21
I-Kuehne	Lance Kuehne / 3-15-21
I-Kutnick	Eileen Kutnick / 3-4-21
I-Limbert	Marge Limbert / 2-9-21

Individuals (continued)	
I-Markwood	Deja Markwood / 2-15-21
I-Martin	Pat Martin / 2-9-21
I-Mattei	Meaghan Mattei / 2-24-21
I-Mazzella	Molly Mazzella / 3-14-21
I-Meikle-1	Teresa Meikle / 2-9-21
I-Meikle-2	Teresa Meikle / 3-13-21
I-Meredith	Beth Meredith / 3-1-21
I-Moore-1	Chey Moore / 2-8-21
I-Moore-2	Chey Moore / 2-23-21
I-Moore-3	Chey Moore / 3-9-21
I-Moore-4	Chey Moore / 3-11-21
I-More	Jennifer More / 2-23-21
I-Morris	Eileen Morris / 3-15-21
I-Olsen	Veronica Olsen / 3-14-21
I-Page	James Page / 3-12-21
I-Petrovic	Velina Petrovic / 1-29-21
I-Porter	Helen Porter / 3-8-21
I-Poutaheri	Neema Poutaheri / 2-8-21
I-Risedorph-1	Sharon Risedorph / 2-9-21
I-Risedorph-2	Sharon Risedorph / 3-15-21
I-Rogers	Nancy Rogers / 3-5-21
I-Ross	Rachael Ross / 3-2-21
I-Schau	Erik Shau / 3-8-21
I-Shepard-1	Robert Shepard / 2-9-21
I-Shepard-2	Rober Shepard / 3-9-21
I-Shettle	Kerrin Shettle / 3-10-21
I-Smallwood	Shawn Smallwood / 2-28-21
I-Steinmetz	Mariah Steinmetz / 2-8-21
I-Stires	Robert Stires / 2-24-21
I-Stone-1	Matthew Stone / 2-8-21
I-Stone-2	Matthew Stone / 3-11-21
I-Sullivan	Moira Sullivan / 3-15-21
I-Terrell	James Terrell / 3-15-21
I-Tracey	Larry Tracey / 2-27-21
I-Venton	Danielle Venton / 3-8-21
I-Vilmur	Pete Vilmur / 3-11-21
I-Wheeler	Jennifer Wheeler / 3-8-21
I-Wolfe	Sydney Wolfe / 2-26-21
Project Applicant - Kelly Creek Protection Project	
O-KCPP-1	Kelly Creek Protection Project – Peter Cohn; Greg Colvin; Steve Abbs / 2-5-21
O-KCPP-2	Kelly Creek Protection Project – Jared Emerson-Johnson / 2-8-21
O-KCPP-3	Kelly Creek Protection Project – Peter Cohn; / 2-9-21
O-KCPP-4	Kelly Creek Protection Project – Greg Colvin / 3-7-21

Project Applicant - Kelly Creek Protection Project (continued)	
O-KCPP-5	Kelly Creek Protection Project – Greg Colvin / 3-8-21
O-KCPP-6	Kelly Creek Protection Project – Greg Colvin / 3-15-21

PUBLIC AGENCIES

Responses to Comments

A-USFWS

Ervin, Olivia

From: Olah, Ryan <ryan_olah@fws.gov>
Sent: Tuesday, March 2, 2021 8:43 AM
To: Ervin, Olivia
Subject: Re: [EXTERNAL] City of Petaluma Scott Ranch Critical Habitat

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---
Hi Olivia,

Sorry for the late response to your email. The age of the surveys is fine for this project-since we have had CRLF detected onsite, we do not need any further surveys to be done and we consider the site to be occupied by CRLF. Let me know if you have any other questions. Thanks. 1

Ryan

~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Ryan Olah

Coast Bay Division Chief
U.S. Fish and Wildlife Service
Sacramento Fish and Wildlife Office
2800 Cottage Way
Sacramento, CA 95825
(916) 414-6623 Not Checked Frequently, Please email or Send a Microsoft Teams message to ryan_olah@fws.gov.
https://www.fws.gov/sacramento/

From: Ervin, Olivia <oervin@cityofpetaluma.org>
Sent: Monday, February 8, 2021 3:40 PM
To: Olah, Ryan <ryan_olah@fws.gov>
Subject: [EXTERNAL] City of Petaluma Scott Ranch Critical Habitat

Hello Ryan,

I left you a voice message last week and am following up. The City of Petaluma has released a RDEIR for the Scott Ranch project and I wanted to connect to see if you had any input and to confirm the Services review process for projects within critical habitat.
~~~~~~~~~~~~~~~~~~~~~~~~~~~~

A question has been raised specifically about the age of the protocol level survey which were done in 2004. Based on the attached correspondence, which was provided to the City by the applicant, I understand that subsequent detection surveys are not required since the site is considered occupied by CRLF.

I've coordinated with Elden Holldorf, Bay Delta, on another project in a different location in the City and want to make sure I am coordinating with the correct division.

I look forward to hearing back from you.

Thanks,
Olivia

Olivia Ervin, Environmental Planner
M-Group Consulting Planner
Serving the City of Petaluma
707.778-4556

While City Hall buildings remain closed to the public in response to COVID-19 Health Orders, the Planning Division is providing services remotely, including virtual counter inquiries and entitlement review. I am working remotely and checking email and voicemail regularly. I will make every effort to respond to your inquiry by the end of the next business day.

A-USFWS

Olivia Ervin

From: Olah, Ryan <ryan_olah@fws.gov>
Sent: Thursday, February 14, 2019 1:40 PM
To: seanm zentner.com
Cc: Steve Abbs; Gregory L. Colvin; Jones, Julie (Perkins Coie); Tamara S. Galanter (Galanter@smwlaw.com)
Subject: Re: [EXTERNAL] Scott Ranch (Formerly UOP Site)

Sean,

I agree with the summary of the meeting. No additional red-legged frog surveys would be required since frogs are known to breed in the stockpond and therefore the project site is considered occupied by the frog.

Ryan

Ryan Olah
Coast Bay Division Chief
U.S. Fish and Wildlife Service
Sacramento Fish and Wildlife Office
2800 Cottage Way
Sacramento, CA 95825
(916) 414-6623

On Tue, Dec 18, 2018 at 1:29 PM seanm zentner.com <seanm@zentner.com> wrote:

> Hi Ryan,
>
> Thank you again for your responsiveness in regards to the Scott Ranch project and for meeting with Greg Colvin, Steve Abbs and I on Monday, December 10th to discuss the revised project plans. I am following up with this email, which summarizes the important points from the meeting.
>
> We were happy to present to you the revised project proposing 28 residential lots located on approximately 15 acres north of Kelly Creek, and an extension of Helen Putnam Park, including trails, parking lots, park amenities, and open space preservation and habitat enhancement, on the remaining 44 acres. The south side of Kelly Creek, which includes the stockpond used by CRLF and seasonal wetlands, is the more sensitive habitat on the property. The revised project avoids these sensitive areas and there was concurrence that the proposal is much-improved in terms of potential CRLF impacts.

In regards to the past CRLF surveys, you did not see any reason for further surveys of the property as CRLF are already known to breed in the stockpond. Additional surveys could potentially cause some disturbance to the CRLF and the past surveys, which found that the stockpond is occupied habitat, are still considered valid.

We discussed the boundaries of the existing Critical Habitat (CH). It was acknowledged, though these boundaries extend to the north side of Kelly Creek, based on the actual lay of the land, the likely intent was for the creek to be the northerly limits of the CH area. Much of the land that would be developed north of the Creek within the currently mapped CH is relatively steep, non-native grassland. However, as we have all noted, the entire site outside of the stockpond, which is known breeding habitat, is considered upland movement habitat. Though the CH boundary cannot be changed, we were glad to hear you reaffirm that the USFWS takes a discretionary consideration of the project's overall impacts versus conservation efforts. In general, the revised project results in a relatively small loss of CH north of the Creek, yet a much larger area of more sensitive habitat would be preserved south of the Creek.

In regards to mitigation for the project there was agreement that the mitigation ratio's first discussed with the Service in 2009, which called for 3:1 mitigation for impacts and preserving as much land on-site as possible, are still appropriate. Currently, the approximate amount of area with permanent impacts is just over 13 acres, which would require just over 40 acres of land. Because the current project includes enhancements and preservation of approximately 44 acres of on-site land, that this onsite area would meet the requirements as long as a Service-approved Conservation Easement was placed over the land. We discussed that there would likely be other Conservation Easements with other entities, such as the County Regional Parks who will eventually manage the land.

Your offer to assign Service staff to the project immediately is very much appreciated. We will be happy to provide additional project details and tour the site, to get them up to speed. Also, as suggested, it will be beneficial to meet with County Regional Parks regarding the long-term maintenance of the property.

Thank you again for all of your time and assistance with this project. Please let me know if I have inadvertently misconstrued any points in the above discussion. It would be very much appreciated if you could verify the content, especially in regards to the need for CRLF surveys, the proposed on-site mitigation, or anything else.

Thanks,

Sean

RESPONSES TO A-USFWS LETTER

Response A-USFWS-1: Comment noted. USFWS confirmed that the age of the California red-legged frog (CRLF) survey was acceptable and further surveys were not needed since CRLF was previously detected and the site is considered to be occupied. See **Master Response 1 – Need for Updated Biological Surveys**.

A-CDFW-1

Olivia Ervin

From: Steve Abbs <Sabbs@davidonhomes.com>
Sent: Tuesday, March 2, 2021 3:39 PM
To: Olivia Ervin
Cc: Tamara S. Galanter; Julie Jones - Perkins Coie LLP (jjones@perkinscoie.com); Greg Colvin (greglcolvin@gmail.com)
Subject: FW: Scott Ranch project, Petaluma

Olivia,

FYI, see below for our correspondence with James Hansen with CDFW in 2019.

Steve

-------- Forwarded Message --------
Subject:RE: Scott Ranch project, Petaluma
Date: Wed, 16 Jan 2019 21:13:52 +0000
From: Hansen, James@Wildlife <James.Hansen@Wildlife.ca.gov>
To:seanm zentner.com <seanm@zentner.com>
CC: Steve Abbs <SAbbs@Davidonnewhomes.com>, 'Tamara S. Galanter (Galanter@smwlaw.com)' <Galanter@smwlaw.com>, Gregory L. Colvin <colvin@adlercolvin.com>, Jones, Julie (Perkins Coie) <JJones@perkinscoie.com>

Hi Sean,

Thank you for providing this summary of our meeting last week. I can confirm that this summary accurately describes what we discussed, and I am in agreement with the conclusions.

I look forward to seeing the permit application and to working together in the future.

Thank you,
James

James Hansen
Environmental Scientist
Habitat Conservation – Sonoma County
California Department of Fish and Wildlife
Bay Delta Region
(707) 576-2869
James.Hansen@Wildlife.ca.gov

A-CDFW-1

"The Mission of the Department of Fish and Wildlife is to manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public."

From: seanm zentner.com <seanm@zentner.com>
Sent: Wednesday, January 16, 2019 12:35 PM
To: Hansen, James@Wildlife <James.Hansen@Wildlife.ca.gov>
Cc: Steve Abbs <SAbbs@Davidonnewhomes.com>; 'Tamara S. Galanter (Galanter@smwlaw.com)' <Galanter@smwlaw.com>; Gregory L. Colvin <colvin@adlercolvin.com>; Jones, Julie (Perkins Coie) <JJones@perkinscoie.com>
Subject: Re: Scott Ranch project, Petaluma

Hi James,

Thank you again for your responsiveness in regards to the Scott Ranch project and for meeting with Tamara Galanter, Steve Abbs and I on Wednesday, January 9th to discuss the revised project plans. I am following up with this email, which summarizes the important points from the meeting.

We were happy to present to you the revised project proposing 28 residential lots located on approximately 15 acres north of Kelly Creek, and an extension of Helen Putnam Park, including trails, parking lots, park amenities, and open space preservation and habitat enhancement, on the remaining 44 acres. The south side of Kelly Creek, which includes the stockpond used by CRLF and seasonal wetlands, is the more sensitive habitat on the property. The revised project avoids these sensitive areas and there was concurrence that the proposal is much-improved in terms of potential CRLF impacts and impacts in general.

We discussed the relatively recent botanical and fossorial mammal surveys, which were completed in 2013. The results of these surveys were negative and you agreed that since those surveys did not find any special status species, and the project location does not appear to have suitable habitat for listed plant species, they most likely would not have to be repeated. We discussed that this was a similar response to the one we received from the USFWS in regards to the past CRLF surveys that had been completed at the site, as the USFWS also stated that those surveys were still valid. Since CRLF is a federally listed species, you deferred to their jurisdiction in this case.

1

We had a good discussion in regards to CRLF habitat, Critical Habitat (CH), and potential project impacts and mitigation. There was agreement that the project looks good and that the proposed onsite mitigation, which would set aside approximately 44 acres of CH adjacent to other CH lands, appears well-conceived and is very appropriate

for this project, providing more than the typically required 3:1 ratio for mitigation of direct impacts to CRLF habitat and the 1:1 ratio for mitigation of indirect impacts to CRLF habitat. You also mentioned that a CDFW-approved Conservation Easement, which would include funding to manage and maintain the mitigation area in perpetuity would be required and that the conservation easement that will be required by the Ag + Open Space District will likely fulfill this requirement. Lastly, we discussed that the County Regional Parks will eventually manage the land for the long-term.

Finally, we discussed the items that would be necessary for permitting. You indicated that a good time for the permit application submittal would be in the winter (November or December) before the scheduled commencement of work the following year. The CDFW Lake and Streambed Alteration Permit would take 90 days as long as the application was complete, including CEQA review. You noted several items that would be required for the permit including, among other items, detailed engineering drawings for the project elements within CDFW jurisdiction such as trails, bridges, step-pools, head-cut repairs and other similar project elements. 1

In the meeting you also mentioned that we could submit a CDFW permit application before CEQA has been finalized, with the understanding that we would need to show proof of completion before the permit could be issued.

Thank you again for all of your time and assistance with this project. Please let me know if I have inadvertently misconstrued any points in the above discussion. It would be very much appreciated if you could respond to this email in order to verify the content so that we all have the same understanding

Thanks,

Sean

Sean Micallef
Partner-Chief Ecologist
seanm@zentner.com

ZENTNER PLANNING AND ECOLOGY
120A Linden Street | Oakland, CA 94607
510.622.8110 | 510.622.8116 fax

www.zentner.com

On 12/18/2018 3:45 PM, Hansen, James@Wildlife wrote:

> Okay great, I look forward to meeting you all in January.
>
> Cheers,
> James

From: seanm zentner.com <seanm@zentner.com>
Sent: Tuesday, December 18, 2018 3:38 PM
To: Hansen, James@Wildlife <James.Hansen@Wildlife.ca.gov>
Subject: Re: Scott Ranch project, Petaluma

Sounds great! Steve Abbs from Davidon Homes, Tamara Galanter counsel for the Earth Island Institute and representing the community plan, and I will be in attendance. Let me if you have any questions on the graphics or anything else before the meeting.

Thanks again!

Sean

Sean Micallef
Partner-Chief Ecologist
seanm@zentner.com

ZENTNER PLANNING AND ECOLOGY
120A Linden Street | Oakland, CA 94607
510.622.8110 | 510.622.8116 fax

www.zentner.com

On 12/18/2018 3:19 PM, Hansen, James@Wildlife wrote:

> Hi Sean,
>
> 10am on January 9 works for me. I work out of a satellite office in Santa Rosa. 3633 Westwind Blvd, Santa Rosa, CA.
>
> I will review this material before our meeting.
>
> Thank you,
> James
>
> James Hansen
> *Environmental Scientist*
> *Habitat Conservation – Sonoma County*
> *California Department of Fish and Wildlife*
> *Bay Delta Region*
> *(707) 576-2869*
> *James.Hansen@Wildlife.ca.gov*

"The Mission of the Department of Fish and Wildlife is to manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public."

From: seanm zentner.com <seanm@zentner.com>
Sent: Tuesday, December 18, 2018 2:23 PM
To: Hansen, James@Wildlife <James.Hansen@Wildlife.ca.gov>
Subject: Re: Scott Ranch project, Petaluma

Hi James,

Let's plan on the morning of January 9th-would 10am work for you? I think for now a meeting in your office should be just fine. However, I wanted to make sure where you are! Is your office in Fairfield??

I have attached a bunch a graphics so that you have some time to look them over.

I also wanted to provide a very brief history for this project, which has been in the works for a long time and has undergone a number of revisions. The originally proposed project (circa 2003-2004) contained 93 lots, with a significant number of lots south of Kelly Creek (**93-Lot Plan 2004**). Corps permits were sought and a Section 7 was initiated in 2005. A joint meeting with Davidon Homes (the project proponent), the CDFW (Dan Wilson) and the USFWS (Jim Browning) took place in early 2009. At that meeting, the USFWS and CDFW agreed that a corridor should be left open between Kelly Creek and the stockpond south of Kelly Creek that contained CRLF. This collaboration resulted in a revised project that included two options that required a new CEQA review between 2014-2017. Both versions of the development contained only 16 lots and trailhead parking south of Kelly Creek (**2016 Scott Ranch Option A and B**). In 2017, Davidon Homes and a local community group began negotiations on a reduced project in exchange for a purchase of a portion of the property. In June 2018, an agreement was entered into by both parties that results in a revised application with the minimum allowable density of 28 lots, while selling the most sensitive 44 acres to the community group. The residential lots are all on the north side of Kelly Creek (**28-Lot Scott Ranch Plan 2018**) and the community group is proposing to create an extension to the Helen Putnam Park on the 44 acres (**Revised Park Plan 12-2018**).

I have also attached a couple early rough drafts of some impact maps including a CRLF impact map and a CDFW jurisdiction impacts (**Top of Bank impact**). We still need to ground truth the CDFW graphic, but gives a good approximation of what the temporary and permanent impacts will be.

Thanks very much!

Sean

RESPONSES TO A-CDFW-1 LETTER

Response to A-CDFW-1-1: Record of correspondence between the City and the California Department of Fish and Wildlife (CDFW) serves to confirm that earlier concerns and comments raised by CDFW in their letter regarding the 2013 Draft EIR on the previous 93-lot development application for the site have been addressed as a result of the major changes to the Scott Ranch Project, the updated studies, and information provided in the RDEIR. See **Master Response 1 – Need for Updated Biological Surveys** and **Master Response 4 – Special-Status Species Present at the Project Site**.

A-CDFW-2

Ervin, Olivia

From: Hansen, James@Wildlife <James.Hansen@Wildlife.ca.gov>
Sent: Wednesday, March 10, 2021 4:30 PM
To: Ervin, Olivia
Subject: RE: Scott Ranch RDEIR CDFW Input

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---
Hi Olivia,

I appreciate you providing the summary of our conversation. I can confirm that the summary in the below email accurately represents my comments on behalf of CDFW for the RDEIR for Scotts Ranch. 1

Thank you for your time,
James

James Hansen
Environmental Scientist
Habitat Conservation Program – Sonoma County
California Department of Fish and Wildlife
Bay Delta Region
James.Hansen@Wildlife.ca.gov
*I am currently working remotely and can be reached most effectively via email.

"The Mission of the Department of Fish and Wildlife is to manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public."

CDFW is transitioning to the Environmental Permit Information Management System (EPIMS), an online system, for all Lake or Streambed Alteration (LSA) Notifications. **CDFW now *only* accepts standard and emergency Notifications through EPIMS**. For more information visit https://wildlife.ca.gov/Conservation/Environmental-Review/EPIMS.

From: Ervin, Olivia <oervin@cityofpetaluma.org>
Sent: Wednesday, March 10, 2021 3:58 PM
To: Hansen, James@Wildlife <James.Hansen@Wildlife.ca.gov>
Subject: Scott Ranch RDEIR CDFW Input

Hello James,

I am glad that we were able to connect this afternoon to receive CDFW's comments verbally since the Department is unable to issue a formal comment letter. The following summary memorializes our conversation regarding CDFW's comments on the RDEIR for the Scott Ranch Project.

- CDFW has been consulted and has provided input on the Scott Ranch Project throughout the CEQA review process
- Major changes to the project, updated studies, and the current RDEIR address prior CDFW comments/concerns (e.g. the 2013 CDFW comment letter) 2
- The RDEIR provides sufficient information for CDFW to rely upon as a responsible agency and in accordance with Fish and Game Code Section 1600
- CDFW defers to the USFWS on California Red Legged Frog (CRLF) and additional protocol level surveys are not necessary since the site is confirmed to be occupied by this species 3
- The Wildfire Section and Fuel Management Plan were reviewed with a focus on CRLF and overall strategies look reasonable to preserve habitat, with the following suggestion from CDFW:
    - Removal of live native vegetation within the riparian corridor zone should be done in consultation with CDFW through a 1600 permit application. 4
    - Removal of invasive and dead vegetation trees for fuel management purposes is acceptable.
- The Biological Resources Section was reviewed and CDFW suggests the following:
    - Modify Measure Bio 1b (g) with underline text: "Avoid development and associated direct and indirect impacts on CRLF in accordance with project revisions required as part of the consultation <u>review and approval</u> process with CDFW and USFWS. Compensatory mitigation shall be provided at a minimum of 3:1 for permanent impacts and 1:1 for temporary impacts to CRLF habitat. This may be accomplished through permanent protection and establishment of a conservation easement or other mechanisms of suitable habitat on-site and off-site, where necessary to achieve the minimum compensatory mitigation requirements <u>or as otherwise required by the CDFW and USFWS</u>."
    - Modify Measure Bio-1c to clarify the duration of the non-nesting season extends from August 31 through February 1 and nesting season extends from Feb 1 through August 31.
    - Expand preconstruction surveys to include special status species and in particular badger dens, yellow legged frog, and burrowing owl. 5
    - Modify Measure Bio-2a with underline text: "A detailed Landscape and Vegetation Management Plan (Plan) shall be prepared by a qualified landscape architect in consultation with <u>CDFW and</u> a plant ecologist experienced with native species. The Plan shall . . ."
    - Modify Measure Bio-2e with underline text: "A Native Grassland Avoidance and Replacement Program (Program) shall be developed by a qualified biologist <u>in consultation with CDFW</u> to address the loss of native grasslands on the site and provide for adequate replacement. . ." ". . . The Final Program shall be subject to review and approval by the <u>CDFW</u>, City, including peer-review by a qualified biologist selected by the City. . ."
    - Modify Measure Bio-2e (g) with underline text: "Annual monitoring reports shall be prepared by the qualified biologist and submitted to the <u>CDFW and the</u> Community Development Department of the City of Petaluma by December 31 of each monitoring year, for a minimum of five years or until the defined success criteria are met."
    - Modify Measure Bio-3 with underline text: . . . "The Final WREP shall be prepared by a qualified wetland consultant in consultation with <u>and for review and approval by</u> the City, the RWQCB, the USACE, and the CDFW. . ."

Please confirm that the above accurately represents CDFW's review and comment on the RDEIR for Scott Ranch or provide clarification and any additional input as appropriate.

Thank you,

Olivia Ervin, Principal Environmental Planner

M-Group Consulting Planner
Serving the City of Petaluma
707.778-4556

While City Hall buildings remain closed to the public in response to COVID-19 Health Orders, the Planning Division is providing services remotely, including virtual counter inquiries and entitlement review. I am working remotely and checking email and voicemail regularly. I will make every effort to respond to your inquiry by the end of the next business day.

RESPONSES TO A-CDFW-2 LETTER

Response A-CDFW-2-1: Comment noted.

Response A-CDFW-2-2: Comment noted.

Response A-CDFW-2-3: Comment noted. See **Master Response 1 – Need for Updated Biological Surveys** and **Master Response 2 – California Red-Legged Frog Surveys**.

Response A-CDFW-2-4: Comment noted. **Mitigation Measure BIO-1a** requires that the project Applicants obtain all required permits from the USFWS, CDFW, RWQCB, and USACE (e.g., 1600 series permits, 404 and 401 permits, incidental take permits, and any others) in advance of any disturbance to existing habitat. In addition, **Mitigation Measure BIO-1a** has been refined to clarify the City's identified mitigation compensation ratios for impacts to CRLF habitat (see **Chapter 5.0, Revisions to the RDEIR**). The mitigation measure also requires compliance with all conditions associated with agency authorizations to avoid, minimize, or offset impacts to any species listed under either the state or federal Endangered Species Acts, or protected under any other state or federal law. Further review and authorizations would be necessary from the USFWS, CDFW and other regulatory agencies, as discussed on **pages 4.3-41** and **4.3-56 of the RDEIR**. Evidence that the project Applicants have secured all required authorization from these agencies must be submitted to the City prior to issuance of any grading or building permits for the project, which provides assurance that any concerns of these agencies have been fully addressed in advance of any disturbance to existing habitat on the site.

Response A-CDFW-2-5: In response to the comments, the following revisions have been made to the RDEIR, with deletions shown as ~~overstrike~~ and addition as <u>underlined</u> text.

Mitigation Measure BIO-1b(g) on **page 4.3-43 of the RDEIR** has been revised as follows:

> Avoid development and associated direct and indirect impacts on CRLF in accordance with project revisions required as part of the consultation <u>review and approval</u> process with CDFW and USFWS. Compensatory mitigation shall be provided at a minimum of 3:1 for permanent impacts and 1:1 for temporary impacts to CRLF habitat. This may be accomplished through permanent protection and establishment of <u>two</u> conservation easements or other mechanisms of suitable habitat on-site and off-site, where necessary to achieve the minimum compensatory mitigation requirements <u>or as otherwise required by the CDFW and USFWS</u>.

Mitigation Measure BIO-1c on **page 4.3-44 of the RDEIR** has been revised as follows:

Any active nests of raptors or other birds protected under federal and state regulations in the vicinity of construction shall be avoided until young birds are able to leave the nest (i.e., fledged) and forage on their own. Avoidance may be accomplished either by scheduling grading, vegetation removal and demolition activities during the non-nesting period (September 1 through January 31 ~~August 30 through February 14~~), or if this is not feasible, by conducting a preconstruction survey for raptor and other bird nests. Provisions of the pre-construction survey and nest avoidance, if necessary, shall include the following:

a. To avoid "take" of barn owls in the large barn, any relocation or restoration work shall be initiated in the non-nesting period or shall be performed in conformance with the pre-construction survey procedures detailed below.

b. If grading is scheduled during the active nesting period (February 1~~5~~ through August 31), a qualified wildlife biologist shall conduct a pre-construction nest survey no more than 15 days prior to initiation of grading to provide confirmation on presence or absence of active nests in the vicinity.

c. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist and implemented to prevent abandonment of the active nest. At a minimum, grading and vegetation removal in the vicinity of the nest shall be deferred until the young birds have fledged or are no longer dependent on the nest. A nest-setback zone shall be established within which all construction-related disturbances shall be prohibited. These are typically at least 300 feet for all raptors and 100 feet for other birds protected under the Migratory Bird Treaty Act and State Fish and Game Code, unless site-specific conditions allow for some variation from these distances as determined by the qualified wildlife biologist in coordination with CDFW. The perimeter of the nest-setback zone shall be fenced or adequately demarcated with staked flagging at 20-foot intervals, and construction personnel restricted from the area.

d. If permanent avoidance of the nest is not feasible, impacts shall be minimized by prohibiting disturbance within the nest-setback zone until a qualified biologist verifies that the birds have either a) not begun egg-laying and incubation, or b) that the juveniles from the nest are foraging independently and capable of independent survival.

e. Demolition of any existing buildings and removal of any trees shall also consider possible bat use of the site, as defined below in **Mitigation Measure BIO-1d**.

f. A survey report by the qualified biologist verifying that the young birds have fledged shall be submitted to the Community Development Department of the City of Petaluma prior to initiation of grading and vegetation removal in the nest-setback zone.

Although the findings of the 2021 biological surveys were consistent with the surveys conducted in 2013, which resulted in the absence of any sign indicating presence of American badger or burrowing owl on the site (see **Master Response 1 – Need for Updated Biological Surveys**), **Mitigation Measure BIO-1b** on **page 4.3-42** to **page 4.3-44 of the RDEIR** has been revised as follows to address the remote potential impact on American badger dens, burrows of western burrowing owl, and individual foothill yellow-legged frog if individuals from these species were to occupy the site in the future in advance of construction:

Preconstruction and Construction Avoidance Provision

a. Preconstruction surveys shall be conducted by a Service-approved biologist prior to any grading or major vegetation clearance to ensure that no individual CRLF are lost during construction. <u>These preconstruction surveys shall also verify the presence or absence of occupied dens of American badger, burrows of western burrowing owl, and individuals of foothill yellow-legged frog in the remote instance individuals were to disperse onto the site in advance of construction-related disturbance.</u> The Final CRLFMP shall: 1) describe in detail the survey approach and methodology, and 2) specify that grading or vegetation clearance may not occur in any area where individual CRLF, <u>American badger, western burrowing owl, and/or foothill yellow-legged frog</u> are located until such time as the individual has either moved out of the disturbance zone or has been physically relocated by a Service-approved biologist legally authorized to handle the species. <u>Any relocation effort for CRLF, American badger, western burrowing owl, and/or foothill yellow-legged frog shall be formulated in consultation with and approved by CDFW and USFWS, and shall be implemented by a qualified biologist. […]</u>

To clarify the consultation process with CDFW, Mitigation Measures BIO-2a, BIO-2e, and BIO-3 have been revised as follows:

Mitigation Measure BIO-2a on **page 4.3-51 of the RDEIR** has been revised as follows:

A detailed Landscape and Vegetation Management Plan (Plan) shall be prepared by a qualified landscape architect in consultation with <u>CDFW and</u> a plant ecologist experienced with native species…

Mitigation Measure BIO-2e on page 4.3-53 of the RDEIR has been revised as follows:

> A Native Grassland Avoidance and Replacement Program (Program) shall be developed by a qualified biologist in consultation with CDFW to address the loss of native grasslands on the site and provide for adequate replacement… The Final Program shall be subject to review and approval by the City and CDFW, including peer-review by a qualified biologist selected by the City…

Mitigation Measure BIO-2e(g) on **page 4.3-54 of the RDEIR** has been revised as follows:

> Annual monitoring reports shall be prepared by the qualified biologist and submitted to the CDFW and the Community Development Department of the City of Petaluma by December 31 of each monitoring year, for a minimum of five years or until the defined success criteria are met.

Mitigation Measure BIO-3 on **page 4.3-56 of the RDEIR** has been revised as follows:

> A Final Wetland Replacement and Enhancement Program (WREP) shall be prepared and implemented to compensate for the loss of jurisdictional waters on the project site. The Final WREP shall be prepared by a qualified wetland consultant in consultation with and for review and approval by the City, the RWQCB, the USACE, and the CDFW […]

A-SCRP

SONOMA COUNTY REGIONAL PARKS

BERT WHITAKER
DIRECTOR

2300
County Center Drive
Suite 120A
Santa Rosa
CA 95403
Tel: 707 565-2041
Fax: 707 579-8247
sonomacountyparks.org

March 15, 2021

ATTN: Olivia Ervin
Community Development Department
City of Petaluma
11 English Street
Petaluma, CA 94954

RE: Scott Ranch Project: Draft Environmental Impact Report

Dear Ms Ervin:

Thank you for the opportunity to review the 2021 Draft Environmental Impact Report (DEIR) for the Scott Ranch Project (Project) that proposes an expansion to the adjacent Helen Putnam Regional Park (Park). We value the City's efforts to collaborate with us, the Applicant, and other stakeholders during the development of the Project and the DEIR.

Regional Parks' appreciates the DEIR's careful consideration of how the Project can best be integrated with the Park for the benefit of residents and visitors of the incorporated and unincorporated areas of the county. The Project offers numerous potential public benefits for public access increasing trails, creating new neighborhood links, expanded and more convenient parking, and new public amenities that support recreation and healthy lifestyles. 1

Our current partnership approach applies lessons learned to avoid procedural issues experienced in previous subdivisions approved adjacent to the park. By completing the environmental process pursuant to California Environmental Quality Act (CEQA) for the public access benefits simultaneously with the residential development, there is strong assurance that the public benefits can be realized no later than the time of residential occupancy. The future conservation easement, which will be required by the Sonoma County Agricultural Preservation and Open Space District as part of their Matching Grant, will be completed once the appropriate environmental compliances have been secured, and thus will eliminate a significant issue that delayed the trail and parking lot on the northeastern side of the park.

Additionally, Kelly Creek Protection Project's commitment to deliver a basic and meaningful initial park development phase on the Scott Ranch, with their funding, ensures a timely implementation of the expanded public parking and trail access. Our understanding is that if the City ultimately approves the Project and environmental documentation, the Kelly Creek Protection Project, working closely with Davidon Homes, Regional Parks, and the City, will at a minimum establish the D Street Parking Area, the Kelly Creek Trail from D

Street to the existing park, a temporary restroom, required frontage improvements, vegetation treatments, and associated mitigations prior to fee-title transfer of parkland to the County of Sonoma.

1

The approved Park plan and completed CEQA will facilitate Regional Park's implementation of the additional park elements proposed in the Park plan that includes additional trails, picnic facilities, and other educational and recreational amenities. Regional Parks has a long history of developing parks in phases by leveraging department funds with public and private sources to complete adopted park plans.

We do request a clarification regarding the proposed playground. Our understanding is that the Scott Ranch has a city General Plan requirement to provide a 3-acre neighborhood park to benefit the new and surrounding neighborhoods. The current Project Description has eliminated the playground north of Windsor Drive and relocated it to the proposed D Street staging area on land proposed to be ultimately owned by Regional Parks within city limits. Would the city park mitigation fees or a different funding source be provided to implement the playground at the D Street staging area?

2

We look forward to working with the City and the Applicant to refine the park development phasing, specific mitigations and conditions of approval pertinent to the Park, and to ensure the necessary coordination in support of the park acquisition and development process.

In closing, Regional Parks is grateful for the collaboration with the City, the Applicant, and other stakeholders to extend Helen Putnam Regional Park to benefit both incorporated and unincorporated residents and visitors. We look forward to continuing to work with City staff to clarify any alternatives as it relates to the Park for the City Council and Planning Commission's consideration.

Respectfully,

Bert Whitaker
Director

cc. 2nd District Supervisor Rabbitt
Steve Ehret, Regional Parks, Planning Manager
Steven Abbs, Davidon Homes
Greg Colvin, Kelly Creek Protection Project

RESPONSES TO A-SCRP LETTER

Response A-SCRP-1: Comment noted. Please see **Master Response 16 – Park Extension Project Construction Schedule** for more details related to implementation of the proposed project.

Response A-SCRP-2: As the commentor notes, the General Plan identifies a future 3-acre passive park at the project site. More specifically, proposed park-7 (P-7) is shown on Figure 6-1 in the Petaluma General Plan and corresponds to notation that P-7 is to be a 3-acre neighborhood park with passive recreational amenities such as play equipment and picnic tables. As described in **Chapter 3.0, Project Description of the RDEIR**, approximately 44 acres of the project site would be developed as public park with public amenities and preserved open space. This would exceed the General Plan requirement of 3-acre passive park at the project site. Additionally, with the revision to the proposed project, as described in **Chapter 2.0, Revised Project Description**, in this document, the proposed residential footprint has been reduced and the proposed park extension has been increased from approximately 44 acres to 47 acres. The proposed public park would incorporate the acreage and features required by P-7 as well as significantly expand the neighboring Helen Putnam Regional Park. The proposed park would include the barn complex, the upper parking lot spur trail, the loop trail, the playground, and restrooms. Furthermore, an additional 5 acres of the site would be preserved as private open space. See **Master Response 16 – Park Extension Project Construction Schedule** for the funding and implementation of the improvement to the park extension component.

A-SCAGOP

AG + OPEN SPACE
SONOMA COUNTY

MEMORANDUM

Date: February 11, 2021

To: Olivia Ervin

From: Jennifer Kuszmar

c: Tamara Galanter

Subject: **Helen Putnam Extension/Scott Rant Project**

Thank you for the opportunity to review and comment on the DREIR for the Scott Ranch Project (FILE NO. 03-TSM-0396-CR). Ag & Open Space has been working with the Earth Island Institute through the Matching Grant Program to protect Kelly Creek and expand Helen Putnam Regional Park. The DREIR touches on this, but I wanted to confirm and clarify our agreement with Earth Island Institute as it relates to the Scott Ranch Project.

Page 31, section 3.0 of EIR states:

All or most of the Putnam Park Extension Project component portion of the project site would be protected by one or more conservation easements to ensure it remains protected in perpetuity. Sonoma County, through its Agriculture and Open Space District, would hold one of the conservation easements.

1

Comment:

As part of the acceptance into the Matching Grant Program the entirety of the 44 acres which will comprise the future Helen Putnam expansion will be covered by a conservation easement and an irrevocable recreation covenant which will ensure the property is available to the public in perpetuity

XXXX

RESPONSES TO SCAGOP LETTER

Response A-SCAGOP-1: As noted on **page 3.0-27 of the RDEIR**, the proposed project would result in the transfer of title of approximately 44 acres of the project site to the Sonoma County Regional Parks to be retained for public recreation and as open space and protected habitat, with the expectation that two conservation easements would be established. The open space portion of the project site would be dedicated through a transfer of title to the Sonoma Regional Parks, as noted on **page 3.0-31 of the RDEIR**. Additionally, with the revision to the proposed project, as described in **Chapter 2.0, Revised Project Description**, in this document, the proposed acreage of residential lots and associated streets has been reduced from approximately 11.7 acres to 6.4 acres and the proposed acreage of the Putnam Park Extension Project has increased from approximately 44 to 47 acres. Furthermore, an additional 5 acres of the site would be preserved as private open space. Therefore, the total acreage that would be transferred to the Sonoma Regional Parks through a transfer of title is approximately 47 acres.

C - Barnacle

From: Barnacle, Brian <bbarnacle@cityofpetaluma.org>
Sent: Monday, March 15, 2021 6:23 PM
To: Hines, Heather <hhines@cityofpetaluma.org>
Cc: Flynn, Peggy <PFlynn@cityofpetaluma.org>; Danly, Eric <EDanly@cityofpetaluma.org>
Subject: Scott Ranch Alternatives

Hi Heather,

Based on Eric's recent email, I am sharing these comments about alternatives that I will be requesting are studied as we move from the DEIR to the FEIR. I will say each at the meeting, but wanted to give you the exact text so that you can make sure these are addressed.

Please study a project that:

1. Does not include any fossil gas in the homes or to any onsite amenity 1
2. Eliminates development where units 20-28 are 2
3. Clusters development where units 1-10 and 15-19 are located 3
4. Eliminates single-family uses and replaces with attached townhomes or apartment/condos 4
5. Minimizing the potential for excessive irrigation by eliminating resident-maintained areas 5
6. Maximizes groundwater recharge and catchment of water runoff in the infiltration basin 6
7. Minimizes and/or eliminates the construction of new roads 7
8. Minimizes cut and fill 8
9. Minimizes fragmentation of the wildlife corridor by moving the pedestrian trail closer to the backyards on Oxford Court 9

Best,
Brian

RESPONSES TO COUNCIL MEMBER BARNACLE LETTER

Response C-Barnacle-1: In compliance with the ordinance of an "All-Electric Construction in New Constructed Buildings" adopted by the City on May 3, 2021, to achieve carbon neutrality by the year 2030, the revised proposed project would not include the use of natural gas and nor would it extend natural gas infrastructure. Furthermore, the proposed project would also participate in active solar design by equipping each residence with solar panels consistent with the latest California building codes (See **Chapter 2.0, Revised Project Description**). Additionally, as described in **Section 4.14, Utilities and Service System, of the RDEIR**, the Sonoma Clean Power utilizes the PG&E wiring and infrastructure in the project area to deliver energy from renewable sources.

Response C-Barnacle-2: Since the publication of the RDEIR, the proposed acreage of the residential component has been reduced from approximately 11.7 acres to 6.4 acres (See **Chapter 2.0, Revised Project Description**). Furthermore, an additional 5 acres of the site would be preserved as private open space. Under the revised proposed project, the location of the single-family homes with numbers 20 to 28 as shown on **Figure 3.0-3 in the RDEIR** would not be developed and would remain as open space to be preserved as part of the park extension component. (See **Updated Figure 3.0-3** in **Chapter 2.0, Revised Project Description**).

Response C-Barnacle-3: The revised project's tentative parcel map (see **Chapter 2.0, Revised Project Description**) proposes to accommodate 14 single-family homes (lots 15 to 28) south of Windsor Drive and north of B Street, and 14 single-family homes (lots 1 to 14) north of Windsor Drive and generally south of A Street. Relative to the residential site plan analyzed in the RDEIR, the modified site plan provides for further clustering by reducing the average lot size, decreasing side yards setbacks, and reducing the homes size. Also see **Response C-Barnacle-2.**

Response C-Barnacle-4: See **Master Response 15 – Project Merit and Alternative.**

Response C-Barnacle-5: As noted in the **Response C-Barnacle-2,** since the publication of the RDEIR, the proposed acreage of the residential component has been reduced from approximately 11.7 acres to 6.4 acres **(See Chapter 2.0, Revised Project Description).** Furthermore, an additional 5 acres of the site would be preserved as private open space. Furthermore, the reduction in the residential lot resulted in the reduction of the resident-maintained irrigated landscaping has been further reduced relative to the RDEIR.

Response C-Barnacle-6: As discussed in **Section 4.8, Hydrology and Water Quality,** and **Section 4.14, Utilities and Service Systems**, **of the RDEIR**, the proposed drainage plan would maintain existing drainage patterns at the project site during 100- and 10-year events and discharge into Kelly Creek, and

would be similar to predevelopment conditions with the installation of the proposed infiltration basin south of Windsor Drive on the project site. **Mitigation Measure HYD-1c** would require that the final drainage plan design accommodate flows for a 2-year, 24-hour storm event, consistent with City and regional standards. Final design plans are required to demonstrate that post-project runoff for the 2-year, 24-hour storm event does not exceed pre-project flow for each drainage management area (DMA). The final design plans are also required to demonstrate that each Drainage Management Area has appropriate stormwater quality treatment based on flow- or volumetric-based calculation, as outlined in the Small MS4 General Permit and in compliance with the 2019 guidance document of the Bay Area Stormwater Management Agencies Association. In addition, the proposed retention basin that would be installed south of Windsor Drive would improve existing conditions by collecting and treating runoff from Windsor Drive. As shown in **Chapter 2.0, Revised Project Description**, the residential component has been revised after the publication of the RDEIR to maintain the area south of B Street undeveloped.

Response C-Barnacle-7: As shown on **Updated Figure 3.0-3** in **Chapter 2.0, Revised Project Description,** of this document, reduction to the footprints of the residential component has also resulted in the reduction of proposed new roads at the project site.

Response C-Barnacle-8: As shown on **Updated Figure 3.0-17,** in **Chapter 2.0, Revised Project Description,** of this document, with the reduced footprint of the residential component, and revised grading plan, the proposed project grading and associated cut and fill would be reduced relative to what was analyzed in the RDEIR.

The RDEIR analyzed grading activities involving 112,000 cubic yards of cut and 112,000 cubic yards of fill. As described in **Chapter 2.0, Revised Project Description**, grading associated with the residential project has been further refined to minimize grading and balance cut and fill onsite. Under the revised project, approximately 78,000 cubic yards (cy) would be cut during grading and 83,000 cy of fill would be required. The remaining approximately 6,000 cy of fill material needed to achieve balance would come from construction spoils. Construction spoils would result from smaller excavations for roadway structures, building pads, utility trenches, retaining walls, subdrains and storm water quality basins.

Response C-Barnacle-9: The concerns of the commentor over the location of wildlife corridors in relation to the proposed development and Oxford Court are noted. A detailed discussion of the potential impacts of project implementation on wildlife movement opportunities is provided under **Impact BIO-4** on **pages 4.3-57** through **4.3-59 of the RDEIR**. The revisions to Davidon (28-lot) Residential Project component made after the publication of the RDEIR and presented in **Chapter 2.0, Revised Project Description**, would place new residences further away from Kelly Creek and increase the width of the "wildlife corridor" between the existing residences along Oxford Court and the closest new residence of the

proposed project. In addition, these revisions would provide a larger setback for fences from the existing Oxford Court development and the closest new residences. However, this area is bordered by existing residences to the west and northwest, which limits the likelihood that it serves an important function for wildlife movement, or that wildlife utilizing the area wouldn't already be acclimated to moving through developed areas. Most wildlife movement at the project site would continue to occur between the portion of the site to be retained as open space and Helen Putnam Regional Park to the west. Also, see **Response C-Fischer-40.**

Page/Section	Error	
Typo's etc.		
3.0-20	Typo in first line of second paragraph	
4.8-20	Second line missing the word side between either and of	
4.9-2	First paragraph references 3.0-4 – should be 3.0-8 with the appropriate title	
4.13-64	Reference to Mitigation Measure TRANS-6 (not in document)	
4.13-69	Reference to Mitigation Measure TRANS-7 (not in document)	1
4.14-3	Extra period before last sentence.	
4.14-22	Double period in third paragraph	
/4.4.3.3	What is meaning of * after All requests under number 1.?	
6.0-5	Last line should read, (t)he project site	
4.0-6	Last line in status column, be should read by	
4.14-20, 4.15-30 & 31	Reference to Section 4.7, Hydrology and Water Quality should reference Section 4.8	
4.4-5	First mention of CA-SON-1082 with no explanation of the reference	
3.0-28		
4.14-13	City of Petaluma Ordinance 2562 effective February 4, 1026.	
4.10-17	Need a space between residences and adjacent	
Inconsistencies		
4.14-6 & 4.8.2.1	Average rainfall is 25"	2
4.15.2	Average rainfall is 30"	
Throughout	Population is 60,000 to 62,247	3
3.0-32 & 4.13-72	Parking at the residential homes would include a two-car garage	4
3.0-12	Plans show a three-car garage	
3.0-36	Construction of Park component results in removal of 11 trees	5
3.0-52	Mature trees would not be removed as part of trail construction	
5.0-16	Alternative would remove only 18 trees – not 30	
3.0-19	All roofs would be made of concrete tile	6
4.7-31	Residences would be equipped with solar panels	
4.7-30	Design features include south facing balconies	7
Plans	Homes are oriented in all directions	
Table 4.0-1	Both tables entitled Approved and Pending Pipeline Projects	8
Table 4.11-7	Yet they are different. Table 4.0-1 includes numerous addt'l sites	
Table 4.10-9	Data in table not found in Appendix 4.10	9
Clarifications		
4.12-14	"The project would include 3 acres of common open space within the residential project". There is no mention of this elsewhere in the document and no indication on any plans as to the location.	10

4.13-65	Trail project would only allow for pedestrian access. What about other modalities like bicycles and equestrians?	11
Transportation	Reference is made to a new roundabout at D Street and Windsor Dr. yet there is no mitigation measure for said roundabout.	12
4.14-7	Please clarify last paragraph	13
4.14-20	"no off-site storm water drainage improvements would be required" All of the proposed infiltration basins are designed to be off-site or not on the residential site.	14
4.14-16	Utility plan does not show hookups for future park facilities. Reference is made to two Green flush restrooms and only one is shown on the park site plan.	15
4.5-9 & 10	Table shows the use of a crane for 52 days during Phase 1 of the park improvements and 102 days during Phase 2. Please clarify.	16
4.13-6	A 72-hour count was done in 2019 of traffic on D Street between El Rose and Windsor. Please include a chart of that data.	17
3.0-52 & 4.9-12	Reference is made to the development of vegetable gardens and vegetable box installation. They are not on the site plan or referenced in the phasing of the park improvements.	18
Outdated		19
Table 4.0-1	Approved and pending projects data from 2019	
/4.7.3.1	IPCC has issued a Sixth Assessment	20
/4.7.3.1	The US has reentered the Paris Climate Accord	21
4.11-2	Population data is in 2018	22
4.12-7	Data for Helen Putnam Regional Park is from 2016-17. In a public comment letter from Carol Eber, visitors to the park have increased significantly in 2019-20. Please provide and use updated visitor counts in analysis.	23
4.5-4	Reference is made to AB32 and SB32 as anticipated though they were both adopted in 2006.	24
4.5-16	Project will be operational in 2022. With a 30 month construction window, this is not true.	25
Inadequate analysis comments		
Geology and Soils	Does not include an analysis of the impact of the improvements to be constructed on the expanded park site of 44 acres	26
Hydrology and Water Quality	Does not include an analysis of the impact of the improvements to be constructed on the expanded park site of 44 acres	27
	What is the impact to Kelly Creek due to the construction and use of the loop trail at the top of the bank?	28
4.7-19	Show how the project is in compliance with GP Policy 4-P-15 D regarding passive solar design	29

Figure 3.0-8	Is entitled Land Use Designations. A separate Zoning Map is needed as referenced on page 4.9-2	30
4.14-11	No mention is made of SB1383	31
4.14-22	This section is in conflict with the assertions that the project will be net zero energy. There is no data in regard to the output of energy expected from the proposed solar arrays on the residential project. Further, it states that the energy for the future residents would be through one of the Sonoma Clean Power programs. There is no mention other than in the title of this section, to natural gas.	32
General Plan	What is the impact of not meeting the requirements of dedicating the 300' wide Urban Separator to the City with funding for its upkeep?	33
General Plan Amendment	Please provide an analysis of the impacts that the request to setback residential project 100' from the centerline vs the bank or edge of Kelly Creek.	34
Greenhouse Gas Emissions	Please add to page 4.9-8 the recently adopted Climate Framework Action Plan and how this project will help us get to our goal of carbon neutrality by 2030.	35
	What is the impact of having 44 acres within the jurisdiction of the City owned by a County entity?	36
Land Use Planning	Page 4.9-8. Please supply adequate evidence that the proposed grading of 112,000 cu yds of cut and 112,000 cu yds of fill will follow the contours of the project site per the Hillside Protection section of our IZO.	37
Zone Change	Please provide justification and impact of the requested zone change from R-1 to the proposed PUD in regard to decreased lot size, reduced setbacks, and reduced lot widths.	38
Aesthetics	Please correct to view lines in Figures 4.1-6 &7 and 4.1-12 & 13 so that they are consistent.	39
Biological Resources	There are conflicting mitigation measures in regard to the fencing between Helen Putnam Park and the project site. See BIO-2e and BIO-4d.	40
4.3-58	"The potential impacts of the project on wildlife movement would be potentially significant" Due to the narrow 5' width of the proposed wildlife corridors, please provide an analysis of the width needed to reduce these impacts.	

RESPONSES TO COUNCIL MEMBER FISCHER LETTER

Response C-Fischer-1: Comment noted. Please see the respective revisions to the RDEIR that correct typos and formatting presented in **Chapter 5.0, Revisions to the RDEIR,** of this document.

Response C-Fischer-2: Data used in the RDEIR reflect average rainfall during two different years (2018: 25 inches and 2019: 30 inches). Fire Station 3 Weather station from 1893 through 2016 identified an average of 24.89 inches per year, highest annual was 31.48 inches 1998 and lowest was 8.98 inches 1976. The RDEIR text has been revised based on the City's published 2020 UWMP, which identifies the average annual rainfall as 26 inches per year. Updates to the rainfall conditions do not change the analysis or findings of the RDEIR.

Response C-Fischer-3: The RDEIR states the number of residents in Petaluma in 2019—the year the RDEIR preparation began. This number is 62,247 as provided by the Department of Finance, which is cited in **Section 4.11, Population and Housing, page 4.11-1**. The full reference is stated on **page 4.11-8 of the RDEIR**. The reference to 60,000 people in **Section 4.12, Public Services**, describes the approximate number of residents served by the City of Petaluma Police Department as presented on the department's website at the time the RDEIR was being prepared. Citation of the Police Department's website information is provided in the **RDEIR on page 4.12-3** and the full reference is stated on **page 4.12-21**. No updates to the population figures are warranted.

Response C-Fischer-4: As the commentor notes, the project originally proposed three-car garages for each residence. As shown in the updated design plans, the proposed project would include two-car garages for each residence. This revision to the project relative to the RDEIR is described in **Chapter 2.0, Revised Project Description** of this document (see **Updated Figures 3.0-11, 3.012,** and **3.0-13**).

Response C-Fischer-5: Section 3.3.5, Trees and Landscaping, in the RDEIR, describes the number of trees that would be removed as part of the park extension component. As shown on **Figure 4.3-3, Trees Locations and Proposed Removals, of the RDEIR**, a total of 11 trees would be removed to accommodate the improvements for the Putnam Park Extension Project component, including the trail through the barn center, the footbridge over Kelly Creek, and the Class I trail adjacent to D Street. The residential component, as revised after the publication of the RDEIR, would result in the removal of 16 trees (see **Chapter 2.0, Revised Project Description**). This would account to for a total of 27 trees that would be potentially removed at the project site to accommodate the proposed project. In addition, there may be up to three trees that would require trimming or removal for the D Street off-site sidewalk improvement. The RDEIR states that approximately 30 trees would be removed and notes in the footnotes of **pages 3.0-36** and **4.3-48** that the 30 trees assumed to be removed account for up to three trees that may require

trimming or removal for the D Street off-site sidewalk improvement. The RDEIR has been revised to clarify that the residential component would result in the removal of a total of 16 trees (see **Chapter 2.0, Revised Project Description,** and **Chapter 5.0, Revisions to the RDEIR**). As noted on **page 3.0-52, Section 3.6.2, Putnam Park Extension Project Component of the RDEIR**, mature trees would not be removed as part of loop trail construction with the exception of the eucalyptus tree. As noted in the tree removal memorandum included in **Appendix 4.3, Biological Resources,** of the RDEIR, this eucalyptus tree would be in the way of the new pedestrian bridge.

Section 5.0, Alternatives, of the RDEIR, presents an impact analysis to the proposed project's alternatives. In addition to the No Project Alternative (Alternative 1), alternatives analyzed in detail are the residential component alternative (Alternative 2) and the park extension alternative (Alternative 3). Under the residential component alternative, the park extension component would not be developed and therefore, the 11 trees that would be removed under that component, would not be removed under Alternative 2. As documented in the tree removal memorandum (**Appendix 4.3, Biological Resources,** of the RDEIR), the residential component (Alternative 2) would remove 16 trees. In addition, there may be up to three trees that would require trimming or removal for the D Street off-site sidewalk gap closure improvement. As such, the residential component (alternative 2) would result in the removal of approximately 19 trees. The RDEIR has been revised in **Section 5.0, Alternatives, on page 5.0-16** to indicate that 19 trees would be removed under this alternative. This edit does not change the analysis or the conclusion made in the RDEIR.

Response C-Fischer-6: Solar panels would be installed either on hooks or using composite shingle. Hooks would be installed under the concrete tiles. Composite shingle would replace the concrete tiles during installation and would not be visible. However, all remaining visible portions of the residences roof would be required to have similar concrete tiles. **Section 3.5.1, Davidon (28-Lot) Residential Project Component, of the RDEIR** has been revised to reflect this change (see **Chapter 2.0, Revised Project Description**). This edit does not change the analysis or conclusion made in the RDEIR.

Response C-Fischer-7: In addition to providing south facing balconies where feasible, the revised residential development is designed to avoid critical habitat, minimize disturbance to sensitive habitat, avoid constructing new homes on prominent ridgelines, and minimize grading and earthwork.

Response C-Fischer-8: As noted in the comment, **Table 4.0-1, Approved and Pending Projects and Table 4.11-7, Approved and Pending Pipeline Projects**, are not similar. **Table 4.0-1** lists the cumulative projects considered in the analysis for each of the resource topics. These projects are reasonably foreseeable future projects that include projects that are approved and under construction, approved but not built projects, and projects for which applications have been submitted but have not yet been approved.

Table 4.11-7, presents approved or pending, but not yet constructed or occupied, developments in the defined study area for the transportation analysis. These projects were considered in the transportation analysis under scenarios 3 and 4. Cumulative analysis in **Section 4.13, Transportation** was addressed under Scenarios 5 and 6. It is based on the buildout of the City under the 2025 General Plan, which at the time of preparation of the City of Petaluma 2025 General Plan was predicted to occur by 2025.

Response C-Fischer-9: An old version of the Appendix was inadvertently included with the RDEIR. The correct, revised Appendix (**Appendix RTC-C, Noise**) is included with this document. In addition, the RDEIR text has been revised accordingly. This edit would not change the analysis or the conclusion made in the RDEIR.

Response C-Fischer-10: Please see **Response A-SCRP-2**.

Response C-Fischer-11: The Regional Park Trail addressed in **Section 4.13, Transportation,** on **page 4.13-65**, and referred to in the comment, would be a multi-use trail, as noted in **Section 3.8, Regional Park Trail Project**. However, the discussion on **page 4.13-65** is in the context of the transportation analysis. The full sentence in this section notes, "the proposed regional park trail project would not construct any parking lots and would only allow for pedestrian access." This is to indicate that vehicle trips generated by the regional park project would be minimal. Pedestrian access in this context refers to all non-vehicular access. For clarification, this statement has been revised in the RDEIR as presented below (also see **Chapter 5.0, Revisions to the RDEIR**).

[…] The proposed regional park trail project would not construct any parking lots and would only allow for ~~pedestrian access~~non-vehicular access, such as pedestrians, cyclists, and equestrians. […]

Response C-Fischer-12: As described in the **RDEIR, Section 3.0, Project Description,** on **page 3.0-19**, the D Street roundabout is proposed as part of the project design. The proposed roundabout would improve traffic operations to acceptable levels under all scenarios at the intersection of D Street and Windsor Drive. The roundabout would allow drivers on Windsor Drive to turn left onto D Street with less delay compared to the existing side-street stop configuration where vehicles must wait extended periods for gaps to traffic. As presented in the detailed calculation work sheets in **Appendix 4.13, Transportation**, **of the RDEIR**, the roundabout would not cause substantial delay for northbound drivers that could result in extensive vehicle queues on D Street, as drivers would experience 17 seconds of delay under the worst-case scenario for cumulative plus project PM peak hour conditions. As traffic operations would be acceptable under all scenarios with the proposed project, the RDEIR appropriately concluded that no mitigation measures are required at the roundabout. Further, as noted by Caltrans, roundabouts have proven safer than traditional intersections and reduce overall collisions, including those with injuries and

fatalities and those involving pedestrians. Please see **Master Response 8 – Traffic Operations** for further details.

Response C-Fischer-13: Commentor is referring to the last sentence under **Section 4.14.2.4, Solid Waste**. This section provides a description of regional waste diversion programs of the Sonoma County Waste Management Agency (SCWMA). As noted in the section, SCWMA has a regional commitment of achieving zero waste by 2030, diverting 90 percent of all material from landfills. Under the new state waste disposal system, the objective is to be below the jurisdiction's 50 percent equivalent per capita disposal target.

The last paragraph in this section presents the latest available information on annual disposal of solid waste within the County. As described in this section, in 2018, the County's disposal rate was 58% of the target, which is not yet below the 50 percent objective. However, the City of Petaluma's overall diversion rate in 2020 was 50 percent.

Response C-Fischer-14: For purposes of CEQA, the "project site" includes the entire Scott Ranch property north and south of Windsor Drive. The location of the infiltration basin is strategically sited and designed to best capture and treat runoff from the proposed residential development and currently untreated runoff from an existing segment of Windsor Drive. As discussed in **Section 4.8, Hydrology and Water Quality**, and **Section 4.14, Utilities and Service Systems**, the proposed design drainage plan would maintain existing drainage patterns at the project site during 100- and 10-year events and discharge into Kelly Creek would be similar to predevelopment conditions with the installation of the proposed infiltration basin south of Windsor Drive on the project site. The RDEIR has identified **Mitigation Measure HYD-1c,** which would require the final design plans to demonstrate compliance with the Small MS4 General Permit and that post-project runoff for a 2-year, 24-hour storm event does not exceed pre-project flow for each drainage management area on the project site. Final design plans are also required to show that each Drainage Management Area has appropriate stormwater quality treatment based on flow- or volumetric-based calculation, as outlined in the Small MS4 General Permit and in compliance with the 2019 guidance document of the Bay Area Stormwater Management Agencies Association.

Response C-Fischer-15: As indicated in the **RDEIR on page 3.0-31**, the proposed project would include a permanent 2-stall restroom. **Updated Figure 3.0-4** included in **Chapter 2.0, Revised Project Description**, of this document, shows the correct number of restrooms. Detailed improvement plans for utility extension and connections as warranted would be developed at the design stage. Existing utilities and infrastructure extend to the project site and would be adequate to serve the proposed park facilities.

Response C-Fischer-16: The information provided in **Table 4.5-1**, **Off-Road Construction Equipment Diesel Fuel Consumption, of the RDEIR** is drawn from the output tables of the California Emissions Estimator Model (CalEEMod) used to estimate the proposed project's air quality and greenhouse gas emissions, and energy usage, included in **Appendix 4.2**, **Air Quality, Health Risk, and Greenhouse Gas Technical Assessments, in the RDEIR**. The average monthly and total consumption of gasoline and diesel fuel during project construction was estimated using the same assumptions and factors from CalEEMod that were used in estimating construction air emissions presented in **the RDEIR, Section 4.2, Air Quality**. Three construction scenarios were modeled: the 28-unit residential component, Putnam Park Extension Phase 1a, and Putnam Park Extension Phase 1b and 2 (shown as Phase 2 and 3 in **Table 4.5-1**). Thus, the difference in days shown in **Table 4.5-1** reflects the estimated number of construction days for each of the different construction phases, using the default equipment lists contained in CalEEMod, which includes the use of a crane.

Response C-Fischer-17: As noted under **Master Response 8 – Traffic Operations,** the 72-hour counts, are part of the project's administrative records and are presented in **Appendix RTC-B, Transportation,** of this document, in response to a commenters request.

Response C-Fischer-18: Figure 3.0-4 of the RDEIR shows the proposed green boxes for the vegetable garden near the agriculture museum. **Updated Figure 3.0-4,** included in **Chapter 2.0, Revised Project Description**, in this document, also shows the green boxes.

Response C-Fischer-19: As described in **Section 4.0, Environmental Impact Analysis, page 4.0-3**, in compliance with section 15130(b) of the *CEQA Guidelines*, analysis of cumulative impacts in the RDEIR uses a combination of two methods. The first method uses a list of past, present, and reasonably anticipated or near-term projects. The RDEIR analysis was prepared in 2019-2020. The cumulative list in **Table 4.0-1, of the RDEIR,** presents the latest projects during that period that were approved and under construction, approved but not built projects, and projects for which applications have been submitted but have not yet been approved. The second method is based on growth projections associated with the buildout of the City under the 2025 General Plan, which captures long-term projected development. Therefore, with the implementation of both methods the cumulative analysis in the RDEIR captures all past, present, and future projects. Also, see **Response C-Fischer-8.**

Response C-Fischer-20: The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change. The Fifth Assessment Report (AR5) was the latest version available at the time of preparing the RDEIR. The AR5 consisted of three Working Group contributions: Working Group I (the physical science basis), Working Group II (impacts, adaptation, and

vulnerability) and Working Group III (mitigation), in addition to a *Synthesis Report*; the combined document was published in 2013.

The Working Group I and Working Group II contributions to the Sixth Assessment Report (AR6), *Climate Change 2021: The Physical Science Basis* and *Impacts, Adaptation and Vulnerability*, were published in August 2021 and February 2022, respectively. Working Group III's report *Mitigation of Climate Change* was published in April 2022, and the full AR6 *Synthesis Report* is due to be published sometime in September 2022.

It should be noted that the IPCC is not a regulatory body, but rather an organization whose mission is to assess information (i.e., scientific literature) regarding human-induced climate change and the impacts of human-induced climate change, to recommend options to policy makers for the adaptation and mitigation of climate change. As the IPCC only makes recommendations to policy makers, it does not make any policies or set any actual thresholds. In addition, the AR6 reports were published well after the release of the RDEIR in December 2020. The RDEIR adequately references and addresses the IPCC reports.

Response C-Fischer-21: The Commenter is correct, in that the United States has rejoined the Paris Climate Agreement. However, at the time of the publication of the RDEIR in December 2020, this was not the case. A brief history of the Paris Climate Agreement, is as follows:

> The United States joined 190 other countries in the Paris Climate Agreement under the Obama administration in September 2016.[1] Under the Trump administration, then President Trump announced his intention to withdraw from the Agreement in June 2017 and formally notified the United Nations in November 2019. However, the Agreement requires a yearlong waiting period before a formal withdrawal will be recognized. As a result, the United States officially withdrew the Agreement in November 2020.[2] However, on January 20, 2021, President Biden accepted and rejoined the Paris Climate Agreement and the United States formally rejoined on February 19, 2021.[3,4]

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1 The White House. *President Obama: The United States Formally Entered the Paris Agreement*. Available online at: https://obamawhitehouse.archives.gov/blog/2016/09/03/president-obama-united-states-formally-enters-paris-agreement.

2 NPR. *U.S. Officially Leaving Paris Climate Agreement*. Available online at: https://www.npr.org/2020/11/03/930312701/u-s-officially-leaving-paris-climate-agreement.

3 The White House. 2021. *Paris Climate Agreement*. Available online at: https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/.

Response C-Fischer-22: Section 4.11-2 of the RDEIR presents a description of the population growth patterns between 2000 and 2019. The discussion notes that population growth slightly decreased in 2019 following a growth of 7.2 percent between 2010 and 2018.

Response C-Fischer-23: Although the number of visitors in the RDEIR dates back to 2016-2017, local park visitor data is difficult to track year-to-year.[5] The increase in number of visitors is within the Regional Parks' goals, which call for the expansion of the number of visitors to Sonoma County Regional Park and Open Space Preserves.[6]

Response C-Fischer-24: AB 32 was adopted in 2006 and SB 32 was adopted in 2016. The text in the **Section 4.5, Energy**, is stating that in order to meet the GHG reduction targets set in those bills it is anticipated that reductions in the GHG emissions from the energy sector will be required. This text refers to **Section 4.7, Greenhouse Gas Emissions,** for more information of AB 32 and SB 32 which clarifies that these laws are in effect.

Response C-Fischer-25: Modeling operation to occur in an earlier year than planned will result in higher emissions because cars tend to become more efficient through time with stricter vehicle standards and fleet turnover. Therefore, a later operational period beyond 2022 would result in less mobile-source emissions. As such, the air emission analysis in the RDEIR presents a conservative approach. With respect to construction, the analysis assumes that the residential component would take place over a nine-month period and construction of the park elements would take over 21 months. Emissions were modeled assuming Phase 1 of the park extension component would occur during construction of the residential component then immediately after, and also as a conservative approach, Phase 2 and Phase 3 of the park extension component were to be constructed simultaneously. Therefore, quantified project air emissions presented in the RDEIR reflect a conservative scenario and construction activities initiating after 2022 would not change the conclusions presented in the RDEIR.

Response C-Fischer-26: Section 4.6, Geology and Soils, of the RDEIR, adequately characterizes the geological and soil conditions on the entire project site. The analysis focuses on the residential component in some discussions depending on the particular impact to geology and soils associated with construction activities of this component. Also, as appropriate, the analysis focuses on the park extension component, such as erosion impact associated with stormwater runoff from the proposed trails along Kelly Creek

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4 The White House. 2021. *The United States Formally Rejoins Paris Agreement*. Available online at: https://www.state.gov/the-united-states-officially-rejoins-the-paris-agreement/.

5 Sonoma County Regional Parks. 2015. Integrated Parks Plans. Draft Plan. December 2015.

6 Sonoma County Regional Parks. 2015. Integrated Parks Plans. Draft Plan. December 2015.

(**See Section 4.6, Geology and Soils, page 4.6-18**). Additionally, mitigation measures, identified to ensure impacts to geology and soils would be below significance, are identified for the proposed project that includes both project components.

Response C-Fischer-27: Section 4.8, Hydrology and Water Quality, of the RDEIR characterizes the hydrology and water quality conditions on all the project site. Project impacts are described for all the project activities. All identified regulations and policies would require compliance of both project components that make up the proposed project. Also, identified mitigation measures to reduce potential impact to hydrology and water quality would apply to both project components. As relevant to each impact, specific project activities for each project component are called out and assessed. For specific reference to impacts associated with the park extension components, see **page 4.8-16 of the RDEIR** for a description of discharge of stormwater impact associated with the barn complex restoration, the multi-use loop trails, and associated improvements. See **page 4.8-20 of the RDEIR** for a description of discharge of stormwater associated with operations of the multi-use trail network. See **page 4.8-23 of the RDEIR** for a description of impact to groundwater supplies associated with the preservation of the major portion of the project site as an open space. See **page 4.8-24 of the RDEIR** for a description of impact to river or stream alteration associated with the proposed fencing from livestock as well as the construction of stormwater outfalls. See **page 4.8-28 of the RDEIR** for a description of runoff and on-site detention capacity associated with the Putnam Park Extension Project component.

Response C-Fischer-28: Impact to water quality and stormwater discharge into Kelly Creek related to the construction of the loop trails is analyzed on **page 4.8-15** through **4.8-16 of the RDEIR.**

Response C-Fischer-29: Passive solar buildings rely primarily on the sun rays to heat indoor spaces, without requiring any mechanical devices or fuel sources. As discussed in **Section 4.7, Greenhouse Gas Emissions,** on **page 4.7-30 of the RDEIR,** the proposed project would comply with the new energy efficiency requirement of Title 24. Project design features would include south facing balconies to capture sunlight during winter, while reducing solar heat gain up to 65 percent during the summer months by providing awning and shading over the windows (see: https://www.energy.gov/energysaver/energy-efficient-window-attachments). The project's windows and doors would be dual-glazed energy efficient with a U-factor and solar heat gain efficient and light-colored roofing materials to reflect heat. A U-factor refers to the rate at which a window or door can conduct non-solar heat, lower U-factor windows and doors are more energy efficient. Solar heat gain coefficient is the fraction of solar heat admitted through a window or a door, a solar gain efficient would mean the product will be more efficient at increasing solar heat during winter (see: https://www.energy.gov/energysaver/energy-performance-ratings-windows-doors-and-skylights). The proposed project would also participate in active solar design by equipping each residence with solar panels consistent with the latest California building codes.

Response C-Fischer-30: The zoning district as well as land use classification is depicted on **Figure 3.0-8** in **Section 3.0, Project Description, of the RDEIR**. **Section 4.9.2.3, Existing Land Use Designation and Zoning,** has been revised to add a reference to this figure.

Response C-Fischer-31: Commentor refers to the need of citing Senate Bill 1383 – *Short-Lived Climate Pollutants: Methane Emissions: Dairy and Livestock: Organic Waste: Landfills*, under applicable regulations related to solid waste. In the context of reducing emissions of short-lived climate pollutants, this bill requires the California Department of Resources Recycling and Recovery that is in charge of the administration of the California Integrated Waste Management Act of 1989, to adopt regulations that achieve the specified targets for reducing organic waste in landfills.

The RDEIR adequately frames the applicable regulations for analysis impacts related to solid waste by the California Integrated Waste Management Act of 1989 and the City's regulations applicable to solid waste management. The analysis also considers the regional commitment of the Sonoma County Waste Management Agency of achieving zero waste by 2030 and diverting 90 percent of all material from landfills.

Response C-Fischer-32: Energy demand of the proposed project presented in **Section 4.14, Utilities and Service System,** is a conservative estimate that does include the project's generation of solar energy. With respect to the Sonoma Clean Power, the analysis adequately describes that it utilizes the PG&E wiring and infrastructure in the project area to deliver energy from renewable sources. With respect to the use of natural gas, the analysis quantifies the amount of natural gas that would be needed by the proposed project. However, since the publication of the RDEIR, the project description has been revised. In compliance with the ordinance of an "All-Electric Construction in New Constructed Buildings" adopted by the City on May 3rd, 2021, to achieve carbon neutrality by the year 2030, the proposed project would not include natural gas and would not involve the extension of natural gas infrastructure.

Response C-Fischer-33: As discussed in the **RDEIR in Section 4.9, Land Use and Planning,** on **page 4.9-9,** the proposed project would maintain and permanently protect the Urban Separator along the southern boundary of the project site by preserving this area and preserving adjacent lands as open space. As described in **Master Response 16 – Park Extension Project Construction Schedule**, upon completion of the initial Phase 1 improvements, KCPP will donate the 47-acre parkland portion of the project site to Regional Parks. The transfer would be bound by an agreement between KCPP and Regional Parks. The agreement would outline the protection of all the 47-acre parkland, expected to be established through two conservation easements to ensure it remains protected in perpetuity. In addition, open space protection is within the mission of Regional Parks, which requires the protection and restoration of natural resources and the enhancement of the quality of life and wellbeing of Sonoma County residents

and visitors.[7] Ongoing Regional Parks' programs include protection of natural resources to ensure the County parks contribute to the ecological function of natural systems and to enhance awareness about the link between environmental health and personal wellness among parks visitors. The 300-foot urban separator is within the overall 47 acres proposed for protection through both conservation easements and dedication to Sonoma County Regional Parks. Therefore, the proposed project actually would meet and exceeds the intent of the General Plan policy 1-P-20 regarding the 300-foot wide Urban Separator by preserving this land in perpetuity, including ongoing maintenance to be carried out by Regional Parks.

Response C-Fischer-34: The proposed amendments to the General Plan Policy 2-P-68 are intended to provide clarity to the policy guidance. This proposed revision is for consistency with other city policies regarding creek setbacks. As an example, for the Petaluma River, Policy 8-P-30 indicates a 200-foot setback for permitted development. The term "along" currently used in Policy 2-P-68, doesn't specify whether the setback is from the centerline of Kelly Creek or the top of the bank. Because of the narrowness of the creek, the proposed clarification is to define the setback as 100 feet from the centerline of Kelly Creek.

Response C-Fischer-35: See **Master Response 6 – Greenhouse Gas Emission and Climate Action Framework.**

Response C-Fischer-36: Once the transfer of title of the park extension occurs, it would become a county property within the City limit. Once the parkland is transferred to ownership by SCRP, the City will have limited jurisdiction over future park improvements such as trail construction, restroom maintenance, management of the parking area, etc. The conservation easements will be in place prior to the transfer of ownership to SCRP and all future changes undertaken by SCRP will be required to meet the parameters of those easements. Additionally, any future work proposed that is outside of the analysis in the FEIR will be subject to future CEQA review.

The City anticipates executing an agreement with SCRP to memorialize any specific conditions associated with the park development and to ensure that key aspects are memorialized even if they are not constructed until after transfer of ownership.

Response C-Fischer-37: The proposed project would comply with Chapter 16 Hillside Protection Ordinance, which requires that grading follow the natural contours of the project site. In addition, revisions to the project description proposed by the Applicants after the publication of the RDEIR (see **Chapter 2.0, Revised Project Description**) would reduce the footprint of the residential component and

7 Sonoma County Regional Parks. 2015. Integrated Parks Plans. Draft Plan. December 2015.

therefore would reduce the amount of cut and fill. Grading activities for the revised project would be reduced by approximately 25 percent. Additionally, the revised project would avoid the landslides labeled E and F at the project site, and therefore no remedial activities would be required for these landslides.

Response C-Fischer-38: As described in **Section 3.4.2, Zoning Map Amendment, Planning Unit Development (PUD) Plan and Guidelines, of the RDEIR**, the proposed project would rezone the project site from R-1 to PUD to adopt project-specific development standards that accommodate residential development and open space and park land. Consideration of adoption of a PUD is governed by Chapter 19 of the IZO and provides flexibility from base zoning requirements to address site specific conditions. While a residential PUD can provide flexibility development standards for onsite development, a PUD does not modify density requirements. Overall project density is required to be consistent with the density range of the underlying General Plan land use designation.

The Very Low Density Residential land use designation allows for 0.6 to 2.5 units per acre. As such, the project site under land use designation currently provides for a range of 28 to 113 units on the total 45.27-net-acre site.[8] The proposed rezoning to PUD would cluster the single-family homes in two areas on the project site to maximize open space areas and avoid construction of the proposed new homes on prominent ridgelines or near the riparian corridor. In addition, the revised project description, presented in **Chapter 2.0** of this document would further cluster the residential development on an approximately 7-acre portion of the site located in the northwestern corner project site and would preserve approximately 5 acres as a private open space. The remaining portion of the 58.66-acre project site would be designated as a public park with public amenities and preserved open space. Therefore, as proposed, the Scott Ranch project would comply with the General Plan policies and City's regulations.

Response C-Fischer-39: Figures 4.1-6 and **4.1-7** adequately show a view of the project site from the Ridge trail under existing and proposed project conditions, respectively. For clarification the name of **Figure 4.1-6** has been revised to be **"Existing View from Ridge Trail" (**see **Chapter 5.0, Revisions to the RDEIR).** Similarly, **Figures 4.1-12** and **4.1-13** adequately show two views from Pinnacle Heights subdivision under existing and proposed project conditions, respectively. For clarification the name of **Figure 4.1-12** has been revised to be **"Existing View from Pinnacle Heights Subdivision" (**see **Chapter 5.0, Revisions to the RDEIR).**

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8 Because the General Plan's residential density formula excludes "proposed" vehicular rights-of-way from the net acreage calculation, the Project's reductions in proposed street rights-of-way have resulted in an increase in the net acreage calculation. As such, the number of units allowed to be developed on the project site ranges between 28 and 113 dwelling units.

Response C-Fischer-40: With respect to concerns about conflicts between **Mitigation Measures BIO-2e** and **BIO-4d**. **Mitigation Measure BIO-2e** calls for preparation of a Native Grassland Avoidance and Replacement Program and **Mitigation Measure BIO-4d** calls for removal of the existing wire fencing that severely interrupts wildlife movement along the western edge of the site where it borders Helen Putnam Regional Park. Replacement of this existing fencing with wildlife-friendly fencing would still allow for containment of domesticated animals used for grazing as part of vegetation management. However, it would allow non-volant wildlife direct access across upland areas away from the proposed loop trail along Kelly Creek and the proposed residences south of Windsor Drive. **Mitigation Measure BIO-2d** does call for maintenance and strengthening of the existing fencing between the site and Helen Putnam Regional Park to avoid the creation of informal trails through stands of native grasslands. However, this fencing would be removed (as stated in the last sentence of this measure) when the proposed Regional Park Trail project (related project analyzed in the RDEIR) is constructed and replaced with wildlife-friendly fencing as called for in **Mitigation Measure BIO-4d**. Therefore, as concluded in the RDEIR, the potential impacts of the project on wildlife movement would be reduced to a less-than-significant level with the project as designed and through compliance with identified mitigation measures.

The commentor mistakenly assumes that the conclusion of significant impact, under **Impact BIO-4,** was related to the 5-foot wildlife corridors. It is in fact due to the increased activity of human and pets, including bridge crossings, that would disrupt wildlife movement opportunities. **Impact BIO-4** on **pages 4.3-57** through **4.3-59 of the RDEIR** provides an analysis of potential project impact on wildlife use and movement. As noted on **page 4.3-58 of the RDEIR**, visitors and their pets would disrupt wildlife use of the site and proposed residential development in the northwestern portion of the project site would limit opportunities for deer and other terrestrial wildlife through this area. Minimum 5-foot-wide movement corridors are proposed along the west and northern edges of the site. Revisions to the Davidon (28-Lot) Residential Project component provide a larger setback from the existing development along the western and northern sides of the proposed residential area south of Windsor Drive. However, the proximity to the existing residences, the lack of protective cover associated with the grazed grasslands, and the fact that Windsor Drive and the existing neighborhood pocket park are located in this area limit the likelihood that it serves an important function for wildlife movement, or that wildlife utilizing the area wouldn't already be acclimated to moving through developed areas. For these reasons, these proposed narrow 5-foot wildlife corridors were not considered to be major factors contributing to the significant impact on wildlife movement opportunities, and no mitigation calling for wider corridors was recommended in the RDEIR or are considered necessary. Wildlife moving though this portion of the proposed residential development are already acclimated to human activity and will likely continue to use these narrow corridors. The proposed project would preserve the open space area around Kelly Creek, as well as the project site portion to the south and west toward Helen Putnam Regional Park, which would provide

opportunities for wildlife movement. In addition, implementation of **Mitigation Measures BIO-4a** through **BIO-4d**, identified in the RDEIR, would reduce potential impacts on habitat connectivity and wildlife corridors to a less-than-significant level, and no additional mitigation is considered necessary in response to the comment.

ORGANIZATIONS

Responses to Comments

O-350 Petaluma

March 15, 2021

City of Petaluma
Mayor and Members of the City Council
11 English Street
Petaluma, CA 94952

Re: Agenda Item 5A -- Scott's Ranch DEIR

Dear Mayor Barrett and City Council Members,

It is tempting to see this project as an ideal compromise. After all, the developer has agreed to build fewer houses and Helen Putnam Park has the ability to expand, allowing more people the opportunity to appreciate its vast beauty.

This proposal certainly is preferable to previous proposals. But community experts have brought to our attention that there is so much more we need to consider:

- Fire fuel maintenance needed at this urban-wildland interface would have a significant impact on fragile ecosystems. 1
- Grasslands and wetlands are vital habitat as wildlife corridors for many species that are increasingly feeling the squeeze due to human encroachment. 2
- According to researchers at UC Davis, grasslands are now considered a more reliable carbon sink than trees, which are increasingly becoming a source of carbon release due to wildfires. 3
- As you well know, we've far exceeded our targets for luxury housing in Petaluma. Even though it's challenging for developers to make a profit building low-income housing, that's what we so sorely need. 4

Northern California is considered a global biodiversity hotspot. Perhaps it is time to follow the lead of Orange County in Florida, the most populous area in the US to recognize the rights of nature. Is there ANY way we can preserve this piece of land and not build on it? Working to find another solution may take a lot of creativity and courage—but it's something we all need more of as we face the many challenges of climate change and biodiversity loss. 5

Thanks so much for all you do for our City.

Respectfully,

Annie Stuart on behalf of 350 Petaluma

RESPONSES TO O-350PETALUMA LETTER

Response O-350Petaluma-1: The potential direct and indirect effects of implementing the proposed Fuel Management Program identified in the *Fuel Management Plan* prepared for the proposed project were reviewed and considered as part of the biological resources assessment conducted for the proposed project and presented in Se**ction 4.3, Biological Resources, of the RDEIR**. The City's independent consulting biologist reviewed and provided comments on the *Fuel Management Plan* (dated November 2020) and *Revised Fuel Management Plan* (dated September 2021) to ensure no major conflicts would occur with regard to protecting and enhancing sensitive habitat areas to be retained as permanent open space on the site. The Fuel Management Plan is specifically designed to manage and maintain the various ecozones exhibited across the project site. The Plan includes conditions to minimize adverse effects on sensitive habitats, such as the Kelly Creek riparian corridor, native grasslands and the stock pond used for breeding by CRLF. This includes restrictions on treatment of native grasslands and riparian habitat as part of management activities in the Fuel Management Program discussed on **pages 4.3-49 of the RDEIR** and providing necessary worker training regarding the presence of CRLF on the site, as discussed on **page 4.3-39 of the RDEIR**. Therefore, the RDEIR appropriately concludes on **page 4.3-46 of the RDEIR** that fuel maintenance and management activities would not have a significant impact on the sensitive biological resources on the site given the controls that would be implemented as part of the Fuel Management Program.

Response O-350Petaluma-2: Impact BIO-4 on **pages 4.3-57** through **4.3-59 of the RDEIR** provides a discussion of potential impacts on wildlife use and movement. As noted on **page 4.3-58 of the RDEIR**, visitors and their pets would disrupt wildlife use of the site and proposed residential development in the northwestern portion of the project site would limit opportunities for deer and other terrestrial wildlife movement through this area. Collectively, the potential impacts of the project on wildlife movement were determined to be potentially significant and mitigation measures were identified in the RDEIR, including the interpretive program called for in **Mitigation Measure BIO-4a** and referred to in this comment. **Mitigation Measures BIO-4b** through **BIO-4d** require controlling future visitors access into sensitive habitat areas and removing existing impediments to improve wildlife movement opportunities. **Mitigation Measure BIO-1b** also requires that methods be identified and implemented, as part of the Final California Red-Legged Frog Mitigation Plan (Final CRLF Mitigation Plan), to minimize the potential for harassment or take of listed and non-listed species as a result of increased human activity associated with the residential development and open space use of the site. The Final CRLF Mitigation Plan would include an educational program for future residents and visitors, fencing and interpretive signage at access points into natural open space areas, use of sensitive grade changes, culverted undercrossings, and bridged overcrossings in uplands where roadways or trails bisect movement corridors, and possible use

of permanent exclusionary fencing, among other treatments. A majority of the project site would be permanently preserved by the proposed project and would continue to provide habitat for wildlife. Controls provided under **Mitigation Measures BIO-1b, BIO-4a, BIO-4b**, and the Final CRLF Mitigation Plan would require leashing of all pets in open space areas, restrictions on public access, use of exclusionary fencing or other barriers, interpretive signage, and other methods to minimize the potential impacts to listed and non-listed species as a result of increased human activity associated with development and open space use of the site. These measures would serve to mitigate the project's potentially significant impact on wildlife habitat and movement to a less than significant level, as concluded on **page 4.3-59 of the RDEIR**. Therefore, the proposed project would result in the protection of sensitive habitat at the project site from human encroachment.

Response O-350Petaluma-3: As noted in the comment, studies have demonstrated that the potential to sequester carbon by improving grassland practices is substantial – of the same order as that of agricultural and forestry sequestration.[9] **Mitigation Measure BIO-2e** identified in the RDEIR requires the development of a Native Grassland Avoidance and Replacement Program to ensure native grasslands are successfully reestablished, existing and restored grasslands remain viable, and grazing is managed appropriately to maintain and enhance grassland cover. Furthermore, the project would preserve, restore, or enhance the majority of the site as natural habitat, including native grasslands. Therefore, as proposed, the project would preserve and restore native grassland, which would continue to provide existing and enhanced carbon sequestration.

Response O-350Petaluma-4: This comment does not raise issues concerning the adequacy or accuracy of the RDEIR's coverage of environmental impacts under CEQA. The comment may be considered and weighed by city decision-makers as part of their decision to approve, modify, or disapprove the proposed project. This consideration will be carried out independent of the environmental review process. For informational purpose, see **Master Response 15 – Project Merit and Alternative** that examines the potential construction and operation impacts associated with developing the project site with multi-family units as compared to the proposed project.

Response O-350Petaluma-5: This comment does not raise issues concerning the adequacy or accuracy of the RDEIR's coverage of environmental impacts under CEQA. The comment may be considered and weighed by city decision-makers as part of their decision to approve, modify, or disapprove the proposed project. This consideration will be carried out independent of the environmental review process.

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9 Food and Agriculture Organization (FAO), 2010, Challenges and Opportunities for Carbon Sequestration in Grasslands Systems, A technical Report on Grassland Management, and Climate Change Methodology, Volume 9-2010.

O-BARTC

February 18, 2021

City of Petaluma
11 English Street
Petaluma, California 94954
Attention: Olivia Ervin, Environmental Planner

Subject: Bay Area Ridge Trail Council Comment on the Scott Ranch Residential Development Project Draft Environmental Impact Report

Dear Ms. Ervin,

The Bay Area Ridge Trail Council (Council) is writing to support the Draft Environmental Impact Report for the Scott Ranch Residential Development Project (proposed project). The Council envisions a 550-mile continuous, multi-use Ridge Trail network that encircles the San Francisco Bay along its ridgelines. The proposed project would support this vision by constructing a multi-use trail and making it possible to connect Helen Putnam Regional Park to D Street, and eventually to downtown Petaluma.

There are many aspects to the proposed project that the Council believes will promote trail sustainability, safety, and local connectivity. Currently, visitors accessing Helen Putnam Park from the north must park in and walk through a residential neighborhood to reach the entrance. The new parking lots included in the proposed project would create better access for visitors and would relieve the parking impacts on residential streets. The Council is also very supportive of the new roundabout, new multi-use trails and sidewalk improvements included in the proposed project. These improvements would all contribute to a safer and more enjoyable experience for Petaluma residents and others looking to access the park.

1

O-BARTC

Helen Putnam Regional Park is a treasured part of Petaluma, and the proposed project will help ensure that all local residents and beyond can enjoy safe, continuous access to this excellent outdoor recreation space. The Council is excited by the possibility of dedicating part of the trails included in this project as Bay Area Ridge Trail and is supportive of access for all trail users including hikers, bikers, and equestrians. We would like to thank the City of Petaluma for their leadership on this project, as well as the Kelly Creek Protection Project and Petaluma residents for creating a balanced and beneficial project for all.

1

Sincerely,

Janet McBride

Janet McBride
Executive Director

391 Sutter Street, Suite 701 • San Francisco, CA 94108 • (415) 561-2595 • info@ridgetrail.org • RidgeTrail.org

RESPONSES O-BARTC LETTER

Response O-BARTC-1: Comment Noted.

O-NOC

From: Robert Shepard <RLShepard@live.com>
Sent: Tuesday, February 09, 2021 11:53 AM
To: Ellis, Evelyn <eellis@cityofpetaluma.org>
Cc: Robert Shepard <rlshepard@live.com>
Subject: Comments on Scott Ranch RDEIR

D'Lynda Fischer
City Council Liaison
dfischer@cityofpetaluma.org
Sandi Potter
Planning Commissioner/Vehicle Miles Traveled (VMT) Technical Advisory Committee Member
sandi.lee.potter@gmail.com
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Scott Alonso
Planning Commission Vice Chair/Animal Services Advisory Committee Member
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Heidi Bauer
Planning Commission Chair/Groundwater Sustainability Advisory Committee Member
heidibauer2000@gmail.com
Olivia Ervin
Principal Environmental Planner
oervin@cityofpetaluma.org

Residents in the neighboring developments around Helen Putnam Park are increasingly concerned about the number of cars parked in our neighborhoods. Over the past year, the numbers of parked cars has increased significantly. According to the county parks, Helen Putnam Park had approximately 189,000 users in the 2019-2020 season. That equates to about 517 users daily.

Our observation of people using the Park entrance in the Victoria development is about 350+ per day, which means that well over half of the park users enter through the neighborhood as opposed to paying for and parking at the main entrance on Chileno Valley Road. The number of cars parked by the West Haven development has increased significantly as well.

Our understanding from the Sonoma County parks is that any new parking constructed for park use will be subject to the daily parking fee the park charges in all its parks. This will do nothing to mitigate the parking issues in the surrounding neighborhoods. People will continue to park in the neighborhoods surrounding the park, thereby avoiding paying for parking to use this valuable resource.

1

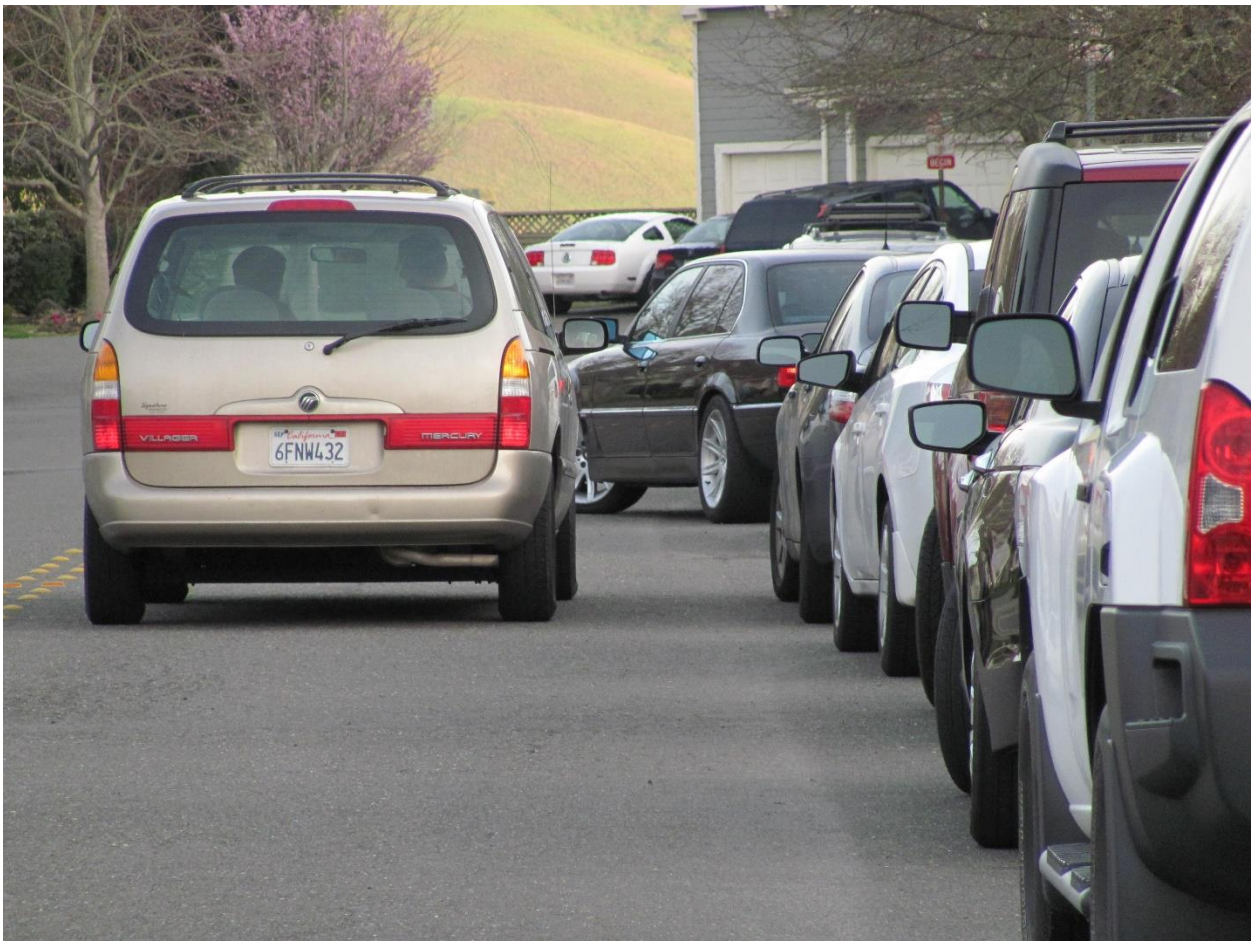
The City and Sonoma County Parks need to address the existing parking problems before any new parking is constructed for park use. Adding new trailheads to the park only exacerbates this problem. This is evidenced by the trailhead opened up last year at the roundabout on Windsor Drive. Parking was not built when the trailhead opened last fall, and a parking lot has yet to be constructed. People park all along Windsor Drive to use that entrance.

From your neighbors on Oxford Court.

Rob and Donna Shepard
Larry and Chey Moore
Jerry and Mary Beene
Susan and Mark Jaderstrom
Bob and Kathleen Billings
Aaron Edmonson and Pat Spitzig
Thom Knudsen
Jeff Marcia
Pam and Jim Granger
Sharon Vallejo

- Attached are a few pictures of vehicular traffic and pedestrians entering the park in the Victoria neighborhood.


HELEN PUTNAM
REGIONAL Parks
SONOMA COUNTY
REGIONAL PARKS


VILLAGER
MERCURY
6FNW432


Helen Putnam's Main Entrance Chileno Valley has very few cars
There is “free parking” on Chileno Valley Road
Oxford Court
Dangerous conditions
No sidewalk on park side.
Blind curve at top of hill
Visitors gather and talk
in the middle of our street
Animals and children
run into the street while drivers
unload their cars
Cars constantly cross
the yellow line to
avoid open car doors
Cigarette Butts thrown on the street and into the grassy field of Helen Putnam Park

RESPONSES TO O-NOC LETTER

Responses to O-NOC-1: See **Master Response 14 – Parking.** The proposed 37 additional parking spaces are designed to provide parking for new users of the park extension, as discussed under **Project Trip Generation** on **page 4.13-27 of the RDEIR,** as well as accommodate some of the existing parking demand that is currently spread on adjacent City streets, (including Oxford Court) or the Chileno Valley parking lot. Furthermore, by providing enhanced connections for people walking and bicycling to and from Helen Putnam Regional Park, as described in **Master Response 12 - Bicycle and Pedestrian Access**, some of the existing visitors who currently drive to the park may shift to walking or bicycling. Sonoma County Regional Parks has also constructed and made available an additional 34 parking spaces (including two ADA spaces) in a new parking lot (West Wind) serving Helen Putnam Regional Park on the south side of Windsor Drive, east of West Haven Way. Given the provision of adequate parking supply to meet expected increases in visitor demand and the potential for existing visitors to shift modes or to use the more convenient parking locations provided by the Putnam Park Extension Project component, it is anticipated that the proposed project would reduce parking demand rather than exacerbate existing parking demands on nearby streets such as Oxford Court.

O-PRP-1

Petalumans for Responsible Planning
69 Oxford Court
Petaluma, CA 94952
Voice 707-762-5166
PetRP@comcast.net www.PetRP.org

January 28, 2021

By e-mail to hhines@cityofpetaluma.org

Ms. Heather Hines, Planning Manager
City of Petaluma Planning Division Office
11 English Street
Petaluma, CA 94952

Re: Scott Ranch Project

Dear Ms. Hines:

On behalf of Petalumans for Responsible Planning, I write to request that, pursuant to CEQA Guideline 15105, the public review period for the Revised Draft Environmental Impact Report (RDEIR), be extended due to the unusual circumstances of inaccurate uploading of electronic documents on the Scott Ranch.

Lorem ipsum

Posted on https://cityofpetaluma.org/scott-ranch/
Disclosure on RDEIR: Please be advised that the RDEIR documents were initially posted to this webpage with erroneous links to the Biological, Cultural and Wildfire Chapters and the Aesthetics Chapter did not contain figures. These errors were corrected on January 7, 2021. Please be advised that if you downloaded these chapters prior to 1.7.21, they should be redownloaded with the corrected chapters below.

1

Granting at least an additional week of review time for this error, consistent with CEQA's purpose, allows maximum participation by the public and allows adequate time for review by responsible agencies including state agencies. The public's ability to adequately respond to the issues raised by this project within a shorter time period has been impaired. In fact, I spent a week trying to figure out the inconsistencies and confusion created by the erroneous links. Moreover, increasing the sixty day review period will not prejudice the project applicants, the City or other public agencies in moving expeditiously to reach an ultimate decision on this proposed project. (See 14 C.C.R. § 15105, Discussion)

Sincerely,
<signed>

Susan Jaderstrom
For the Steering Committee

cc: Rose M. Zoia, Esq.

RESPONSES TO O-PRP-1 LETTER

Response O-PRP-1-1: On December 31, 2020, in accordance with California Public Resources Code Section 21091, the RDEIR for the Scott Ranch Project was published for a 60-day public comment period that extended to March 1, 2021. Upon request from the public, the comment period was extended to March 8, 2021. The City continued to accept public comment through the City Council hearing on the RDEIR conducted on March 15, 2021.

O-PRP-2

Petalumans for Responsible Planning

PetRP@comcast.net
www.PetRP.org

February 9, 2021

Subject: Concerns about the Davidon Scott Ranch RDEIR

Size of and price of houses

https://cityofpetaluma.org/documents/rdeir-3-0-project-description-part-1/

p. 3.0-19. “The residences would range in size between 2,678 sf and 3,523 sf.”

Comment: An approximate price for the houses has not been disclosed. Is a new home with 2,678 - 3,523 square feet overlooking open space affordable housing? 1

https://cityofpetaluma.org/documents/rdeir-4-11-population-and-housing/

p. 4.11-2

Table 4.11-1 City of Petaluma RHNA Allocation – Year 2015 to 2023

Comment: The Regional Housing Needs Allocation (RHNA) is dated (adopted in December 2014). Have Petaluma housing needs have changed since 2014? Is more affordable housing necessary now?

2009 Noise Studies

https://cityofpetaluma.org/documents/rdeir-4-10-noise/

4.10.3.2 Existing Noise Environment, p. 4.10-6

“The primary source of noise at and around the project site is vehicular traffic on D Street.” 2

“Table 4.10-4, 2009 Roadway Noise Levels Off-Site, shows average daily noise levels along five roadway segments of D Street **in 2009** at the time of the preparation of the noise analysis for the residential development previously proposed for the project site.

p. 4-10-7

"As shown in Table 4.10-4, in 2009 ambient noise levels along D Street exceeded 60 dBA CNEL at all five roadway segments (Christopher A. Joseph Associates 2009). Considering that traffic volumes have remained **generally the same or slightly increased between 2009 and 2019**, ambient noise levels at all five roadway segments still exceed 60 dBA CNEL at the present time (Christopher A. Joseph Associates 2009; Fehr and Peers 2019)."

Comment: The statement that noise "slightly increased between 2009 and 2019" is contradictory to the Traffic section, Table 4.13-10

	2017 DEIR (p. 4.12-12) LOS	2020 DEIR (p. 4.13-49) LOS
D Street & Windsor		
AM	13 EB (B)	16 EB (C)
PM	37 EB (E)	>50 EB (F)
D Street & Eighth Street	Not measured	
AM		29 (D)
PM		49 (E)

2

Recommendation: Up-to-date noise studies be conducted so that an accurate dBA can be calculated.

Significant and unavoidable traffic

https://cityofpetaluma.org/documents/rdeir-4-13-transportation/

p 4.13-27

- The 28-unit residential subdivision would generate 322 new daily trips, 25 new AM peak hour trips (6 inbound and 19 outbound), and 30 new PM peak hour trips (19 inbound and 11 outbound).

3

Intersection Operations

p 4.13-70
D Street / Lakeville Street remains an F

p. 4. 13-71
D Street / 8th Street becomes an F

The only improvement (because of traffic circle)
Windsor / D Street goes from an F to a B

3

Comments: The movement of traffic at Windsor/D might improve, but the pavement on D Street toward Marin County is in deplorable condition. Will that repaving be a part of the project?

Windsor has a weight limit of 5 tons. What is the weight limit on D Street? If no weight limit exists, what is future projection of pavement status on D Street from the proposed Helen Putnam Park parking lot on D Street to Lakeville?

RDEIR says the following impacts are significant and unavoidable

4.13-66
"Cumulative Impact TRANS-1: Development of the proposed project and the regional park trail would generate VMT per capita greater than the project threshold under cumulative conditions. **(Significant; Significant and Unavoidable)**."

4

"Mitigation Measure TRANS-1 is set forth above to address this significant impact. **However, with mitigation, this impact would remain significant and unavoidable."**

"Therefore, since this mitigation measure cannot guarantee that the impact of the proposed project on VMT would be reduced to a less-than-significant level, **this cumulative impact would be significant and unavoidable."**

Question: Are these significant and unavoidable traffic impacts an acceptable permanent trade-off for this project?

Unrealistic statements about the amount of traffic generated by the Helen Putnam park extension

https://cityofpetaluma.org/documents/rdeir-4-13-transportation/

p. 4.13-27

5

"As shown in Table 4.13-4, the 44-acre extension of the county park and amenities would generate **one vehicle trip during the AM peak hour and five vehicle trips during the PM peak hour**."

Note about trip generation: “These rates were found to be higher than trip generation rates prepared for the Taylor Mountain Regional Park and Tolay Lake Regional Park Master Plan studies13, which used ITE rates and a survey of Sonoma County Parks.”

Comment: Neither Taylor Mountain Regional Park nor Tolay Lake Regional Park are located adjacent to neighborhoods. Taylor Mountain Regional Park is being expanded but had not expanded before this RDEIR was written. *Press Democrat*, March 30, 2020: https://www.pressdemocrat.com/article/news/addition-to-taylor-mountain-park-in-santa-rosa-secures-key-link-in-open-spa/ 5

p. 4.13-65

“As presented in Section 4.13.4.2, Project Trip Generation, the Putnam Park Extension Project component would generate additional visitors (**approximately new 40 daily trips and five new PM peak hour trips**) and potentially change existing visitor travel patterns.”

p. 4.13-72

“Based on the trip generation analysis and regional park comparison presented in Section 4.13.4.2, approximately **30-40 vehicle trips per weekday, or five during the PM peak period**, would be forecasted to use the proposed parking lots in addition to people who shift to these parking lots from parking lots elsewhere to access the park.” 6

Table 4.13-4 on p. 4.13-27 indicates 34 daily trips.

Comment: For the average nontechnical reader of this RDEIR, these differing numbers are confusing. Credibility is stretched to believe that only one car will arrive in peak AM hours and only 5 cars in the peak PM hours.

The numbers seem inaccurate and very low.

Parking on Windsor Drive any time between sunrise and sunset far exceeds 34 daily car trips. Residents estimate that approximately 300+ per day enter the park entrance from Victoria (this figure includes runners and bicyclists who do not drive cars or park on Windsor).

Parking in existing neighborhoods for Helen Putnam Park

https://cityofpetaluma.org/documents/rdeir-4-13-transportation/

Comments:

According to Sonoma County Parks, Helen Putnam Park had approximately **189,000** visitors in the 2019-2020 Season.

Throughout the RDEIR, the parking problems in the neighborhoods surrounding Helen Putnam Park are mentioned as existing parking for the park (p. 4.13-5, 4.13-26, 4.13-28, 4.13-65, 4.13-66, 4.13-72).

Residents in the Victoria neighborhood and West Haven neighborhoods are dealing with Helen Putnam Park parkers. For the West Haven neighborhood, the parking issues are relatively new because the park opened a trail by the traffic circle without building a parking lot.

For Victoria, this parking problem has been an ongoing issue for over a decade but has become markedly worse during the pandemic. Helen Putnam Park is not responsible for park visitors parking on city streets. Meetings have been held with city officials over the years. However, the conclusion has always been that these are city streets.

p. 4.13-72

The RDEIR states: “The proposed parking areas would serve as a secondary access point to the park and absorb **some of the parking demand** that currently parallel parks on Oxford Court and on Windsor Drive west of Oxford Court.”

7

Comments**:** Absorbing some of the parking demand while increasing park visitors is not a reassuring statement to the Victoria neighborhood.

The unknown factor is whether park visitors are parking on Windsor Drive because this location is closer to Petaluma or whether free parking is important. If, indeed, free parking is the determining parking factor, the new nearby parking lots that charge a fee will be avoided.

The park knows about the parking problems; the city knows about the parking problems; the residents of Victoria know about the parking problems; and any runner, bicyclist, or motorist driving down Windsor know about the parking problem.

“Perhaps” the parking problem will be solved is not a good enough solution for residents who live in the middle of a parking lot.

What about the new proposed neighborhood?

> 3.0 Project Description, p. 3.0-32
>
> “In addition, the new public roads would have parking lanes on both sides that would provide on street parking for the neighborhood.”

Comments:

If this historical well-known and recognized parking problem is not addressed, the parking problems will become the problem of the Scott Ranch neighborhood. Will the new neighborhood have park visitors not parking in parking lots but parking in the neighborhood?

Pinnacle Heights is directly across from the proposed park. Will that neighborhood see the same problems that Victoria lives with on a daily basis? 7

The city must address the existing Helen Putnam Park parking problems before approving an extension that will increase park visitors.

Biological resources

https://cityofpetaluma.org/documents/rdeir-4-3-biological-resources/

p. 4.3-2

The RDEIR states: "However, the findings of these studies that include information on biological and wetland conditions associated with the project site are still relevant for this analysis."

"Biological Resources, Existing Conditions by Zander Associates (2003). This letter report summarizes biological and wetland resources on the site, including plant communities and wildlife habitats, special-status species, and wetlands. This includes the results of detailed surveys for special-status plant species conducted on March 12 and April 18, 2003 by Kelley Associates, protocol surveys for California red-legged frog conducted on May 30 and June 2, 2003 by Wildlife Research Associates, and the findings of a preliminary wetland delineation." 8

p. 4.3-3

"California Red-legged Frog Protocol Surveys by Wildlife Research Associates (2003)"

p. 4.3-5

"Updated Biological Assessment by Zentner Planning & Ecology (2018). This report provides an updated biological assessment of the potential impacts of the Davidon (28-lot) Residential Project component of the Scott Ranch project, and compares the significance levels to previous residential development plans."

https://cityofpetaluma.org/documents/rdeir-appendix-4-3-biological-resources/

Comments:

The public is interested in the 2018 updated biological assessment in the residential component of Scott Ranch. In searching the Biological Resources Appendix section, no letter report prepared for Steve Abbs on the Updated Biological Assessment was included.

If updated biological assessments on the 28 homes have been completed, should the public have an opportunity to review those assessments?

During the 2017 DEIR hearing, the following people mentioned the dated red-legged frog habitat studies.

Tamara Galanter, attorney from Shute, Mihaly & Weinberger

“The DEIR cannot rely on surveys conducted over a decade ago to make assumptions about incidence of CRLF in the Project area. The USFWS Protocol Guidelines for conducting CRLF habitat assessments and surveys specify that survey data is valid for only two years and it is collected, making the 2005 data woefully out of date.” 8

Attorney Brian Gaffney

“Neither the 2017 EIR geology section nor the biological resources section considers the impact of the proposed excavation mitigations on biological resources include inter alia, California red legged frog, wetlands and streets.”

Dr. Shawn Smallwood, a biologist hired by PetRP in 2013

"the fact that the CRLF species occurs on the site suggests that it is successfully breeding." Therefore, the EIR conclusion that "no loss of breeding habitat for CRLF would occur as a result of project implementation" is not supported by substantial evidence."

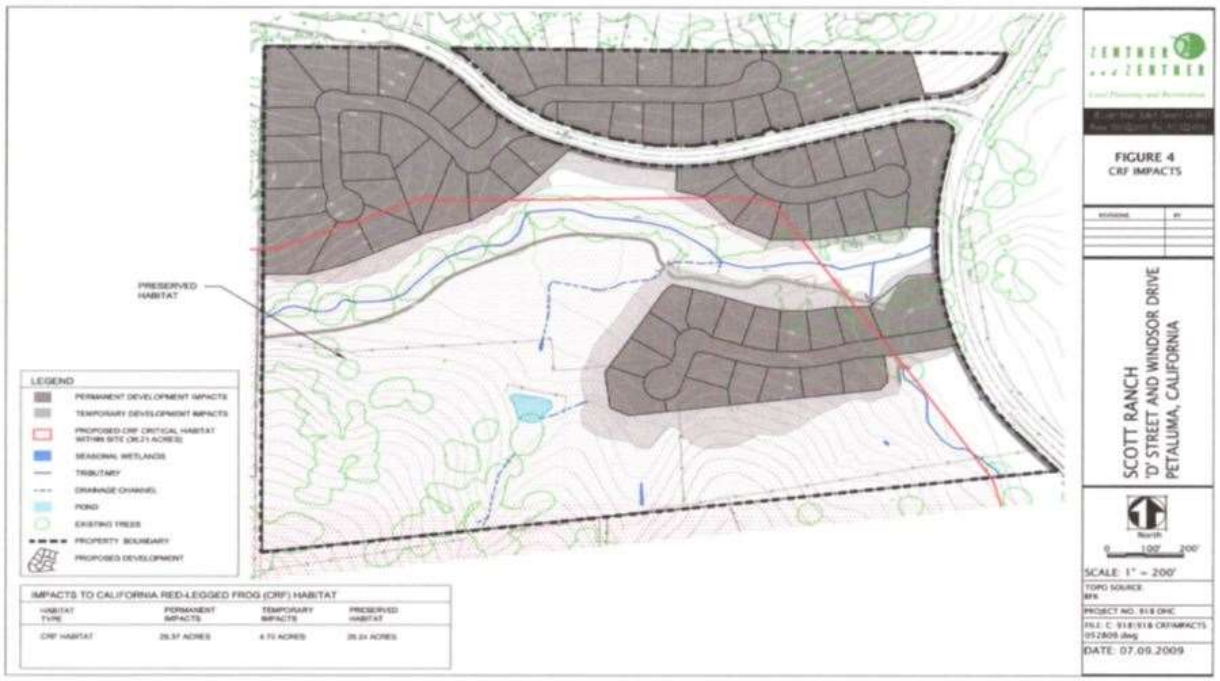
In 2013, the CA Dept of Fish & Wildlife (CDFW) stated that the studies should be done again.

Concept Design

https://cityofpetaluma.org/documents/concept-design/ 9

In the 2017 Concept Design map, the red line indicated the red legged frog habitat.

Davidon: 66 homes
(protected critical frog habitat below red line)



In the current Concept Design map, a red dotted line is still showing but with no indication that it is a red legged frog habitat.

Questions: What is the red dotted line on the Concept Map? Does it still indicate the red-legged frog habitat? If it does, are proposed houses 20, 21, 22, and 28 in the habitat?

p. 4.3-40

Discusses permanent habitat impacts (habitat lost as a result of development).

Questions: Why not do a current study to determine whether the red-legged frogs are located on the 28-home part of the project? Why not design the development that does not affect endangered species?

Is it preferable to build over the habitat and find “A minimum of 6.1 acres, at a yet to be identified off-site location, would be required to meet the standard mitigation ratio for permanent impacts.”

9

p. 4.3-42 to 43

"The Final CRLFMP shall be required as a condition of approval for the project Tentative Map . . ."

9

Questions: What does this mean? Isn't the public entitled to updated studies when evaluating the project? Does the project need to be approved before updated studies are prepared?

Wildfire

https://cityofpetaluma.org/documents/rdeir-4-15-wildfire/

p. 4.15-5

Figure 4.15-2

Hundreds of homes are in the Wildland Urban Interface area (WUI)— a designation for areas with dense housing adjacent to vegetation that can burn in a wildfire (Sonoma County 2018).

"The project site is not within a "very high fire hazard severity" (VHFHS) zone by the State of California (Sonoma County 2008)."

Comment: What the report fails to mention is that this open space is designated as Tier 2, Elevated Risk of fire threat. 2019, the California Public Utilities Commission map:

10

https://ia.cpuc.ca.gov/firemap/

Below is a link in order to better see how this 2019 map affects a variety of homes in Petaluma.

Petaluma Area Fire Risk page

The categories are Tier 1 (Extreme) and Tier 2 (Elevated). Much of the southwestern part of Petaluma is in Tier 2 (orange color - elevated fire risk). All of the Davidon property is in Tier 2.

Questions: Should it matter that the site (and surrounding homes) are in elevated fire risk? If maps from California Public Utilities show that information, why not include them in the Wildfire section of the RDEIR?

4.15-29

"Conclusion The project's compliance with the California Building Code 2019 to develop the residential component with fire-resistant construction materials and the wildfire fuel

control through the implementation of the Fuel Management Program developed for the proposed project would improvement existing conditions (without the proposed project), reduce the risk of wildfires, and facilitate quick containment, so that fire would not spread quickly within the residential portion of the site and nearby residential subdivisions."

10

Questions: The project site is a small section of a very large WUI and Tier 2 elevated fire risk. The Scott Ranch housing would adhere to strict fire safety regulations and reduce the risk of wildfires. What about the nearby residential subdivisions and homes, which were built when fire safety was not a consideration in building materials or landscaping? A more comprehensive question for the existing elevated fire risk homes is: Should the city suggest home-hardening standards to encourage fire-safe retrofits that could save lives and property?

11

"Also as discussed under Impact WDF-1 above, with the worst-case traffic assumptions and fire scenarios identified and analyzed in the Fuel Management Plan report, D Street and Western Avenue would have sufficient capacity to accommodate evacuating vehicles while maintaining one lane along those streets for emergency access. Therefore, the proposed project's impact associated with the risk wildfire and exposure of project occupants to spread of a wildfire would be less than significant."

Question: The subdivisions of Victoria and Victoria Residential have one evacuation road: Windsor Drive. Under the above assumption during a wildfire, is it assumed that each house would evacuate using one car or did the analysis take into account the previous experiences with fires that residents take several vehicles per home to escape?

RESPONSES TO O-PRP-2 LETTER

Response O-PRP-2-1: The commenter inquirers about the price of the proposed houses. This comment does not raise issues concerning the adequacy or accuracy of the RDEIR's coverage of environmental impacts under CEQA.

The commenter further inquires about changes to the City's regional housing needs allocation. Project's inclusion of affordable housing is not considered an impact under CEQA. This issue will be examined and assessed by the City independent of the environmental review process. However, **Section 4.11.2, Environmental Setting,** presents in **Table 4.11-1,** the regional housing needs allocation (RHNA) assigned by the Association of Bay Area Governments for the City of Petaluma. As described in Table 4.11-1, the assigned 2015-2023 RHNA for the City of Petaluma is 745 units with 16.2 percent for moderate income levels. As described in **Section 4.11.3.3, Local,** on **page 4.11-3 of the RDEIR**, the 2014 iteration of the Housing Element's residential lands inventory accounts for 66 single-family homes at the project site.

Based on the staff report dated March 1, 2021, as of 2020, the City of Petaluma has fully met the 2015-2023 RHNA for the moderate-income category. Therefore, the reduction of residential units at the project site (from 66 to 28 units) would not affect the RHNA for this category. Pursuant to Housing Element Policy 4.2 and associated Program 4.3, all residential developments in the City are subject to the Inclusionary Housing Ordinance, which provides for the contribution of fees to assist the City in meeting its affordable housing goals.

Response O-PRP-2-2: The RDEIR analysis in **Section 4.10, Noise**, refers to the 2009 ambient noise levels along D Street to characterize the existing noise levels and indicate that these still exceed the 60 dBA CNEL level at present time. Consistent with the City of Petaluma General Plan Policy 10-P-3(G), the RDEIR analysis uses an increase of 4 or more dBA as the criterion to evaluate the significance of any permanent increase in noise levels at residential receptors along D Street as a result of project-related traffic. Considering that traffic has increased between 2009 and 2019, an updated ambient noise survey would not change the methodology and finding of the RDEIR analysis. As described in the **RDEIR in Section 4.10, Noise,** on **page 4.10-20**, estimated noise levels during operation, presented in **Table 4.10-9**, represent a worst-case scenario. As shown, the traffic generated by the proposed Davidon (28-lot) Residential Project component and Putnam Park Extension Project component in combination with the traffic generated by the pipeline projects would increase local roadway noise levels by a maximum of 1.3 dBA over existing noise levels. The traffic generated by the proposed project alone would increase local roadway noise levels by a maximum of 0.3 dBA. Both increases in noise level would be imperceptible to most people and would not exceed the identified threshold of significance of 4 decibel increase. As discussed in **Section 4.10, Noise, of the RDEIR**, with mitigation, project construction would result in a

less-than-significant noise impact. In addition, the proposed project would have a less-than-significant noise impact during operation.

Response O-PRP-2-3: The proposed project would include improvements to the intersection of Windsor Drive and D Street. These improvements would include a roundabout with single-lane approaches to slow traffic along this portion of D Street and minimize pedestrian crossing distances. The roundabout would provide crosswalks on all approaches with Rectangular Rapid Flash Beacons. Slowing the traffic would reduce the potential hazards associated with vehicles speed. It would also reduce vehicular noise. Additionally, frontage improvements would be installed including the curb and gutter as well as restriping. The project would be responsible for improvements to Windsor Drive and D Street along the site frontage including curb, gutter, sidewalks, and bicycle lanes striping and signage. The City is aware that the existing D street roadway conditions are deteriorated and in need of repair. Accordingly, the City's Public Works Department has identified D Street under the capital improvement schedule (CIP-68), which includes reconstruction of D Street from city limits to Petaluma Boulevard South. The City would coordinate the repairs schedule with the construction activities of the proposed project.

Response O-PRP-2-4: See **Master Response 9 – VMT Approach** and **Master Response 10 – VMT Mitigation.**

Response O-PRP-2-5: See **Master Response 7 – Trip Generation** and **Master Response 8 – Traffic Operations.**

Response O-PRP-2-6 and 7: See **Master Response 14 – Parking.**

Response O-PRP-2-8: See **Master Response 4 – Special-Status Species Present at the Project Site.** As indicated on **page 4.3-5 of the RDEIR**, the 2018 Updated Biological Assessment by Zentner Planning & Ecology provides an updated biological assessment of the potential impacts of the Davidon (28-lot) Residential Project component of the Scott Ranch project and compares the significance levels to previous residential development plans. The 2018 Update was inadvertently not included in **Appendix 4.3, Biological Resources, of the RDEIR** and has been made available for public review on the City's website as of February 24, 2021.

Response O-PRP-2-9: A detailed assessment of potential impacts of the proposed project on CRLF is provided under **Impact BIO-1** on **page 4.3-36** through **page 4.3-41 of the RDEIR**. The "red dotted line" in question by the commentor is the boundary of Critical Habitat for CRLF designated by the USFWS and located across the site. As discussed on **page 4.3-15 of the RDEIR** and shown in **Figure 4.3-5** on **page 4.3-17 of the RDEIR**, the majority of the site is contained within Critical Habitat Unit SON-3, which covers an area of approximately 2,230 acres, starting south of Windsor Drive and west of D Street, and extending

south into the Chileno Valleynorth. The project as revised precludes residential development within the designated critical habitat area. It should be noted that the entire site is considered to provide suitable foraging and estivation habitat for CRLF. Where proposed development extends into suitable habitat, even outside the designated Critical Habitat, compensatory mitigation measures have been identified as discussed in detail on **page 4.3-40 – 4.3-41 of the RDEIR** and defined in **Mitigation Measure BIO-1b**. See **Master Response 1 – Need for Updated Biological Surveys** and **Master Response 2 – California Red-Legged Frog Surveys,** and **Master Response 4 – Special-Status Species Present at the Project Site**.

Given the difficulty of surveying for CRLF in upland habitat, such as the portion of the site north of Kelly Creek where the 28 residences are proposed, surveys focus on determining presence or absence in suitable breeding habitat locations. There are no standards for conducting studies for CRLF in upland habitat. Where proposed development extends into potentially suitable habitat (including the upland areas where the 28 residences are proposed), then compensatory mitigation is typically required by the USFWS as discussed in detail on **page 4.3-40 – 4.3-41 of the RDEIR** and defined in **Mitigation Measure BIO-1b**. In addressing potential impacts, completely avoiding habitat is always considered the preferred approach to mitigation, followed by minimizing impacts, and then providing compensatory mitigation. Any development of the project site would be considered a potential impact on CRLF, as the site is presumed occupied as described in the RDEIR. Compensatory mitigation, required under **Mitigation Measure BIO-1b**, would have to be secured before any loss of suitable habitat could occur on the site as part of the proposed project.

The Final CRLF Mitigation Plan would be prepared in consultation with and approved by the regulatory agencies and the City. This would be required as a condition of approval for the project Tentative Map to ensure its preparation during further project review by the City. **Mitigation Measures BIO-1b** contains detailed provisions related to preconstruction and construction avoidance, habitat avoidance and mitigation, and habitat connectivity and on-site management that would be incorporated into the Final CRLF Mitigation Plan and would serve as performance standards to ensure adequacy and feasibility in fulfilment of the City's CEQA review. Based on consultation with regulatory agencies including the USFWS, no additional updated studies for CRLF are considered necessary or anticipated in preparing the Final CRLF Mitigation Plan.

Response O-PRP-2-10: Section 4.15, Wildfire, of the RDEIR, on **page 4.15-15** provides background on the California Public Utility Commission's (CPUC) Fire Threat Map under the SB 901 header. The CPUC Fire Threat Map depicts three areas (Tier 1, Tier 2, and Tier 3) based on where there is an extreme risk from wildfires associated with overhead utility power lines or overhead utility power-line facilities that also support communication facilities. Areas depicted as Tier 1 are areas in direct proximity to communities, roads, and utility lines, and are a direct threat to public safety. Tier 2 areas are considered

an elevated risk from wildfires associated with overhead utility power lines or overhead utility power-line facilities. The highest risk is in Tier 3 areas, which are classified as extreme for overhead utility power-line facilities.

The City's Planning Commission requested clarification regarding the CPUC Fire Threat Map, which shows that the southern portion of the City of Petaluma including the Scott Ranch property is located within a Tier 2 fire threat area, indicating an elevated risk from utility associated wildfires. Pursuant to the CPUC disclaimer "all data and information portrayed on the CPUC Fire-Threat Map are for the expressed use called for in the CPUC Decision D.17-12-024, and any other use of this map is not the responsibility of, or endorsed by, the CPUC or its supporting Independent Review Team." The intent of the regulation is to alert all electric utility and communication infrastructure providers of the fire risk associated with overhead facilities and to reinforce compliance with all fire safety regulations.

The proposed project would not include any new overhead facilities. Rather, the Scott Ranch project proposes to underground all new electric and communication facilities. Therefore, the project would not increase fire risk due to expansion of utilities and as the RDEIR concludes, wildfire impact associated with the proposed project would be less than significant.

Cumulative impact associated with the proposed project on wildfire are addressed **in the RDEIR** on **page 4.15-35**. As discussed in the RDEIR, the proposed project would not exacerbate wildfire risk, compared to existing conditions. Implementation of the Fuel Management Program would ensure that the property is developed and managed for wildfire safety, through a set of maintenance standards for each type of land use. These standards include, among others, maintaining a non-combustible buffer area around the residences, regular and flash grazing, and trees thinning or pruning. In addition, the proposed project would comply with the latest California Building Code to develop the residential component with fire-resistant construction. Therefore, the proposed project's contribution to wildfire impacts would not be cumulatively considerable and cumulative impacts related to wildfires would be less than significant.

With respect to the project impact during a wildfire evacuation, please see **Master Response 13 – Wildfire Evacuation.**

Response O-PRP-2-11: With respect to the question about nearby residential subdivisions and existing homes adhering to fire safety regulations, this topic is beyond the scope of this analysis and does not raise issues concerning the adequacy or accuracy of the RDEIR's coverage of environmental impacts under CEQA. Surrounding properties are not part of the proposed project. As described in **Response O-PRP-2-10**, the proposed project would not exacerbate wildfire risk. Therefore, no offsite hardening is needed as a result of the proposed project.

O-PRP-3

Subject: RE: Can this be real? Biological Research from 2003-2005

From: kathleen kestelyn <kkestelyn@gmail.com>
Sent: Tuesday, March 9, 2021 10:51 AM
To: -- City Council <--CityCouncil@cityofpetaluma.org>; citymgr <citymgr@cityofpetaluma.org>; Teresa Barrett <Teresabarrett@comcast.net>
Subject: Fwd: Can this be real? Biological Research from 2003-2005

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---
I am forwarding this message to you and hope that you will re-evaluate this housing project and do the right thing for
the good of this city and its people.

Respectfully, Kathleen Kestelyn

---------- Forwarded message ---------
From: **Petalumans for Responsible Planning** <PetRP@comcast.net>
Date: Mon, Mar 8, 2021 at 7:29 AM
Subject: Can this be real? Biological Research from 2003-2005
To: <kkestelyn@gmail.com>

View this email in your browser

Donate

Photo by Scott Hess

Petalumans for Responsible Planning started scrutinizing the Davidon development in 2004 (17 years ago). The Davidon proposal for Scott Ranch at Windsor & D Street is 28 homes and 44 park acres.

Recycled Biological Research from 2003-2005

When we opened the Biological Resources section of the 2021 Davidon / Scott Ranch REEIR, we could not believe that Davidon is still relying on biological data on this land from 2003-2005. But, yes, it is true!

In 2013, the California Department of Fish & Game wrote a letter to the Planning Department to alert Petaluma that this data was outdated. They found the surveys to be insufficient then; they must be insufficient now.

- "The Report presents the results of a special status plant and wildlife surveys conducted within the proposed Project area during 2003. As more than a decade has passed since the Report was prepared, the Department recommends that the draft EIR be revised to provide an updated habitat assessment and survey results for special-status plant and wildlife species located within the proposed Project area and surround lands. Since no detail into the scope and depth of data collected during additional reconnaissance-level surveys performed since 2003 is given in the draft EIR, the Department does not consider the additional surveys, to be sufficient to accurately assess project impacts in in the Draft EIR."

Testimony from Rob Hamilton, biologist and President of Hamilton Biological, to the Petaluma City Council on June 19, 2017, also found the surveys to be inadequate.

- "Although most of the Project site constitutes federally designated critical habitat for the Red-legged Frog, the EIR preparers failed to conduct updated protocol surveys for this species. Rather, data on Red-legged Frog on the project site is based mainly upon protocol surveys conducted in 2003 and 2005. According to the United States Fish & Wildlife Service "2005 Guidance on Field Surveys for the California Red-legged Frog," survey data for this species are normally valid for only two years. Survey efforts in 2009, 2011, and 2015, did not follow the current federal protocol. Given that 12 years have passed since Red-legged Frog habitat data were collected following the required protocol, the EIR cannot rely on outdated protocol surveys, or more recent non-protocol surveys, to make valid assumptions about the status and distribution of Red-legged Frog in the project area. The EIR's failure to provide updated Red-legged Frog surveys, conducted according to protocol, is particularly perplexing because the California Department of Fish & Wildlife notified the City and the applicant in 2013 that the documentation for Red-legged Frog was, at that time, insufficient to accurately assess the Project's impacts."

What we did

So, we hired an expert to try to deconstruct this Revised DEIR. Dr. Shawn

Smallwood, Ecologist, not only analyzed the 2020-2021 Scott Ranch RDEIR but also completed a site visit to the Davidon / Scott Ranch property in February 2021--just last month--to see things for himself.

Quotes from Dr. Smallwood

- "The RDEIR's characterization of baseline conditions and its analysis of potential project impacts to vertebrate wildlife are outdated, incomplete and flawed. The RDEIR does not provide the most basic information the reader needs to know about the surveys listed on pages 4.3-2. Decision-makers and the public need to know how much credibility to assign the surveys." 3
- "Most of the surveys for biological resources were performed in 2003-2005. Wildlife populations tend to shift locations every generation or so, and given all the other changes to the landscape, to species' status, and to survey protocols, surveys performed nearly two decades ago are out of date." 4
- "The RDEIR should provide a detailed account of which species were seen and in what levels of abundance, what members of each species were doing, and in what environmental context." 5

The RDEIR describes that certain bird species are unlikely on this land; however, Dr. Smallwood cites pictures taken in 2019-2021 in Helen Putnam Park of the "unlikely" bird species. No biologist has yet to survey the grassland nor the trees for bird nests, nor for bird behaviors indicative of nesting. Many more details are in the report. 6

Shawn's report is fascinating if you are interested in the biology on this land. We have uploaded the following for you to review:

- Dr. Smallwood's report
- A comparison of statements in the RDEIR to Dr. Smallwood's research
- Dr. Smallwood's curriculum vitae

Dr. Shawn Smallwood, February 28, 2021

What can you do?

Even if you have already written to the City Council, you can let them know about the lack of current biological research. Otherwise the Council will assume that this dated research does not matter.

- Please contact your city council members now. The vote to move this DEIR to final EIR is March 15th and we want your voice to be heard.

  Email addresses to the City Council

- Talk to your network to spread the word (share this email!)

- Take our survey! We will forward your concerns to the City Council before the March 15 meeting.

Davidon / Scott Ranch Survey

New Comments from the Survey

Below are just a few of the many comments made by citizens:

- This project is beyond wasteful and environmentally ill balanced. As a resident of Petaluma for 40+ years the growth of this city has maxed out. It is time to be focusing on what is naturally And already in existence here and how we will manage these things. The red legged frog deserves a chance to exist and the people deserve your time to be spent on cleaning up so many things, but I'll mention the house less community, which is affecting our water ways. When do you put your greed and dollar signs away for the sake of peace of all things and beings? Do the right thing Petaluma.
- Cities have a right to not over develop. We need to stop approving too much way over RHNA #s.
- The city council seems committed to destroying every remaining historic parcel they can. We absolutely do not need 28 large, ugly homes. The parcel as is adds more value - including tourism dollars - than new, ugly homes ever could. Please stop destroying our heritage and our environment.
- This parcel represents the only opportunity for residents of Petaluma to extend open space/parkland that is walkable from the city center and protects vital watershed, wildlife corridors and species. Please protect

7

8

our health, wellbeing and our unique 'small town' feel by reducing sprawl and opting for infill projects instead.

- It is very unclear to me why we are taking our beautiful and highly limited open space and selling it off to the highest bidder. This land is irreplaceable. Once it's developed it remains so. The city should focus and reward development within the current urban footprint and next to transportation hubs. This proposed development is the antithesis of all of that. Helen Putnam is the only "wild" feeling park that Petaluma has. It is a jewel. It should be expanded not surrounded by luxury homes. Open spaces are for everyone to enjoy, not just for the wealthy and well connected.
- This 'deal' for a park and 28 homes was developed by 2 people, NOT the entire community. And these 2 are not aware of, nor seem to care about Petaluma's Climate Action Framework. Does City Council care more about these out-of-town/out-of-touch developers and future occupants of the 28 homes, than they care about current residents?

Please contact us with any comments: PetRP@comcast.net

Steering Committee for Petalumans for Responsible Planning:

Chris Cort, Sue Davy, Sherri Fabre-Marcia, Susan Jaderstrom

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To save us the fees that PayPal charges, you could mail a check to:

Petalumans for Responsible Planning

130 Sunnyslope Road

Petaluma, CA 94952

RESPONSES TO O-PRP-3 LETTER

Response O-PRP-3-1: See **Master Response 1 – Need for Updated Biological Surveys**. Also, see **Comment Letter A-CDFW-2-1** for the conclusion from CDFW that major changes to the project, updated studies, and the current RDEIR address prior comments and concerns in the 2013 CDFW comment letter. Recent correspondence with CDFW (see **A-CDFW-2**) notes that the RDEIR provides sufficient information for CDFW to rely upon as a responsible agency and in accordance with Fish and Game Code Section 1600.

Response O-PRP-3-2: Recent correspondence between the City and CDFW served to confirm that earlier concerns and comments raised by CDFW in their letter (dated April 15, 2013) regarding the Draft EIR on the previous 93-lot development application for the site have been addressed as a result of the major changes to the Scott Ranch Project, the updated studies, and information provided in the RDEIR (see **Comment Letter A-CDFW-2**). The USFWS has also confirmed in their correspondence with the City that additional surveys for CRLF are not necessary given that this species has already been detected and that the site is considered occupied habitat for permitting purposes (see **Comment Letter A-USFWS-1**). Also, see **Master Response 1 – Need for Updated Biological Surveys** and **Master Response 2 – California Red-Legged Frog Surveys**.

Response O-PRP-3-3: See **Master Response 1 – Need for Updated Biological Surveys.**

Response O-PRP-3-4: See **Master Response 1 – Need for Updated Biological Surveys.**

Response O-PRP-3-5: See **Master Response 1 – Need for Updated Biological Surveys.**

Response O-PRP-3-6: See **Master Response 1 – Need for Updated Biological Surveys** and **Master Response 4 – Special-Status Species Present at the Project Site.**

Response O-PRP-3-7: Comment does not raise issues concerning the adequacy or accuracy of the RDEIR's coverage of environmental impacts under CEQA. As described in **Section 3.0, Project Description, of the RDEIR**, the major portion of the project site would be occupied by a public park with public amenities and preserved open space. Additionally, as described in **Chapter 2.0, Revised Project Description,** since the publication of the RDEIR, the proposed project has been revised to reduce the acreage of the residential component from approximately 11.7 acres to 6.4 acres and the proposed acreage of the Putnam Park Extension Project has increased from approximately 44 to 47 acres. In addition, approximately 5 acres would be preserved as private open space.

Response O-PRP-3-8: This comment does not raise issues concerning the adequacy or accuracy of the RDEIR's coverage of environmental impacts under CEQA. The comment may be considered and weighed by city decision-makers as part of their decision to approve, modify, or disapprove the proposed project. This consideration will be carried out independent of the environmental review process.

O-PRP-4

Ervin, Olivia

From: Petalumans for Responsible Planning <PetRP@comcast.net>
Sent: Wednesday, March 10, 2021 1:40 PM
To: Ervin, Olivia
Subject: Davidon / Scott Ranch - Ecologist Peer Review
Attachments: CV_Smallwood.DOC; Smallwood comments_Davidon Homes_Petaluma_022621.pdf

Please include this information with the Davidon / Scott Ranch public comments.

From: Petalumans for Responsible Planning [mailto:PetRP@comcast.net]
Sent: Monday, March 1, 2021 2:28 PM
To: 'tbarrett@cityofpetaluma.org' <tbarrett@cityofpetaluma.org>; 'bbarnacle@cityofpetaluma.org' <bbarnacle@cityofpetaluma.org>; 'dfischer@cityofpetaluma.org' <dfischer@cityofpetaluma.org>; 'mhealy@cityofpetaluma.org' <mhealy@cityofpetaluma.org>; 'dking@cityofpetaluma.org' <dking@cityofpetaluma.org>; 'kmcdonnell@cityofpetaluma.org' <kmcdonnell@cityofpetaluma.org>
Subject: Davidon / Scott Ranch - Ecologist Peer Review

Dr. Shawn Smallwood, Ecologist, completed a site visit to the Davidon / Scott Ranch property in February 2021. Dr. Smallwood also analyzed the 2020-2021 Scott Ranch RDEIR. Attached is Dr. Smallwood's Curriculum Vitae.

Also attached is a PDF with Dr. Smallwood's analyses of the Davidon / Scott Ranch project.

Below is a brief summary written by Dr. Smallwood:

The RDEIR provides an incomplete and inadequate analysis of baseline conditions and potential impacts to wildlife. It relies on reconnaissance-level surveys performed nearly two decades ago, but does not provide critical details of how those surveys were performed nor does it reveal the species detected other than California red-legged frog. Many of the conclusions of potential impacts are based on misleading premises and otherwise speculate in favor of minimal to no impacts. For example, the RDEIR absurdly claims that the site is absent of nests of special-status species of birds. The RDEIR fails to estimate impacts to wildlife caused by habitat loss, nor does it analyze impacts to wildlife caused by project-generated traffic, bird-window collisions, and predation of outdoor house cats. It mischaracterizes cumulative impacts, and it therefore fails to appropriately analyze the project's potential contribution to cumulative impacts. The RDEIR fails to reveal the site as one that is rich in wildlife. It inadequately mitigates for impacts to California red-legged frog and to other special-status species of wildlife. In my comments I provide some recommendations for improving mitigation.

1

Petalumans for Responsible Planning
www.PetRP.org
PetRP@comcast.net

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Attn: Heather Hines, Planning Manager
City of Petaluma
11 English Street
Petaluma, California 94954

28 February 2021

RE: Scott Ranch Project RDEIR

Dear Ms. Hines,

I write to comment on the revised draft Environmental Impact Report (DEIR) prepared for the Scott Ranch Project on 58.66 acres of land (City of Petaluma 2013, 2020). I understand this project would add 28 single-family dwelling units and a public park on 22.1 acres, and would contribute open space as a Putnam Park Extension.

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 11 February 2021, starting at 07:41 hours. With binoculars, I walked the eastern and southern perimeter, stopping periodically to perform visual scans for vertebrate wildlife. I also walked on the project site, accompanied by Sean Micallef of Zentner Planning & Ecology.

The site consists of cattle-grazed grassland bisected by riparian forest along Kelly Creek (Photos 1 and 2). It is bordered by oak woodland to the west. A stock pond is located on the west edge. Overflow from the stock pond drains from the south side of the earthen levee through a gully-eroded channel to Kelly Creek.

While visiting the site, I detected 43 species of vertebrate wildlife, 6 of which were special-status species (Table 1). The site supports keystone species such as Botta's

pocket gopher (Photos 3 and 4) and California scrub-jay. Pocket gophers serve both as prey items to carnivorous species and as providers of fossorial habitat used by many other species, including special-status species. California scrub-jays cache thousands of acorns, some of which grow new oaks. I saw 3 red-tailed hawks socializing on the site, and I heard an American kestrel calling from Kelly Creek. I saw a western screech-owl in Kelly Creek (Photo 5) and both Say's phoebes and black phoebes hunting all across the site (Photo 6). Western bluebirds and yellow-rumped warblers were abundant (Photo 7 and 8), as were wild turkeys and Anna's hummingbirds (Photos 9 and 10). Evidence of breeding was abundant. The site is rich in wildlife.

Photo 1. *View of the portion of the project site west of Windsor Avenue, 11 February 2021. Kelly Creek is visible to the left.*

Photo 2. *Wild turkeys emerge onto the proposed development footprint from Kelly Creek, 11 February 2021.*

Table 1. *Species of wildlife I observed during 3 hours on 11 February 2021.*

Species	***Scientific name***	**Status (see Table 2)**
Canada goose	*Branta canadensis*	
California quail	*Callipepla californica*	
Wild turkey	*Melleagris gallopavo*	Non-native
Turkey vulture	*Cathartes aura*	FGC 3503.5
Red-tailed hawk	*Buteo jamaicensis*	FGC 3503.5
American kestrel	*Falco sparverius*	FGC 3503.5
Mourning dove	*Zenaida macroura*	
Western screech-owl	*Megascops kennicottii*	FGC 3503.5
Anna's hummingbird	*Calypte anna*	
Northern flicker	*Colaptes auratus*	
Acorn woodpecker	*Melanerpes formicivorus*	
Nuttall's woodpecker	*Picoides nuttallii*	BCC
Downy Woodpecker	*Picoides pubescens*	
Black phoebe	*Sayornis nigricans*	
Say's phoebe	*Sayornis saya*	
European starling	*Sturnus vulgaris*	Non-native
Ruby-crowned kinglet	*Regulus calendula*	
Oak titmouse	*Baeolophus inornatus*	BCC
Chestnut-backed chickadee	*Poecile rufescens*	
Bushtit	*Psaltriparus minimus*	
White-breasted nuthatch	*Sitta carolinensis*	
American crow	*Corvus brachyrhynchos*	
Common raven	*Corvus corax*	
California scrub-jay	*Aphelocoma californica*	
Steller's jay	*Cyanocitta stelleri*	
Northern mockingbird	*Mimus polyglottos*	
American robin	*Turdus migratorius*	
Western bluebird	*Sialia mexicana*	
Yellow-rumped warbler	*Dendroica coronata*	
California towhee	*Pipilo crissalis*	
Spotted towhee	*Pipilo maculatus*	
White-crowned sparrow	*Zonotrichia leucophrys*	
Golden-crowned sparrow	*Zonotrichia atricapilla*	
Western meadowlark	*Sturnella neglecta*	
House finch	*Carpodacus mexicanus*	
American goldfinch	*Carduelis tristis*	
Lesser goldfinch	*Carduelis psaltria*	
Black-tailed jackrabbit	*Lepus californicus*	
Botta's pocket gopher	*Thomomys bottae*	
California vole	*Microtis californicus*	
Western gray squirrel	*Sciurus griseus*	
Striped skunk	*Mephitis mephitis*	
Black-tailed deer	*Odocoileus hemionus hemionus*	

Photos 3 and 4. *Mounds of Botta's pocket gopher covered portions of the site, 11 February 2021, indicating an abundance of a keystone species that serves as prey items of multiple special-status species of raptor and American badger, and that serves as a prolific excavator of fossorial habitat for multiple special-status and listed species including California red-legged frog and California tiger salamander when these species are in need of refuge outside the breeding season.*


Photos 5 and 6. *Western screech-owl (left) and black phoebe (right) in Kelly Creek and on the development footprint of the project site, respectively, 11 February 2021.*

Photos 7 and 8. *Western bluebird (left), and yellow-rumped warbler (right) on the site, 11 February 2021.*

Photos 9 and 10. *Wild turkeys courting females (left) and an Anna's hummingbird defending its breeding territory (right) on the project site, 11 February 2021.*

BASELINE CONDITIONS AND BIOLOGICAL IMPACTS ASSESSMENT

The RDEIR's characterization of baseline conditions and its analysis of potential project impacts to vertebrate wildlife are outdated, incomplete and flawed. Since the 2013 DEIR, the status of multiple species has changed, as have survey protocols for special-status species, and as has our understanding of anthropogenic impacts to wildlife. We now know that the takings of habitat here and the takings there, along with the usual assurances of insignificant impacts or of mitigated impacts, have resulted in a 29% loss of total bird abundance across North American over the last half-century (Rosenberg et al. 2019). Less understood are the ecological and economic costs of this loss of birds, but it would be reasonable to assume the costs are very large. We now know that bats are declining (Rodhouse et al. 2019), and that the loss of bats translates into large economic losses to agriculture as well as to downstream effects caused by the need to use greater amounts of insecticides to control pests that bats have long managed (Boyles et al. 2011). We also now know – and can quantify – the adverse effects of residential development that are additional to habitat loss, including from automobile traffic, glass windows, and outdoor house cats that come with the residents of new development. The RDEIR addresses none of these potential impacts.

According to the RDEIR, most of the surveys for biological resources were performed in 2003-2005. Given that wildlife populations tend to shift locations every generation or so (Taylor and Taylor 1979), and given all the other changes to the landscape, to species' status, and to survey protocols, surveys performed nearly two decades ago are out of date. Even though burrowing owl surveys were performed later – in 2013 – those surveys did not meet the standards of the CDFW (2012) guidelines, which specify

surveys separated by at least three weeks, including 1 survey prior to 15 April and the final survey between 15 June and 15 July. The surveys performed in 2013 did not meet the seasonal survey date thresholds. Without access to the report, I cannot determine whether additional standards were also missed.

The RDEIR lists multiple surveys and assessments performed for biological resources on the project site, most nearly two decades ago, but a few assessments more recently. However, only Micallef (2018) is provided with the RDEIR. Other than maps of broad vegetation cover categories, nowhere in the RDEIR can I find a list of species detected by those who performed site visits.

The RDEIR does not provide the most basic information the reader needs to know about the surveys listed on pages 4.3-2. Provision of the reports of field reconnaissance surveys would have been helpful, assuming there were reports. The dates of the reconnaissance surveys were reported in the 2013 DEIR, but neither the DEIR nor the RDEIR identifies the biologists who performed the surveys. The RDEIR should report when each survey began, how long it lasted, and how it was performed. The RDEIR should also provide a detailed account of which species were seen and in what levels of abundance, what members of each species were doing, and in what environmental context. Decision-makers and the public need to know how much credibility to assign the surveys.

The RDEIR presents a series of flawed and misleading conclusions regarding the occurrence potentials of special-status species of wildlife. For example, when discussing the occurrence potential of California tiger salamander (p. 4.3-19), the RDEIR says "…because the site is located outside the known potential range the species is not believed to be present." The appropriate wording would be 'the site is located outside the currently known range…' By adding the word *potential*, the RDEIR gives the false impression that it would be impossible for California tiger salamander to occur on site. Considering that California tiger salamanders have been documented to disperse 2.2 km from breeding ponds (Orloff 2011), the 4 miles reported by the RDEIR as the distance to the nearest sites recorded to host California tiger salamanders does not seem insurmountable. The RDEIR claims that California tiger salamanders at known locations north and west of the site are "generally separated" from the project site by residential development, but aerial imagery shows sufficient open space north and west of the project site for tiger salamanders to disperse and for larger vertebrate wildlife to vector egg masses. Essentially, the RDEIR gives up on conserving California tiger salamander in the project area, which is the opposite of how risk assessment should proceed for rare and precious resources in the face of uncertainty (National Research Council 1986).

In another example, the RDEIR (p. 4.3-20) reports "Several special-status birds have varying potential to frequent the project site…" Actually, the level of variation was binary: the RDEIR reported 6 special-status species of bird to be unlikely to occur and 4 to potentially occur. According to the RDEIR, the project site poses a bleak setting for special-status species of bird. Further, it claims that nesting habitat is generally unavailable and that no nesting was observed during reconnaissance visits. These

conclusions are misleading. The RDEIR assesses impacts to only 10 (22%) of the 45 potentially occurring special-status species of birds (Table 2), thereby neglecting 35 (78%) special-status species of birds. Of the 10 species it does assess, its conclusions do not comport with geographic range overlaps of the project site, with known habitat relationships, and with detection records of birds in the area (Table 2). Regarding its conclusion of no nesting habitat, the RDEIR falsely implies that birds do not nest on the ground and do not nest in the trees that are slated for removal.

Nor do the occurrence likelihoods in the RDEIR comport with the habitat characterizations of each species – habitat characterizations that appear in the same lines as the occurrence likelihood determinations in Table 4.3-1 of the RDEIR. (The same Table that appeared in the 2013 DEIR.) For example, golden eagle habitat is said to be "Open mountains, foothills, and canyons." By *open*, I assume the RDEIR means treeless, but the habitat characterization is cursory and vague. I have studied golden eagles for many years, and since 2013 I have tracked 35 golden eagles via GPS telemetry. Our telemetered golden eagles use many types of environment from Canada to Mexico, including the type of environment at the project site. The highest golden eagle breeding density in the world occurs just north of the Altamont Pass in Contra Costa County, where patches of grassland and woodland are interspersed similar to the area of the project site. Based on my experience, there is no reason not to expect golden eagles in the project area. In fact, a golden eagle was photographed in Helen Putnam Regional Park as recently as 2 February 2021. The proposed project site provides habitat for golden eagle, which undoubtedly uses the site.

In the case of burrowing owl, the RDEIR characterizes habitat as "Open grassland and fields, farms, and ruderal areas," before determining the species is unlikely to occur at the site even though the site conditions match the RDEIR's habitat characterization. In the body of text, the RDEIR provides two explanations for this discordant determination. The first is that "ground squirrel burrows necessary for nesting by burrowing owl were absent from the project site." I have studied burrowing owls even longer than I have studied golden eagles, and along the way I have recorded hundreds of burrowing owl nest sites, including 800 at one of my project sites alone (Smallwood et al. 2013). Whereas burrowing owls are more likely to nest among burrow complexes of ground squirrels, they do not require ground squirrel burrows. This is well published in the scientific literature. I have recorded nest sites in metal culverts, rock piles, caves, the cavity of a downed electric distribution pole, under overhangs of concrete and asphalt pads, and under concrete half-round (Smallwood and Morrison 2018). Other investigators have reported burrowing owls in nest burrows of their own construction, sometimes starting with pocket gopher burrows. The first explanation given for why burrowing owls are unlikely on site is inaccurate.

The second reason the RDEIR gives for why burrowing owls are unlikely on site is that no CNDDB records were found of burrowing owls nesting on site. This is a misuse of CNDDB. Whereas consulting CNDDB is fine for confirming presence of a species, it is inappropriate for determining absence and hence narrowing a list of potentially occurring species. CNDDB is voluntary and not based on scientific sampling or equal access to properties. The limitations of CNDDB are well-known, and are summarized in

a warning presented by CDFW on the CNDDB web site (https://www.wildlife.ca.gov/Data/CNDDB/About): "*We work very hard to keep the CNDDB 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 CNDDB 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…*" The RDEIR needs to revise its analysis of potential project impacts to burrowing owl. As a first step, burrowing owl surveys should be performed to the standards of CDFW (2012).

In another example of occurrence determinations not comporting with habitat characterizations, the RDEIR determines northern harrier as unlikely. The habitat is described as "Marshes, fields, and grassland." The project site is largely covered in grassland, so why then does the RDEIR determine the species to be unlikely? I have recorded northern harriers in grasslands hundreds of times, if not thousands of times. I studied northern harriers in grasslands for 21 years. I have recorded northern harrier nests in grasslands. As recently as 23 November 2019, a northern harrier was photographed in Helen Putnam Regional Park and the photo posted on eBird. The analysis of potential project impacts to northern harrier needs to be revised in the RDEIR.

According to the RDEIR, horned lark is unlikely to occur at the project site because its habitat consists of "Open habitat with sparse cover." The RDEIR, however, describes only a narrow part of the species' habitat. Horned larks occur in greatest abundance in grasslands, which I can readily document with hundreds if not thousands of my own data. The horned lark is a grassland species, and nests in grasslands typical of the grassland of the project site.

Similarly, the RDEIR pigeonholes prairie falcons and peregrine falcons into unrealistically narrow portions of the environment, in this case to "Canyons, mountains, open grassland." The RDEIR adds, "Suitable nesting habitat for prairie falcon, peregrine falcon, and golden eagle, which may occasionally forage in the vicinity, is absent from the site because of the lack of suitable cliff faces or ledges used by the falcons and the proximity to existing development which limits the suitability for golden eagle nesting." I have studied these species for years. I have recorded them in many types of environment, and not just in canyons, mountains and open grassland. I have recorded occurrences of these species across California, and I have observed and quantified their flight behaviors over grasslands, oak woodlands and groves of California buckeye. I have recorded nest sites of these species, which have sometimes been on cliff faces as reported in the RDEIR, but not always. Golden eagles often nest in trees. Peregrine falcons often nest on buildings. Prairie falcons nest opportunistically, including in the nacelles of derelict wind turbines. These species of falcon occur where birds are abundant, which means they likely use the site of the proposed project. According to eBird, a peregrine falcon was recently seen east of the site, in Petaluma, and a prairie falcon was observed hunting western bluebirds in Helen Putnam Regional Park on 1 February 2021. The analysis of potential project impacts to peregrine and prairie falcons needs to be revised in the RDEIR.

As part of its explanation for why the project would not cause significant impacts to golden eagle, peregrine falcon and prairie falcon, the RDEIR implies that impacts are limited to "nesting habitat." The RDEIR separates foraging and perching habitat from nesting habitat, and then claims the former types of habitat occur on the project site, but not the latter type. This separation of habitat types is contrived for convenience to minimalize conclusions of potential project impacts. In reality, there is only *habitat*, and all of it is critical for nest success and persistence of the species. No animal can successfully breed without having acquired sufficient forage and effective refuge during both the breeding season and non-breeding season and both along migration routes and at migration destinations. Any animal coming up short will either not have survived to nest in the next season or it will lack the energy stores and physical conditioning to successfully nest. For the RDEIR to acknowledge that the site provides foraging and perching opportunities is the same as to acknowledge that the site provides resources that are critical to nest success. The question over whether nest structures occur on site cannot be answered soundly by mere speculation, but only by experience and actual directed surveys.

The RDEIR continues its misdirection by claiming, "Other raptors, such as ferruginous hawk, merlin, and bald eagle may be infrequent winter migrants and uncommon aerial transients that may forage and roost in the project vicinity, but essential breeding habitat for these species is absent." Bald eagles will use the site year-round, mostly for foraging but also for stop-over opportunity during long-distance flights. Merlin and ferruginous hawks are well known to migrate to the area in winter, and they are also well known to migrate north for breeding in spring and summer. These species do not breed in the project area, but as I explained in the preceding paragraph, migratory species cannot successfully breed if they cannot successfully forage at their migratory destinations. It is, in fact, essential for merlin and ferruginous hawk to find sufficient forage in the project area so that they can breed at the other end of their migration route. The RDEIR inappropriately absolves the project of any responsibility over what adverse impacts would befall these species should the project destroy the increasingly diminishing forage at the southern end of their winter migration.

Returning to the RDEIR's claims that nesting habitat is generally unavailable and that no nesting was observed during reconnaissance visits, I first point out that nearly all of the special-status species of birds listed in RDEIR Table 4.3-1 can nest at the project site. With the existing neighborhoods along Windsor Drive, I would not expect golden eagles to nest at the site because breeding golden eagles are typically averse to human presence, but every other species in the Table could nest there. Horned larks, burrowing owls, and northern harriers are ground-nesters. Having recorded loggerhead shrike nests across a 16,700-hectare study area for 4 years, I can say with confidence that loggerhead shrikes can nest on site. With 4 years' experience recording and analyzing site attributes of white-tailed kite nests (starting with Erichsen et al. 1996), I am confident in concluding the site provides suitable habitat of white-tailed kite. All of the Accipiters and Falcons in RDEIR Table 4.3 can also nest in the riparian forest of the

project site. The claim that the site is generally absent of nesting habitat is unfounded and misleading.

The claim of no nesting habitat is also unfounded, as noted above, because it is based on the outcome of reconnaissance-level surveys. The surveys performed at the site were not detection surveys for breeding birds. The closest that any of the surveys came to breeding bird surveys was the burrowing owl survey, but that survey was focused only on burrowing owls and fell short of the CDFW (2012) breeding-season survey standards. No survey was otherwise directed toward breeding birds. Although springtime surveys were directed toward plants, frogs, burrowing owls and badgers, none were directed toward birds. As far as I can determine from the RDEIR, no biologist has yet to survey the grassland nor the trees for bird nests, nor for bird behaviors indicative of nesting. It is therefore inappropriate of the RDEIR to imply that bird nests are absent simply because they were not seen in reconnaissance-level surveys. Those surveys were not designed to record bird nests, so the outcomes of those surveys do not bear on any analysis of whether birds nest on site.

The assessments performed for bats in 2004 and 2014 were performed without the aid of any means to actually detect bat activity other than looking for bat guano under barns and sheds. Based on what I can discern from the RDEIR, no use was made of acoustic detectors, thermal-imaging cameras or mist nets. An assessment without these tools is an unreliable foundation for determining habitat suitability of bats. Without these tools of detection, the assessment cannot rule out the occurrences of individual species.

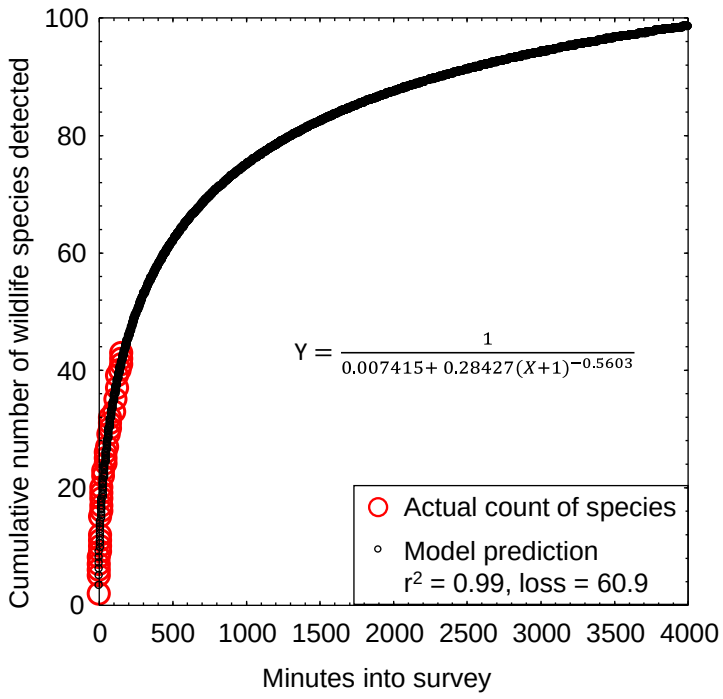
According to the RDEIR (p. 4.3-21), western red bat is not currently recognized as a species of special concern by the California Department of Fish and Wildlife. But it is so recognized. Under the California Fish and Game Code, western red bat is a California Species of Special Concern.

It is not enough for the RDEIR to simply list surveys and assessments performed for plants and wildlife and wetlands on the project site. As I pointed out earlier, the reader needs appropriate information about the surveys to assess the credibility of survey outcomes. The reader needs to know whether the surveys qualified as detection surveys. Surveys known as 'detection surveys' have been developed by species' experts to provide biologists with sufficient opportunity for detecting a particular special-status species. Detection surveys capitalize on species' attributes that predispose them to detection, but they also rely on sufficient survey effort to account for the stochastic nature of individuals of a species being both available and detectable at the place under surveillance. Detection surveys are also used for supporting absence determinations, for improving the efficacy of preconstruction surveys, and for supporting the formulation of appropriate mitigation measures. The reader needs to know that reconnaissance-level surveys are not surrogates for detection surveys.

But neither are reconnaissance surveys totally without value. When diligently performed, and when outcomes are 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. I only had three hours I could commit to a visual scan survey on 11 February 2021, so there were only so many species I was likely to detect. By recording when I detected each species, I can 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 an inevitable asymptote of the number of species detectable from the same survey method over a longer time. In this case, I would have detected >100 species of terrestrial vertebrate wildlife after 67 hours of the same type of survey during the same portion of the year, but I could have detected even more species with commitment of more than 67 hours. I could have also accelerated my rate of wildlife species detections by surveying at different times of day, in different seasons, and using various methods such as acoustic detectors or thermal-imaging for bats, owls, and nocturnally migratory birds, and live-trapping for small mammals. My reconnaissance survey informs me that the site is rich in wildlife.

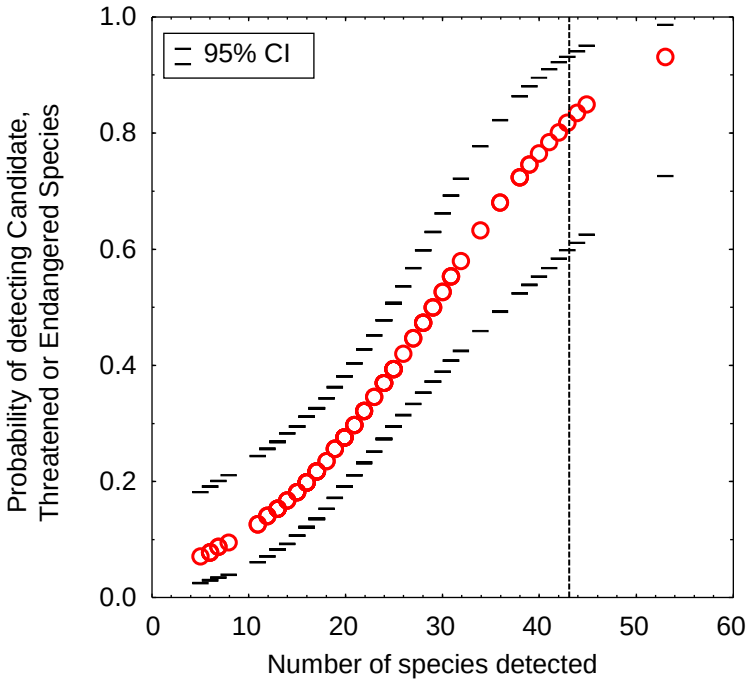
Figure 1. *Actual and predicted relationships between the number of vertebrate wildlife species detected and the elapsed survey time based on visual scan on 11 February 2021. Note that the relationships would differ if the survey was based on another method, another time of day, or during another season. Also note the cumulative number of vertebrate species across all methods, times of day, and seasons would increase substantially.*



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. Based on the outcomes of 106 previous surveys that I performed at sites of proposed projects, my survey effort at the currently proposed project site carried an 82% chance of detecting a listed species. Although the odds were pretty good, considering my survey effort, this time I did not detect a listed species. Another survey of similar effort would likely result in detection of a listed species because the site is rich in wildlife. The RDEIR needs to be revised to more carefully analyze potential project impacts to special-status species of wildlife.

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 vertical dashed line represents the number of species I detected on 11 Feb 2021.*



Overall, the RDEIR founds its analysis of occurrence likelihoods of special-status species on a very cursory, inadequate review of the available data. The RDEIR should also make use of eBird, iNaturalist, and local knowledge of wildlife occurrences. According to eBird and iNaturalist records, 66 special-status species of vertebrate wildlife have been recently detected nearby or within the region of the project site, or their geographic ranges overlap the site (Table 2). At the site, I detected 6 of the special-status species listed in Table 2, and this outcome required only 3 hours of my time. I am confident that with more survey time, including surveys during other times of year and using additional methods, I would also detect multiple other species including northern harrier, merlin, white-tailed kite, yellow warbler, and multiple species of bats. Multiple special-status species of bats likely roost in the trees and old structures on site (Kunz and Lumsden 2003). A larger effort is needed to inform the public and decision-makers about the potential project impacts to wildlife and how to mitigate them.

Table 2. *Occurrence likelihoods of special-status species at the project site, based on records of sightings in eBird and iNaturalist. Entries in bold font under 'eBird, iNaturalist' represent species I observed at the site.*

Species	Scientific name	Status[1]	Occurrence likelihood	
			RDEIR	eBird, iNaturalist
California tiger salamander	*Ambystoma californiense*	FT, CT	Unlikely	Nearby
California red-legged frog	*Rana draytonii*	FT, SSC	Present	Nearby
Foothill yellow-legged frog	*Rana boylii*	CE, SSC	Unlikely	In region
Western pond turtle	*Emys marmorata*	SSC	Unlikely	Nearby
Caspian tern	*Hydroprogne caspia*	BCC		Nearby
California gull	*Larus californicus*	TWL		Nearby
Turkey vulture	*Cathartes aura*	FGC 3503.5		Adjacent
Osprey	*Pandion haliaetus*	TWL, FGC 3503.5		Nearby
Bald eagle	*Haliaeetus leucocephalus*	BGEPA, BCC, CE, CFP		Nearby
Golden eagle	*Aquila chrysaetos*	BGEPA, BCC, CFP	Unlikely	Very close (2/2/21)
Red-tailed hawk	*Buteo jamaicensis*	FGC 3503.5		**Adjacent**
Ferruginous hawk	*Buteo regalis*	BCC, TWL, FGC 3503.5		Nearby
Swainson's hawk	*Buteo swainsoni*	BCC, CT		Very close
Rough-legged hawk	*Buteo regalis*	FGC 3503.5		Nearby
Red-shouldered hawk	*Buteo lineatus*	FGC 3503.5		Adjacent
Sharp-shinned hawk	*Accipiter striatus*	TWL, FGC 3503.5	Possible	Very close
Cooper's hawk	*Accipiter cooperi*	TWL, FGC 3503.5	Possible	Very close
Northern harrier	*Circus cyaneus*	SSC3, FGC 3503.5	Unlikely	Adjacent
White-tailed kite	*Elanus leucurus*	CFP, FGC 3503.5	Possible	Adjacent
American kestrel	*Falco sparverius*	FGC 3503.5		**Adjacent**
Merlin	*Falco columbarius*	TWL, FGC 3503.5		Nearby
Prairie falcon	*Falco mexicanus*	BCC, TWL, FGC 3503.5	Unlikely	Nearby
Peregrine falcon	*Falco peregrinus*	BCC, CFP	Unlikely	Nearby
Burrowing owl	*Athene cunicularia*	BCC, SSC2	Unlikely	Nearby
Great-horned owl	*Bubo virginianus*	FGC 3503.5		Nearby
Long-eared owl	*Asio otus*	SSC3, FGC 3503.5		In region
Short-eared owl	*Asio flammeus*	SSC3, FGC 3503.5		Nearby
Barn owl	*Tyto alba*	FGC 3503.5		Adjacent
Western screech-owl	*Megascops kennicotti*	FGC 3503.5		**Nearby**
Allen's hummingbird	*Selasphorus sasin*	BCC		Nearby

Species	Scientific name	Status[1]	Occurrence likelihood	
			RDEIR	eBird, iNaturalist
Rufous hummingbird	*Selasphorus rufus*	BCC		Nearby
Nuttall's woodpecker	*Picoides nuttallii*	BCC		**Very close**
Lewis's woodpecker	*Melanerpes lewis*	BCC		Nearby
Vaux's swift	*Chaetura vauxi*	SSC2		Nearby
Willow flycatcher	*Epidomax trailii*	CE, BCC		In region
Olive-sided flycatcher	*Contopus cooperi*	BCC, SSC2		In region
Oak titmouse	*Baeolophus inornatus*	BCC		**Adjacent**
Horned lark	*Eremophila alpestris*	TWL	Unlikely	Nearby
Loggerhead shrike	*Lanius ludovicianus*	BCC, SSC2	Possible	Nearby
Yellow-billed magpie	*Pica nuttalli*	BCC		In region
Common yellowthroat	*Geothlypis trichas sinuosa*	SSC3		Nearby
Yellow warbler	*Setophaga petechia*	BCC, SSC2		Nearby
Yellow-breasted chat	*Icteria virens*	SSC3		In region
Oregon vesper sparrow	*Pooecetes gramineus affinis*	SSC2		Nearby
Grasshopper sparrow	*Ammodramus savannarum*	SSC2		Nearby
Summer tanager	*Piranga rubra*	SSC1		Nearby
Tricolored blackbird	*Agelaius tricolor*	CT, BCC		Nearby
Yellow-headed blackbird	*X. xanthocephalus*	SSC3		In region
Lawrence's goldfinch	*Spinus lawrencei*	BCC		Nearby
Pallid bat	*Antrozous pallidus*	SSC, WBWG H	Unlikely	Neaby
Townsend's big-eared bat	*Plecotus t. townsendii*	SSC, WBWG H	Unlikely	Nearby
Western mastiff bat	*Eumops perotis*	SSC, WBWG H		Possible
Silver-haired bat	*Lasionycteris noctivagans*	WBWG:M		In region
Western red bat	*Lasiurus blossevillii*	SSC, WBWG H	Possible	In region
Little brown bat	*Myotis lucifugus*	WBWG:M	Unlikely	Nearby
Big brown bat	*Episticus fuscus*	WBWG:L		In region
California myotis	*Myotis californicus*	WBWG:L		Nearby
Canyon bat	*Parastrellus hesperus*	WBWG:M		In range
Small-footed myotis	*Myotis cililabrum*	WBWG M		In region
Long-eared myotis	*Myotis evotis*	WBWG M		In region
Fringed myotis	*Myotis thysanodes*	WBWG H		In region
Long-legged myotis	*Myotis volans*	WBWG H		In range

Species	Scientific name	Status[1]	Occurrence likelihood	
			RDEIR	eBird, iNaturalist
Yuma myotis	*Myotis yumanensis*	WBWG LM	Unlikely	In region
Hoary bat	*Lasiurus cinereus*	WBWG LM		Nearby
Ringtail	*Bassariscus astutus*	CFP		In range
American badger	*Taxidea taxus*	SSC	Unlikely	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), FGC 3503.5 = 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), TWL = Taxa to Watch List (Shuford and Gardali 2008), WBWG = Western Bat Working Group with low, medium and high conservation priorities.

HABITAT LOSS

The RDEIR does not estimate the loss in bird nests and productivity that would result from the project. The project would contribute to an ongoing trend of declining birds in North America due to habitat loss and habitat fragmentation (Rosenberg et al. 2019). Habitat loss not only results in the immediate numerical decline of wildlife, but also in permanent loss of productive capacity. For example, a grassland/wetland/woodland complex at one study site had a total bird nesting density of 32.8 nests per acre (Young 1948). In another study on a similar complex of vegetation cover, the average annual nest density was 35.8 nests per acre (Yahner 1982). These densities averaged 34.3 nests per acre. Given that the homes would be developed upslope from Kelly Creek, it would destroy more grassland than woodland or wetland. A reasonable estimate would be that total avian nest density on the development area would be a third of that quantified at the Young (1948) and Yahner (1982) study sites, or about 11.4 nests per acre per year across 22.1 acres of permanent impacts.

Assuming a total breeding density of only a third of the mean between the Young (1948) and Yahner (1982) study sites, 252 nest sites (11.4 nests/acre/year × 22.1 acres) would be a great many nest sites. The loss of this many nest sites would qualify as a significant project impact that has not been addressed in the RDEIR. But the impact does not end with the immediate loss of nests as the site is graded for construction. The reproductive capacity of the site is lost. The average number of fledglings per nest in Young's (1948) study was 2.9. Assuming Young's (1948) study site typifies bird productivity, the project would prevent the production of 731 fledglings per year. After 100 years and further assuming an average bird generation time of 5 years, the lost capacity of both breeders and annual fledgling production would total **83,180 birds** {(nests/year × chicks/nest × number of years) + (2 adults/nest × nests/year) × (number of years ÷ years/generation)}. The project's denial to California of 83,180 birds over the first century following construction would qualify as a significant and substantial impact. This impact is not been addressed in the RDEIR, nor does the RDEIR provide any compensatory mitigation for it. The RDEIR should be revised to appropriately analyze the project's impacts from habitat loss. The example analysis I provide above should be extended to other taxa including to herpetofauna and mammals.

WILDLIFE MOVEMENT

According to the RDEIR (p. 4.3-25), "The drainages tend to serve as movement corridors for larger wildlife species, such as deer, raccoon, and grey fox, particularly where dense growth provides protective cover and retreat habitat." I spent nearly 1,000 hours behind a FLIR T620 thermal-imaging camera fitted with an 88.9 mm telephoto lens to observe both volant and terrestrial wildlife among many stations across a large study area. I recorded the nocturnal movement patterns of many deer, raccoons, gray foxes and other species such as American badger. I was particularly interested in learning whether and to what degree mammals moved along drainages and other linear features of the environment. I found that many mammals did follow such linear features, but many did not. Many of the large mammals that I followed moved across wide valleys and broad slopes, where their encounter frequencies with other large

mammals were minimized. Animals moving along narrow reaches of the landscape, such as along drainages, are more likely to encounter other large mammals, some of which are larger and more dangerous. Therefore, the RDEIR's characterization of Kelly Creek and its tributary as being the only possible means for large mammals to move across the site is unfounded and misleading.

The focus of discussion on wildlife movement corridors implies that a project's interference with a corridor is the only means by which a project can interfere with wildlife movement. But this standard would be 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 all the more important for wildlife movement because it provides opportunities for stopover and staging of volant wildlife during migration, and for dispersal and home range patrol while opportunities nearby diminish as anthropogenic uses expand (Warnock 2010, Taylor et al. 2011, Runge et al. 2014). The project would cut wildlife off from stopover and staging opportunities, forcing volant wildlife to travel even farther between remaining patches of stopover refugia. The project would interfere with wildlife movement in the region. The RDEIR needs to be revised to analyze this type of impact.

TRAFFIC IMPACTS ON WILDLIFE

A shortfall of the RDEIR is its failure to analyze the impacts of the project's added road traffic on special-status species of wildlife, including to animals that would be killed far from the project's construction footprint; they would be crossing roads traversed by cars originating from or headed toward the project site. The project's impacts to wildlife would add to ongoing traffic impacts, and would reach as far from the project as cars and trucks travel to or from the project site. Evidence of such ongoing impacts was readily visible during my site visit, when I found a road-killed striped skunk on Windsor Drive between the two parcels where new homes are proposed.

Vehicle collisions have accounted for the deaths of many thousands of reptile, amphibian, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally.

In a recent study of traffic-caused wildlife mortality, investigators found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches along a 2.5 mile stretch of Vasco Road in Contra Costa County, California (Mendelsohn et al. 2009). Using carcass detection trials performed on land immediately adjacent to the traffic mortality study (Brown et al. 2016) to adjust the found fatalities for the proportion of fatalities not found due to scavenger removal and searcher error, the estimated traffic-caused fatalities was 12,187. This fatality estimate translates to a rate of 3,900 wild animals per mile per year killed. In terms comparable to the national

estimates, the estimates from the Mendelsohn et al. (2009) study would translate to 243,740 animals killed per 100 km of road per year, or 29 times that of Loss et al.'s (2014) upper bound estimate and 68 times the Canadian estimate. An analysis is needed of whether increased traffic generated by the project site would similarly result in local impacts on wildlife.

Increased use of existing roads would increase wildlife fatalities (see Figure 7 in Kobylarz 2001). Wildlife roadkill is not randomly distributed, and so it can be predicted. Causal factors include types of roadway, human population density, and temperature (Chen and Wu 2014), as well as time of day and adjacency and extent of vegetation cover (Chen and Wu 2014, Bartonička et al. 2018), and intersections with streams and riparian vegetation (Bartonička et al. 2018). For example, species of mammalian Carnivora are killed by vehicle traffic within 0.1 miles of stream crossings >40 times other than expected (K. S. Smallwood, 1989-2018 unpublished data). Reptiles are killed on roads where roadside fences end or where fences are damaged (Markle et al. 2017). There has even been a function developed to predict the number of golden eagles killed along the road, where the function includes traffic volume and density of road-killed animals available for eagles to scavenge upon (Lonsdorf et al. 2018). These factors also point the way toward mitigation measures, which should be formulated in a revised RDEIR.

Predicting project-generated traffic impacts to wildlife

The RDEIR predicts 550,858 vehicle miles traveled per year (VMT) as a result of the project. The project's impacts to wildlife can be predicted to a reasonable degree of accuracy based on what scientific monitoring has learned from collision impacts of moving obstacles elsewhere in the lower atmosphere. One type of impact to consider is blunt-force injury and death caused by collisions with the front ends of vehicles. Assuming the average car frontal surface area is 3.08 m^2 (average height of 1.7 m and average wheelbase of 1.81 m), then the predicted average annual volume of airspace intercepted by cars would be 3.08 m^2 × 886,330,522 m (1,609 m/mile × 550,858 miles) = 2729,898,008 m^3.

This volume of intercepted airspace would be equivalent to the intercepted winds of 32.2 2.3-MW wind turbines each of which in the Altamont Pass averages about 41 bird fatalities per year (my estimates of fatalities based on data in H.T. Harvey & Associates 2020, Great Basin Bird Observatory and H.T. Harvey & Associates 2020).[1] Therefore, front-end, blunt-force mortality would be predicted, in this example, to tally **1,320 birds annually**. It remains unknown whether collision risk is higher or lower for vehicles traveling forward to intercept airspace as compared to wind turbines remaining

[1] A 2.3-MW wind turbine is rated at 14 m/s. It runs an average of about 8 hours per day with a blade area of about 210 m^2. Daily volume of wind intercepted by the turbine blades is 210 m^2 × 14 m/s × 8 hr × 3600 s/hr = 84.67 million m^3. Fatality monitoring at the Vasco Winds and Golden Hills projects resulted in fatality estimates that accounted for the proportion of fatalities never found by searchers.

stationary to intercept wind. Also, yet to be considered are the deaths and injuries to vertebrate wildlife caused by crushing under tires, broadside impacts of flying birds, and turbulence-induced injuries and deaths above, to the side, and in the wake of traveling cars. However, even if one or more assumptions prove inaccurate, the magnitude of the impact would remain very large.

Based on my assumptions and simple calculations, the project-generated traffic would cause substantial, significant impacts to wildlife. The RDEIR needs to be revised to analyze the project-generated traffic impacts to wildlife. Mitigation measures to improve wildlife safety along roads are available and are feasible, and they need exploration for their suitability with the proposed project.

WINDOW COLLISIONS

Window collisions are often characterized as either the second or third largest source or human-caused bird mortality. The numbers behind these characterizations are often attributed to Klem's (1990) and Dunn's (1993) estimates of about 100 million to 1 billion bird fatalities in the USA, or more recently 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

Predicting the number of bird collisions at a new project is challenging because the study of window collisions remains in its early stages. Collision rate metrics have varied, including collisions per building per year and collisions per m^2 of window. The problem with the temporal factor in the collision rate metrics has been monitoring time spans varying from a few days to 10 years, and even in the case of the 10-year span, monitoring was largely restricted to spring and fall migration seasons. Short-term monitoring during one or two seasons of the year cannot represent a 'year,' but monitoring has rarely spanned a full year. Using 'buildings' in the metric treats buildings as all the same size and height, when we know they are not. Using square meters of glass in the metric treats glass as the only barrier upon which birds collide against a building's façade, when we know it is not. It also treats all glass as equal, even though we know that collision risk varies by type of glass as well as multiple factors related to contextual settings.

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 m^2 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 m^2 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 RDEIR does not provide sufficient structural detail to measure the extent of glass windows, but it does provide the square footage (s.f.) of floorspace of the homes. I therefore applied my own measurements of 0.0147368 m^2 of glass window extent per s.f. of floorspace in modern homes. Based on my measured rate, the proposed project would add 1,215 m^2 of new glass windows. Aplying the mean fatality rate (above) to my estimate of 1,215 m^2 of glass windows predicts **89 bird deaths per year (95% CI: 53-125)**. The 100-year toll from this average annual fatality rate would be 8,900 bird deaths (95% CI: 5,300-12,500). 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 RDEIR, it is my opinion that the project would result in potentially significant adverse biological impacts. The RDEIR needs to be revised 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. Existing structures can be modified or retrofitted to reduce impacts, and proposed new structures can be more carefully sited, designed, and managed to minimize impacts. However, the costs of some of these measures can be high and can vary greatly, but most importantly the efficacies of many of these measures remain uncertain. Both the costs and effectiveness of all of these measures can be better understood through experimentation and careful scientific investigation. **Post-construction fatality monitoring should be an essential feature of any new building project**.

HOUSE CATS

House cats would be introduced to the project site by residents of the proposed residential units. However, the RDEIR 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 RDEIR, the proposed project would add 77 new residents. The above rates applied to this number of new residents **would add 34 cats, which would kill 4,270 vertebrate wildlife per year**.

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/). According to the RDEIR, an outfall from the project would drain into Kelly Creek, which would then transport *Toxoplasma gondii* downstream where it could infect ringtail and eventually sea otters and other marine mammals. The RDEIR needs to be revised to address the impacts of house cats to wildlife.

CUMULATIVE IMPACTS

The RDEIR characterizes cumulative effects as simply residual impacts of incomplete mitigation of project-level impacts. It asserts that environmental review for other proposed projects in the area will ensure adequate protection and management of biological resources in Petaluma. 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 RDEIR'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. The RDEIR needs to refrain from assuring that the environmental reviews for other projects will avoid cumulative impacts. It needs to be revised to perform an appropriate, serious analysis of cumulative impacts.

MITIGATION

Measure BIO-1a – Permits from resource agencies. It goes without saying that take permits are required prior to construction, but acquisition of permits does not necessarily ensure impacts would be adequately mitigated. Acquisition of permits is more of a required step than it is a mitigation measure.

Measure BIO-1b – Final California Red-Legged Frog Mitigation Plan. It would help to provide more details related to this plan, because this plan would be critical to mitigating impacts to California red-legged frog, and because members of the public could potentially contribute to a better plan. As formulated, this measure defers the plan development to a time after RDEIR certification, thereby bypassing meaningful public input.

To exemplify my point, I will offer suggestions. I have seen the stock pond where California red-legged frogs were found, and I have seen portions of Kelly Creek. I have also surveyed many miles of streams for California red-legged frogs and I have performed research on the species and formulated a conservation plan involving the

management of breeding ponds on Naval Weapons Station, Seal Beach, Detachment Concord (Smallwood and Morrison 2008). The condition of the project site's stock pond reminded me of pond conditions where California red-legged frogs used to breed at Concord Naval Weapons Station. Ponds that were once used for breeding, but which ceased being used, were those that had either filled with silt or where earthen levees had failed. The stock pond on the project site is filling with silt and needs to be dredged. I suggest it be dredged in phases over two to three years. Its earthen levee also appears to be failing, as a gullied channel has appeared below its southern edge and extends all the way to Kelly Creek. The levee needs repair, and outflow from the pond needs to be better managed.

Measure BIO-1c and BIO 1d – Preconstruction surveys for bird nests and bat roosts. 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 the RDEIR, 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.

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.

Measure BIO-4 – Interpretive program and management of barriers to movement. Whereas I concur that a visitor interpretive program would be helpful, and management of fencing could improve movement of large mammals into and out of the property, these measures do not compensate for project interference with wildlife movement in the region. The proposed measures do nothing to minimize or compensate for impacts to movement by volant species, which are largely unaffected by fences. Impacts to volant wildlife would be caused by habitat loss and infiltration of the open spaces by outdoor house cats and people. The proposed measures do nothing to offset the barrier effects the project would pose to nonvolant animals that would normally move between the project site and the remaining open spaces to the east and southeast of Windsor Drive and D Street. Interference with movement to those spaces should be regarded as additional habitat loss, for which compensatory mitigation is needed.

RECOMMENDED MITIGATION

Habitat Protection

The RDEIR vaguely implies that habitat would be conserved by payment of a compensatory mitigation fee to be worked out later in a California Red-Legged Frog Mitigation Plan. However, I did not see any indication that loss of upland habitat of California red-legged frog would be mitigated. Nor did I see any compensatory mitigation for other species. Many more special-status species would be significantly and adversely affected by this project. Compensatory mitigation is also 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).

Internal to the project, residential yards should be covered to the extent feasible by natural vegetation. Native plants attract beneficial arthropods, and the increased abundance of arthropods combined with the structures of the plants themselves attract vertebrate wildlife for both stopover and permanent residence (Burghardt et al. 2008, Goddard et al. 2009, Lerman and Warren 2011, Narango et al. 2017, Adams et al. 2020, Berthon et al. 2021). Use of native vegetation would also minimize outflows of pesticides and synthetic fertilizers from the neighborhood to Kelly Creek.

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.

Road Mortality

I recommend funding one or more wildlife crossings at strategic locations along roads used by the project. I also recommend funding research into wildlife mortality caused by car traffic in the area. Traffic-calming measures would also help.

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,

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Shawn Smallwood, Ph.D.

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Photo 11. *Western bluebird on the project site, 11 February 2021.*

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 basedon 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 founds 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 interspersion 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.

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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.

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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.

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- 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);
- 2nd comments on Heber 2 Geothermal Repower Project IS/MND, El Centro (2020; 8);
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- 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);

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- Levine-Fricke Softball Field Improvement Addendum, UC Berkeley (2020; 16);
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- 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);
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- 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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- 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 Gorgonio 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);
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- Agua Mansa Distribution Warehouse Project Initial Study (2016; 14);
- Santa Anita Warehouse MND, Rancho Cucamonga (2016; 12);
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- 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);
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- 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);
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- 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);
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- 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);
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- 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 Calexico 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);
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- 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.);
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- Rio del Oro Specific Plan Project Recirculated DEIR, Mather (2008: 66);
- Replies on Regional University Specific Plan EIR, Roseville (2008; 20);
- Regional University Specific Plan EIR, Roseville (2008: 33);
- Clark Precast, LLC's "Sugarland" project, ND, Woodland (2008: 15);
- Cape Wind Project DEIS, Nantucket (2008; 157);
- Yuba Highlands Specific Plan EIR, Spenceville, Yuba County (2006; 37);
- Replies to responses on North Table Mountain MND, Butte County (2006; 5);

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

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

Comments on other Environmental Review Documents:

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

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

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

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

Posters at Professional Meetings

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

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

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

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

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

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

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

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

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

Presentations at Professional Meetings and Seminars

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Other forms of Participation at Professional Meetings

- Scientific Committee, Conference on Wind energy and Wildlife impacts, Berlin, Germany, March 2015.

- Scientific Committee, Conference on Wind energy and Wildlife impacts, Stockholm, Sweden, February 2013.

- Workshop co-presenter at Birds & Wind Energy Specialist Group (BAWESG) Information sharing week, Bird specialist studies for proposed wind energy facilities in South Africa, Endangered Wildlife Trust, Darling, South Africa, 3-7 October 2011.

- Scientific Committee, Conference on Wind energy and Wildlife impacts, Trondheim, Norway, 2-5 May 2011.

- Chair of Animal Damage Management Session, The Wildlife Society, Annual Meeting, Reno, Nevada, September 26, 2001.

- Chair of Technical Session: Human communities and ecosystem health: Comparing perspectives and making connection. Managing for Ecosystem Health, International Congress on Ecosystem Health, Sacramento, CA August 15-20, 1999.

- Student Awards Committee, Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

- Student Mentor, Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

Printed Mass Media

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

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

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

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

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

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

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

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

Radio/Television

PBS News Hour,

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Representative special-status species experience

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

RESPONSES TO O-PRP-4 LETTER

Response O-PRP-4-1: Concerns of the commentor over the analysis of baseline conditions and belief that the RDEIR provides an incomplete and inadequate assessment of potential impacts on wildlife, special-status species, and cumulative impacts is noted. See **Master Response 1 – Need for Updated Biological Surveys, Master Response 2 – California Red-Legged Frog Surveys**, and **Master Response 4 – Special-Status Species Present at the Project Site**.

With respect to Dr. Smallwood comments, see **Responses I-Smallwood-1** through **I-Smallwood-32**.

O-PRP-5

Ervin, Olivia

From: Petalumans for Responsible Planning <PetRP@comcast.net>
Sent: Wednesday, March 10, 2021 1:42 PM
To: Ervin, Olivia
Subject: Additional Biological Research of Davidon / Scott Ranch RDEIR
Attachments: Comparison Smallwood & RDEIR.docx.pdf; CA Dept of Fish & Wildlife 2013.pdf

Please include this information with the Davidon / Scott Ranch public comments.

From: Petalumans for Responsible Planning [mailto:PetRP@comcast.net]
Sent: Monday, March 8, 2021 7:10 AM
To: 'tbarrett@cityofpetaluma.org' <tbarrett@cityofpetaluma.org>; 'bbarnacle@cityofpetaluma.org' <bbarnacle@cityofpetaluma.org>; 'dfischer@cityofpetaluma.org' <dfischer@cityofpetaluma.org>; 'mhealy@cityofpetaluma.org' <mhealy@cityofpetaluma.org>; 'dking@cityofpetaluma.org' <dking@cityofpetaluma.org>; 'kmcdonnell@cityofpetaluma.org' <kmcdonnell@cityofpetaluma.org>
Subject: Additional Biological Research of Davidon / Scott Ranch RDEIR

Dear Mayor Barrett and City Council Members,

On March 1, 2021, we emailed a PDF entitled “Smallwood Comments_Davidon Homes_Petaluma” from Dr. Shawn Smallwood, ecologist, who completed a site visit to the Davidon / Scott Ranch property in February 2021. Dr. Smallwood also analyzed the 2020-2021 Scott Ranch RDEIR.

In our effort to help the public analyze the 75 page Biological Resources report in the RDEIR, we created the attached chart entitled “Comparison Smallwood & RDEIR” that compares that section of the RDEIR and Dr. Smallwood’s analysis.

Pages 1-3 summarize Dr. Smallwood’s analysis of the RDEIR. Pages 4-24 are a table. The statements and page numbers from the RDEIR are in column #1. The analysis from Dr. Smallwood of the statements and page numbers in his report are in column #2. 1

The reoccurring theme throughout the analysis of the current Scott Ranch RDEIR is the same:

“Most of the surveys for biological resources were performed in 2003-2005. Wildlife populations tend to shift locations every generation or so, and given all the other changes to the landscape, to species’ status, and to survey protocols, surveys performed nearly two decades ago are out of date.”

***

Attached is a PDF entitled “CA Department of Fish & Wildlife” dated April 13, 2013, regarding the Davidon DEIR in 2013.

p. 2

“The Report presents the results of a special status plant and wildlife surveys conducted within the proposed Project area during 2003. As more than a decade has passed since the Report was prepared, the Department recommends that the draft EIR be revised to provide an updated habitat assessment and survey results for special-status plant and wildlife species located within the 2

proposed Project area and surround lands. Since no detail into the scope and depth of data collected during additional reconnaissance-level surveys performed since 2003 is given in the draft EIR, the Department does not consider the additional surveys, to be sufficient to accurately assess project impacts in the Draft EIR.

***

Testimony from Rob Hamilton, biologist and President of Hamilton Biological, to the Petaluma City Council on June 19, 2017. (Written testimony can be provided upon request.)

"Although most of the Project site constitutes federally designated critical habitat for the Red-legged Frog, the EIR preparers failed to conduct updated protocol surveys for this species. Rather, data on Red-legged Frog on the project site is based mainly upon protocol surveys conducted in 2003 and 2005. According to the United States Fish & Wildlife Service "2005 Guidance on Field Surveys for the California Red-legged Frog," survey data for this species are normally valid for only two years. Survey efforts in 2009, 2011, and 2015, did not follow the current federal protocol. Given that 12 years have passed since Red-legged Frog habitat data were collected following the required protocol, the EIR cannot rely on outdated protocol surveys, or more recent non-protocol surveys, to make valid assumptions about the status and distribution of Red-legged Frog in the project area. The EIR's failure to provide updated Red-legged Frog surveys, conducted according to protocol, is particularly perplexing because the California Department of Fish & Wildlife notified the City and the applicant in 2013 that the documentation for Red-legged Frog was, at that time, insufficient to accurately assess the Project's impacts." 2

***

Questions to the City Council:

Why do experts, starting with the CA Department of Fish & Wildlife in 2013 and including the 2021 analysis from Dr. Shawn Smallwood, need to keep repeating the same criticisms in the 2013, 2017, and 2021 RDEIRs?

How is the public able to make any recommendations on the environmentally sensitive land with "outdated" reports reported in DEIRs year after year?

Why do these expert critiques never get answered by the developer or the City? Are these critiques irrelevant? The public needs to know.

Petalumans for Responsible Planning

www.PetRP.org

PetRP@comcast.net

O-PRP-5

Summary from Dr. Sawn Smallwood, Ecologist
Site visit and Scott Ranch RDEIR Review, February 28, 2021

The RDEIR's characterization of baseline conditions and its analysis of potential project impacts to vertebrate wildlife are outdated, incomplete and flawed. The RDEIR does not provide the most basic information the reader needs to know about the surveys listed on pages 4.3-2. Decision-makers and the public need to know how much credibility to assign the surveys.

- Most of the surveys for biological resources were performed in 2003-2005. Wildlife populations tend to shift locations every generation or so, and given all the other changes to the landscape, to species' status, and to survey protocols, surveys performed nearly two decades ago are out of date. 3
- Multiple surveys and assessments performed for biological resources on the project site, most nearly two decades ago, but a few assessments more recently. Burrowing owl surveys in 2013 did not meet the standards of the CDFW (2012) guidelines
- The RDEIR should provide a detailed account of which species were seen and in what levels of abundance, what members of each species were doing, and in what environmental context. 4

California Red-Legged Frog

Measure BIO-1a – Permits from resource agencies. It goes without saying that take permits are required prior to construction, but acquisition of permits does not necessarily ensure impacts would be adequately mitigated. Acquisition of permits is more of a required step than it is a mitigation measure. 5

Measure BIO-1b – Final California Red-Legged Frog Mitigation Plan. It would help to provide more details related to this plan, because this plan would be critical to mitigating impacts to California red-legged frog, and because members of the public could potentially contribute to a better plan. As formulated, this measure defers the plan development to a time after RDEIR certification, thereby bypassing meaningful public input.

However, I did not see any indication that loss of upland habitat of California red-legged frog would be mitigated. Nor did I see any compensatory mitigation for other species.

California Tiger Salamander

The RDEIR presents a series of flawed and misleading conclusions regarding California tiger salamander. The RDEIR gives the false impression that it would be impossible for California tiger salamander to occur on site. Essentially, the RDEIR gives up on conserving California tiger salamander in the project area, which is the opposite of how risk assessment should proceed for rare and precious resources in the face of uncertainty. 6

Special Status Birds

The RDEIR assesses impacts to only 10 (22%) of the 45 potentially occurring special-status species of birds (Table 2), thereby neglecting 35 (78%) special-status species of birds.

- The RDEIR states that the following special status species of birds are unlikely on the site: Golden eagle, northern harrier, peregrine falcon, prairie falcon.
- Photographed in Helen Putnam Regional Park: golden eagle (2 February 2021), northern harrier (23 November 2019), prairie falcon (1 February 2021—hunting western bluebirds). A peregrine falcon was recently seen east of the site in Petaluma.
- The RDEIR inappropriately absolves the project of any responsibility over what adverse impacts to Bald eagles or Merlin and ferruginous hawks, who are well known to migrate to the area in winter, and also well known to migrate north for breeding in spring and summer. No mention is made of what would befall these species should the project destroy the increasingly diminishing forage at the southern end of their winter migration.
- No biologist has yet to survey the grassland nor the trees for bird nests, nor for bird behaviors indicative of nesting. It is therefore inappropriate of the RDEIR to imply that bird nests are absent simply because they were not seen in reconnaissance-level surveys. Those surveys were not designed to record bird nests, so the outcomes of those surveys do not bear on any analysis of whether birds nest on site. The reader needs to know that reconnaissance-level surveys are not surrogates for detection surveys. 7
- According to the RDEIR (p. 4.3-21), western red bat is not currently recognized as a species of special concern by the California Department of Fish and Wildlife. But it is so recognized. Under the California Fish and Game Code, western red bat is a California Species of Special Concern.
- The RDEIR does not estimate the loss in bird nests and productivity that would result from the project.

Wildlife Corridor

The focus of discussion on wildlife movement corridors implies that a project's interference with a corridor is the only means by which a project can interfere with wildlife movement. But this standard would be 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. 8

Adverse Effects of residential development

The RDEIR addresses none of the adverse effects of residential development that are additional to habitat loss, including from automobile traffic, glass windows, and outdoor house cats that come with the residents of new development.

- The impacts of the project's added road traffic on special-status species of wildlife, including to animals that would be killed far from the project's construction footprint; they would be crossing roads traversed by cars originating from or headed toward the project site.
- Vehicle collisions have accounted for the deaths of many thousands of reptile, amphibian, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level.
- Window collisions are often characterized as either the second or third largest source or human-caused bird mortality. Given the predicted level of bird-window collision mortality, and the absence of proposed mitigation in the RDEIR, it is my opinion that the project would result in potentially significant adverse biological impacts.
- The RDEIR 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

9

Comparison of Scott Ranch 4.3 Biological Resources with Analysis from Dr. Sawn Smallwood, Ecologist

https://cityofpetaluma.org/documents/rdeir-4-3-biological-resources/

Scott Ranch 4.3 Biological Resources	Dr. Shawn Smallwood, Ecologist, February 28, 2021	
Accompanied by Sean Micallef of Zentner Planning & Ecology	Shawn Smallwood visited the site of the proposed project for 3 hours on 11 February 2021.	10
	P. 3 Detected 43 species of vertebrate wildlife, 6 of which were special-status species. ***Table 1.*** *Species of wildlife I observed during 3 hours on 11 February 2021.*	11 12
	P. 6 The RDEIR's characterization of baseline conditions and its analysis of potential project impacts to vertebrate wildlife are outdated, incomplete and flawed.	13
	P.6 Since the 2013 DEIR, the status of multiple species has changed, as have survey protocols for special-status species, and as has our understanding of anthropogenic impacts to wildlife.	14
p. 43-41 Mitigation Measure BIO-1c is set forth below to restrict tree removal during nesting season, and require that a qualified biologist conduct preconstruction surveys if tree and grubbing is initiated during the nesting. season. With implementation of Mitigation Measure BIO-1c, project's impact on nesting birds would be less than significant. With implementation of Mitigation Measure BIO-1c, project's impact on nesting birds would be less than significant.	P. 6 We now know that the takings of habitat here and the takings there, along with the usual assurances of insignificant impacts or of mitigated impacts, have resulted in a 29% loss of total bird abundance across North American over the last half-century (Rosenberg et al. 2019).	15
Not addressed in RDEIR	P.6 We also now know – and can quantify – the adverse effects of residential development that are additional to habitat loss, including from automobile traffic, glass windows, and outdoor house cats that come with the residents of new development. The RDEIR addresses none of these potential impacts.	16

Scott Ranch 4.3 Biological Resources	Dr. Shawn Smallwood, Ecologist, February 28, 2021	
p. 43-2 • Biological Resources, Existing Conditions by Zander Associates (2003). • California Red-legged Frog Protocol Surveys by Wildlife Research Associates (2003) • Focused Special-Status Plant Survey by Zander Associates (2004c)	p. 6 According to the RDEIR, most of the surveys for biological resources were performed in 2003-2005. Given that wildlife populations tend to shift locations every generation or so (Taylor and Taylor 1979), and given all the other changes to the landscape, to species' status, and to survey protocols, surveys performed nearly two decades ago are out of date.	16
p. 4.3-4 Burrowing Owl, Badger and Fossorial Mammal Survey Results by Zentner and Zentner (2013).	p. 6-7 Even though burrowing owl surveys were performed later – in 2013 – those surveys did not meet the standards of the CDFW (2012) guidelines, which specify surveys separated by at least three weeks, including 1 survey prior to 15 April and the final survey between 15 June and 15 July. The surveys performed in 2013 did not meet the seasonal survey date thresholds.	17
No list of species in RDEIR	p. 7 The RDEIR lists multiple surveys and assessments performed for biological resources on the project site, most nearly two decades ago, but a few assessments more recently. However, only Micallef (2018) is provided with the RDEIR. Other than maps of broad vegetation cover categories, nowhere in the RDEIR can I find a list of species detected by those who performed site visits.	18
p. 4.3-2 Biological Resources, Existing Conditions by Zander Associates (2003). Request for Jurisdictional Determination by Zander Associates (2003).	p. 7 The RDEIR does not provide the most basic information the reader needs to know about the surveys listed on pages 4.3-2. Provision of the reports of field reconnaissance surveys would have been helpful, assuming there were reports. The dates of the reconnaissance surveys were reported in the 2013 DEIR, but neither the DEIR nor the RDEIR identifies the biologists who performed the surveys. The RDEIR should report when each survey began, how long it lasted, and how it was performed. The RDEIR should also provide a detailed account of which species were seen and in what levels of abundance, what members of each species were doing, and in what environmental context. Decision-makers and the public need to know how much credibility to assign the surveys.	19
p. 4.3-19 The habitat assessment for CTS in 2003 concluded that the stock pond on the project site provides suitable aquatic breeding habitat for this species, but that because the site is located	p. 7 The RDEIR presents a series of flawed and misleading conclusions regarding the occurrence potentials of special-status species of wildlife. For example, when discussing the occurrence potential of California tiger salamander (p. 4.3-19), the RDEIR says "…because the site is located outside the known potential range the	20

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outside the known potential range the species is not believed to be present (Wildlife Research Associates 2003). . . .), but all other known occurrences are over four miles north or west of the project site, and generally separated by the intensively developed area of central Petaluma and suburban residential development of the western hills, severely limiting the potential for any future dispersal to the project site	species is not believed to be present." The appropriate wording would be 'the site is located outside the currently known range…' By adding the word *potential*, the RDEIR gives the false impression that it would be impossible for California tiger salamander to occur on site. Considering that California tiger salamanders have been documented to disperse 2.2 km from breeding ponds (Orloff 2011), the 4 miles reported by the RDEIR as the distance to the nearest sites recorded to host California tiger salamanders does not seem insurmountable. The RDEIR claims that California tiger salamanders at known locations north and west of the site are "generally separated" from the project site by residential development, but aerial imagery shows sufficient open space north and west of the project site for tiger salamanders to disperse and for larger vertebrate wildlife to vector egg masses. Essentially, the RDEIR gives up on conserving California tiger salamander in the project area, which is the opposite of how risk assessment should proceed for rare and precious resources in the face of uncertainty (National Research Council 1986).

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Table 4.3-1, p. 4.3-18 Special-status species of bird potentially occur Cooper's hawk Sharp-shinned hawk White-tailed kite Loggerhead strike Special-status species of bird unlikely to occur Golden eagle Burrowing owl Northern harrier California horned lark Prairie falcon Peregrine falcon p. 4.3-20 However, nesting habitat is generally absent for most of these species or no evidence of nesting activity was observed during field reconnaissance surveys of the site Table 4.3-1, p. 4.3-18 Golden eagle - Habitat Characteristics: Open mountains, foothills, and canyons	p. 7-8 In another example, the RDEIR (p. 4.3-20) reports "Several special-status birds have varying potential to frequent the project site…" Actually, the level of variation was binary: the RDEIR reported 6 special-status species of bird to be unlikely to occur and 4 to potentially occur. According to the RDEIR, the project site poses a bleak setting for special-status species of bird. Further, it claims that nesting habitat is generally unavailable and that no nesting was observed during reconnaissance visits. These conclusions are misleading. The RDEIR assesses impacts to only 10 (22%) of the 45 potentially occurring special-status species of birds (Table 2), thereby neglecting 35 (78%) special-status species of birds. Of the 10 species it does assess, its conclusions do not comport with geographic range overlaps of the project site, with known habitat relationships, and with detection records of birds in the area (Table 2). Regarding its conclusion of no nesting habitat, the RDEIR falsely implies that birds do not nest on the ground and do not nest in the trees that are slated for removal. p. 8 Nor do the occurrence likelihoods in the RDEIR comport with the habitat characterizations of each species – habitat characterizations that appear in the same lines as the occurrence likelihood determinations in Table 4.3-1 of the RDEIR. (The same Table that appeared in the 2013 DEIR.) For example, golden eagle habitat is said to be "Open mountains, foothills, and canyons." By *open*, I assume the RDEIR means treeless, but the habitat characterization is cursory and vague. I have studied golden eagles for many years, and since 2013 I have tracked 35 golden eagles via GPS telemetry. Our telemetered golden eagles use many types of environment from Canada to Mexico, including the type of environment at the project site. The highest golden eagle breeding density in the world occurs just north of the Altamont Pass in Contra Costa County, where patches of grassland and woodland are interspersed similar to the area of the project site. Based on my experience, there is no reason not to expect golden eagles in the project area. In fact, a golden eagle was photographed in Helen Putnam Regional Park as recently as 2 February 2021. The proposed project site provides habitat for golden eagle, which undoubtedly uses the site.

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Table 4.3-1, p. 4.3-18 Burrowing owl - Habitat Characteristics: Open grassland and fields, farms, and ruderal areas p. 4.3-20 However, ground squirrel burrows necessary for nesting by burrowing owl were absent from the project site and there are no occurrences of burrowing owl reported in the project site vicinity by the CNDDB, which does monitor known nesting colonies. This species was not observed during detailed surveys conducted by in 2013 (Zentner and Zentner 2013).	p. 8 In the case of burrowing owl, the RDEIR characterizes habitat as "Open grassland and fields, farms, and ruderal areas," before determining the species is unlikely to occur at the site even though the site conditions match the RDEIR's habitat characterization. In the body of text, the RDEIR provides two explanations for this discordant determination. The first is that "ground squirrel burrows necessary for nesting by burrowing owl were absent from the project site." I have studied burrowing owls even longer than I have studied golden eagles, and along the way I have recorded hundreds of burrowing owl nest sites, including 800 at one of my project sites alone (Smallwood et al. 2013). Whereas burrowing owls are more likely to nest among burrow complexes of ground squirrels, they do not require ground squirrel burrows. This is well published in the scientific literature. I have recorded nest sites in metal culverts, rock piles, caves, the cavity of a downed electric distribution pole, under overhangs of concrete and asphalt pads, and under concrete half-round (Smallwood and Morrison 2018). Other investigators have reported burrowing owls in nest burrows of their own construction, sometimes starting with pocket gopher burrows. The first explanation given for why burrowing owls are unlikely on site is inaccurate. The second reason the RDEIR gives for why burrowing owls are unlikely on site is that no CNDDB records were found of burrowing owls nesting on site. This is a misuse of CNDDB. Whereas consulting CNDDB is fine for confirming presence of a species, it is inappropriate for determining absence and hence narrowing a list of potentially occurring species. CNDDB is voluntary and not based on scientific sampling or equal access to properties. The limitations of CNDDB are well-known, and are summarized in a warning presented by CDFW on the CNDDB web site (https://www.wildlife.ca.gov/ Data/CNDDB/About): "*We work very hard to keep the CNDDB 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 CNDDB 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…*" The RDEIR needs to revise its analysis of potential project impacts to burrowing owl. As a first step, burrowing owl surveys should be performed to the standards of CDFW (2012).

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Table 4.3-1, p. 4.3-18 Northern harrier- Habitat Characteristics: Marshes, fields, and grassland	p. 9 In another example of occurrence determinations not comporting with habitat characterizations, the RDEIR determines northern harrier as unlikely. The habitat is described as "Marshes, fields, and grassland." The project site is largely covered in grassland, so why then does the RDEIR determine the species to be unlikely? I have recorded northern harriers in grasslands hundreds of times, if not thousands of times. I studied northern harriers in grasslands for 21 years. I have recorded northern harrier nests in grasslands. As recently as 23 November 2019, a northern harrier was photographed in Helen Putnam Regional Park and the photo posted on eBird. The analysis of potential project impacts to northern harrier needs to be revised in the RDEIR.
Table 4.3-1, p. 4.3-18 California horned lark - Habitat Characteristics: Open habitat with sparse cover	p. 9 According to the RDEIR, horned lark is unlikely to occur at the project site because its habitat consists of "Open habitat with sparse cover." The RDEIR, however, describes only a narrow part of the species' habitat. Horned larks occur in greatest abundance in grasslands, which I can readily document with hundreds if not thousands of my own data. The horned lark is a grassland species, and nests in grasslands typical of the grassland of the project site.
Table 4.3-1, p. 4.3-18 Prairie falcon & Peregrine falcon - Habitat Characteristics: Canyons, mountains, open grassland p. 4.3-20 Suitable nesting habitat for prairie falcon, peregrine falcon, and golden eagle, which may occasionally forage in the vicinity, is absent from the site because of the lack of suitable cliff faces or ledges used by the falcons and the proximity to existing development which limits the suitability for golden eagle nesting	p. 9 Similarly, the RDEIR pigeonholes prairie falcons and peregrine falcons into unrealistically narrow portions of the environment, in this case to "Canyons, mountains, open grassland." The RDEIR adds, "Suitable nesting habitat for prairie falcon, peregrine falcon, and golden eagle, which may occasionally forage in the vicinity, is absent from the site because of the lack of suitable cliff faces or ledges used by the falcons and the proximity to existing development which limits the suitability for golden eagle nesting." I have studied these species for years. I have recorded them in many types of environment, and not just in canyons, mountains and open grassland. I have recorded occurrences of these species across California, and I have observed and quantified their flight behaviors over grasslands, oak woodlands and groves of California buckeye. I have recorded nest sites of these species, which have sometimes been on cliff faces as reported in the RDEIR, but not always. Golden eagles often nest in trees. Peregrine falcons often nest on buildings. Prairie falcons nest opportunistically, including in the nacelles of derelict wind turbines. These species of falcon occur where birds are abundant, which means they likely use the site of the proposed project. According to eBird, a peregrine falcon was recently seen east of the site, in Petaluma, and a prairie falcon was observed hunting

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	western bluebirds in Helen Putnam Regional Park on 1 February 2021. The analysis of potential project impacts to peregrine and prairie falcons needs to be revised in the RDEIR.
p. 4.3-20 Most of these may forage to varying degrees in the grasslands and woodlands of the site vicinity. However, nesting habitat is generally absent for most of these species or no evidence of nesting activity was observed during field reconnaissance surveys of the site	p. 10 As part of its explanation for why the project would not cause significant impacts to golden eagle, peregrine falcon and prairie falcon, the RDEIR implies that impacts are limited to "nesting habitat." The RDEIR separates foraging and perching habitat from nesting habitat, and then claims the former types of habitat occur on the project site, but not the latter type. This separation of habitat types is contrived for convenience to minimalize conclusions of potential project impacts. In reality, there is only *habitat*, and all of it is critical for nest success and persistence of the species. No animal can successfully breed without having acquired sufficient forage and effective refuge during both the breeding season and non-breeding season and both along migration routes and at migration destinations. Any animal coming up short will either not have survived to nest in the next season or it will lack the energy stores and physical conditioning to successfully nest. For the RDEIR to acknowledge that the site provides foraging and perching opportunities is the same as to acknowledge that the site provides resources that are critical to nest success. The question over whether nest structures occur on site cannot be answered soundly by mere speculation, but only by experience and actual directed surveys.
p. 4.3-20 Other raptors, such as ferruginous hawk, merlin, and bald eagle may be infrequent winter migrants and uncommon aerial transients that may forage and roost in the project vicinity, but essential breeding habitat for these species is absent.	p. 10 The RDEIR continues its misdirection by claiming, "Other raptors, such as ferruginous hawk, merlin, and bald eagle may be infrequent winter migrants and uncommon aerial transients that may forage and roost in the project vicinity, but essential breeding habitat for these species is absent." Bald eagles will use the site year-round, mostly for foraging but also for stop-over opportunity during long-distance flights. Merlin and ferruginous hawks are well known to migrate to the area in winter, and they are also well known to migrate north for breeding in spring and summer. These species do not breed in the project area, but as I explained in the preceding paragraph, migratory species cannot successfully breed if they cannot successfully forage at their migratory destinations. It is, in fact, essential for merlin and ferruginous hawk to find sufficient forage in the project area so that they can breed at the other end of their migration route. The RDEIR inappropriately absolves the project of any responsibility over what adverse impacts would befall these species

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	should the project destroy the increasingly diminishing forage at the southern end of their winter migration. 21
p. 4.3-2 The site reconnaissance and review provided information on general resources in the area . . . p.4.3-6 The additional reconnaissance surveys were conducted on August 30 and December 2, 2004. Follow-up reconnaissance surveys were conducted on June 24 and August 3, 2009, then again on September 29 and October 2, 2011, and then in April, September, and October 2015. A field reconnaissance survey was conducted on May 21, 2019, to verify that field conditions have not changed considerably over the past four years.	p. 11 The claim of no nesting habitat is also unfounded, as noted above, because it is based on the outcome of reconnaissance-level surveys. The surveys performed at the site were not detection surveys for breeding birds. The closest that any of the surveys came to breeding bird surveys was the burrowing owl survey, but that survey was focused only on burrowing owls and fell short of the CDFW (2012) breeding-season survey standards. No survey was otherwise directed toward breeding birds. Although springtime surveys were directed toward plants, frogs, burrowing owls and badgers, none were directed toward birds. As far as I can determine from the RDEIR, no biologist has yet to survey the grassland nor the trees for bird nests, nor for bird behaviors indicative of nesting. It is therefore inappropriate of the RDEIR to imply that bird nests are absent simply because they were not seen in reconnaissance-level surveys. Those surveys were not designed to record bird nests, so the outcomes of those surveys do not bear on any analysis of whether birds nest on site. 22
No detection surveys performed.	p. 11 Detection surveys capitalize on species' attributes that predispose them to detection, but they also rely on sufficient survey effort to account for the stochastic nature of individuals of a species being both available and detectable at the place under surveillance. Detection surveys are also used for supporting absence determinations, for improving the efficacy of preconstruction surveys, and for supporting the formulation of appropriate mitigation measures. The reader needs to know that reconnaissance-level surveys are not surrogates for detection surveys.
p. 4.3-21 No bats were actually encountered during the day-time surveys, and it is uncertain what species may use the buildings for roosting, although observed fecal pellets were of more common species such as myotis (Myotis sp.) and Brazilian free-tailed bat (Tadarida brasiliensis).	p. 11 The assessments performed for bats in 2004 and 2014 were performed without the aid of any means to actually detect bat activity other than looking for bat guano under barns and sheds. Based on what I can discern from the RDEIR, no use was made of acoustic detectors, thermal-imaging cameras or mist nets. An assessment without these tools is an unreliable foundation for determining habitat suitability of bats. Without these tools of detection, the assessment cannot rule out the occurrences of individual species. 23

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p. 4.3-21 While the western red bat and western yellow bat are currently not recognized as SSC species by the CDFW, . . .	p. 11 According to the RDEIR (p. 4.3-21), western red bat is not currently recognized as a species of special concern by the California Department of Fish and Wildlife. But it is so recognized. Under the California Fish and Game Code, western red bat is a California Species of Special Concern.
	p. 13 – Referring to Table 2 in the Smallwood report (p. 14-16) Overall, the RDEIR founds its analysis of occurrence likelihoods of special-status species on a very cursory, inadequate review of the available data. The RDEIR should also make use of eBird, iNaturalist, and local knowledge of wildlife occurrences. According to eBird and iNaturalist records, 66 special-status species of vertebrate wildlife have been recently detected nearby or within the region of the project site, or their geographic ranges overlap the site (Table 2). At the site, I detected 6 of the special-status species listed in Table 2, and this outcome required only 3 hours of my time. I am confident that with more survey time, including surveys during other times of year and using additional methods, I would also detect multiple other species including northern harrier, merlin, white-tailed kite, yellow warbler, and multiple species of bats. Multiple special-status species of bats likely roost in the trees and old structures on site (Kunz and Lumsden 2003). A larger effort is needed to inform the public and decision-makers about the potential project impacts to wildlife and how to mitigate them.
Not addressed in RDEIR	p. 17 **Habitat Loss** The RDEIR does not estimate the loss in bird nests and productivity that would result from the project. The project would contribute to an ongoing trend of declining birds in North America due to habitat loss and habitat fragmentation (Rosenberg et al. 2019). Habitat loss not only results in the immediate numerical decline of wildlife, but also in permanent loss of productive capacity. Given that the homes would be developed upslope from Kelly Creek, it would destroy more grassland than woodland or wetland. A reasonable estimate would be that total avian nest density on the development area would be a third of that quantified at the Young (1948) and Yahner (1982) study sites, or about 11.4 nests per acre per year across 22.1 acres of permanent impacts.

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	Assuming a total breeding density of only a third of the mean between the Young (1948) and Yahner (1982) study sites, 252 nest sites (11.4 nests/acre/year × 22.1 acres) would be a great many nest sites. The loss of this many nest sites would qualify as a significant project impact that has not been addressed in the RDEIR. The reproductive capacity of the site is lost. The average number of fledglings per nest in Young's (1948) study was 2.9. Assuming Young's (1948) study site typifies bird productivity, the project would prevent the production of 731 fledglings per year. After 100 years and further assuming an average bird generation time of 5 years, the lost capacity of both breeders and annual fledgling production would total **83,180 birds** {(nests/year × chicks/nest × number of years) + (2 adults/nest × nests/year) × (number of years ÷ years/generation)}. The project's denial to California of 83,180 birds over the first century following construction would qualify as a significant and substantial impact. This impact is not been addressed in the RDEIR, nor does the RDEIR provide any compensatory mitigation for it. The RDEIR should be revised to appropriately analyze the project's impacts from habitat loss. The example analysis I provide above should be extended to other taxa including to herpetofauna and mammals.
p. 3.-25 The drainages tend to serve as movement corridors for larger wildlife species, such as deer, raccoon, and grey fox, particularly where dense growth provides protective cover and retreat habitat.	**p. 17** **WILDLIFE MOVEMENT** I spent nearly 1,000 hours behind a FLIR T620 thermal-imaging camera fitted with an 88.9 mm telephoto lens to observe both volant and terrestrial wildlife among many stations across a large study area. I recorded the nocturnal movement patterns of many deer, raccoons, gray foxes and other species such as American badger. I was particularly interested in learning whether and to what degree mammals moved along drainages and other linear features of the environment. I found that many mammals did follow such linear features, but many did not. Many of the large mammals that I followed moved across wide valleys and broad slopes, where their encounter frequencies with other large mammals were minimized. Animals moving along narrow reaches of the landscape, such as along drainages, are more likely to encounter other large mammals, some of which are larger and more dangerous. Therefore, the RDEIR's characterization of Kelly Creek and its tributary as being the only possible means for large mammals to move across the site is unfounded and misleading.

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	The focus of discussion on wildlife movement corridors implies that a project's interference with a corridor is the only means by which a project can interfere with wildlife movement. But this standard would be 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 all the more important for wildlife movement because it provides opportunities for stopover and staging of volant wildlife during migration, and for dispersal and home range patrol while opportunities nearby diminish as anthropogenic uses expand (Warnock 2010, Taylor et al. 2011, Runge et al. 2014). The project would cut wildlife off from stopover and staging opportunities, forcing volant wildlife to travel even farther between remaining patches of stopover refugia. The project would interfere with wildlife movement in the region. The RDEIR needs to be revised to analyze this type of impact.
Not addressed in the RDEIR	p. 18 **TRAFFIC IMPACTS ON WILDLIFE** A shortfall of the RDEIR is its failure to analyze the impacts of the project's added road traffic on special-status species of wildlife, including to animals that would be killed far from the project's construction footprint; they would be crossing roads traversed by cars originating from or headed toward the project site. The project's impacts to wildlife would add to ongoing traffic impacts, and would reach as far from the project as cars and trucks travel to or from the project site. Evidence of such ongoing impacts was readily visible during my site visit, when I found a road-killed striped skunk on Windsor Drive between the two parcels where new homes are proposed. Vehicle collisions have accounted for the deaths of many thousands of reptile, amphibian, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405

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	deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally. In a recent study of traffic-caused wildlife mortality, investigators found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches along a 2.5 mile stretch of Vasco Road in Contra Costa County, California (Mendelsohn et al. 2009). Using carcass detection trials performed on land immediately adjacent to the traffic mortality study (Brown et al. 2016) to adjust the found fatalities for the proportion of fatalities not found due to scavenger removal and searcher error, the estimated traffic-caused fatalities was 12,187. This fatality estimate translates to a rate of 3,900 wild animals per mile per year killed. In terms comparable to the national estimates, the estimates from the Mendelsohn et al. (2009) study would translate to 243,740 animals killed per 100 km of road per year, or 29 times that of Loss et al.'s (2014) upper bound estimate and 68 times the Canadian estimate. An analysis is needed of whether increased traffic generated by the project site would similarly result in local impacts on wildlife. Increased use of existing roads would increase wildlife fatalities (see Figure 7 in Kobylarz 2001). Wildlife roadkill is not randomly distributed, and so it can be predicted. Causal factors include types of roadway, human population density, and temperature (Chen and Wu 2014), as well as time of day and adjacency and extent of vegetation cover (Chen and Wu 2014, Bartonička et al. 2018), and intersections with streams and riparian vegetation (Bartonička et al. 2018). For example, species of mammalian Carnivora are killed by vehicle traffic within 0.1 miles of stream crossings >40 times other than expected (K. S. Smallwood, 1989-2018 unpublished data). Reptiles are killed on roads where roadside fences end or where fences are damaged (Markle et al. 2017). There has even been a function developed to predict the number of golden eagles killed along the road, where the function includes traffic volume and density of road-killed animals available for eagles to scavenge upon (Lonsdorf et al. 2018). These factors also point the way toward mitigation measures, which should be formulated in a revised RDEIR.
Not addressed in the RDEIR	p. 19 <u>Predicting project-generated traffic impacts to wildlife</u>

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	The RDEIR predicts 550,858 vehicle miles traveled per year (VMT) as a result of the project. The project's impacts to wildlife can be predicted to a reasonable degree of accuracy based on what scientific monitoring has learned from collision impacts of moving obstacles elsewhere in the lower atmosphere. One type of impact to consider is blunt-force injury and death caused by collisions with the front ends of vehicles. Assuming the average car frontal surface area is 3.08 m^2 (average height of 1.7 m and average wheelbase of 1.81 m), then the predicted average annual volume of airspace intercepted by cars would be 3.08 m^2 × 886,330,522 m (1,609 m/mile × 550,858 miles) = 2729,898,008 m^3. This volume of intercepted airspace would be equivalent to the intercepted winds of 32.2 2.3-MW wind turbines each of which in the Altamont Pass averages about 41 bird fatalities per year (my estimates of fatalities based on data in H.T. Harvey & Associates 2020, Great Basin Bird Observatory and H.T. Harvey & Associates 2020). Therefore, front-end, blunt-force mortality would be predicted, in this example, to tally **1,320 birds annually**. It remains unknown whether collision risk is higher or lower for vehicles traveling forward to intercept airspace as compared to wind turbines remaining stationary to intercept wind. Also, yet to be considered are the deaths and injuries to vertebrate wildlife caused by crushing under tires, broadside impacts of flying birds, and turbulence-induced injuries and deaths above, to the side, and in the wake of traveling cars. However, even if one or more assumptions prove inaccurate, the magnitude of the impact would remain very large. Based on my assumptions and simple calculations, the project-generated traffic would cause substantial, significant impacts to wildlife. The RDEIR needs to be revised to analyze the project-generated traffic impacts to wildlife. Mitigation measures to improve wildlife safety along roads are available and are feasible, and they need exploration for their suitability with the proposed project.
Not addressed in RDEIR	p. 21 **WINDOW COLLISIONS** Window collisions are often characterized as either the second or third largest source or human-caused bird mortality. The numbers behind these characterizations are often attributed to Klem's (1990) and Dunn's (1993) estimates of about 100 million to 1 billion bird fatalities in the USA, or more recently by Loss et al.'s (2014) estimate

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	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** Predicting the number of bird collisions at a new project is challenging because the study of window collisions remains in its early stages. Collision rate metrics have varied, including collisions per building per year and collisions per m^2 of window. The problem with the temporal factor in the collision rate metrics has been monitoring time spans varying from a few days to 10 years, and even in the case of the 10-year span, monitoring was largely restricted to spring and fall migration seasons. Short-term monitoring during one or two seasons of the year cannot represent a 'year,' but monitoring has rarely spanned a full year. Using 'buildings' in the metric treats buildings as all the same size and height, when we know they are not. Using square meters of glass in the metric treats glass as the only barrier upon which birds collide against a building's façade, when we know it is not. It also treats all glass as equal, even though we know that collision risk varies by type of glass as well as multiple factors related to contextual settings. 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 m^2 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 m^2 of glass per year (95% CI: 0.042-0.102). This average and

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	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 RDEIR does not provide sufficient structural detail to measure the extent of glass windows, but it does provide the square footage (s.f.) of floorspace of the homes. I therefore applied my own measurements of 0.0147368 m^2 of glass window extent per s.f. of floorspace in modern homes. Based on my measured rate, the proposed project would add 1,215 m^2 of new glass windows. Aplying the mean fatality rate (above) to my estimate of 1,215 m^2 of glass windows predicts **89 bird deaths per year (95% CI: 53-125)**. The 100-year toll from this average annual fatality rate would be 8,900 bird deaths (95% CI: 5,300-12,500). 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 RDEIR, it is my opinion that the project would result in potentially significant adverse biological impacts. The RDEIR needs to be revised 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. Existing structures can be modified or retrofitted to reduce impacts, and proposed new structures can be more carefully sited, designed, and managed to minimize impacts. However, the costs of some of these measures can be high and can vary greatly, but most importantly the efficacies of many of these measures remain uncertain. Both the costs and effectiveness of all of these measures can be better understood through experimentation and careful scientific investigation. **Post-construction fatality monitoring should be an essential feature of any new building project**.
Not addressed in RDEIR	p. 21 **HOUSE CATS** House cats would be introduced to the project site by residents of the proposed residential units. However, the RDEIR does not address the impacts of house cats on wildlife. House cats serve as one of the largest sources of avian mortality in North

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	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 RDEIR, the proposed project would add 77 new residents. The above rates applied to this number of new residents **would add 34 cats, which would kill 4,270 vertebrate wildlife per year**. 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/). According to the RDEIR, an outfall from the project would drain into Kelly Creek, which would then transport *Toxoplasma gondii* downstream where it could infect ringtail and eventually sea otters and other marine mammals. The RDEIR needs to be revised to address the impacts of house cats to wildlife.
p. 4.3-35 Based on the resources present on the project site and the types of impacts anticipated, the project Applicants would be required to obtain permits and authorizations from state and federal resource agencies under the CWA, FESA and CESA, and other laws. Those permitting processes would not conclude until after the Final EIR is prepared and certified	p. 22 **CUMULATIVE IMPACTS** The RDEIR characterizes cumulative effects as simply residual impacts of incomplete mitigation of project-level impacts. It asserts that environmental review for other proposed projects in the area will ensure adequate protection and management of biological resources in Petaluma. 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 RDEIR's implied standard is not the standard of analysis of cumulative effects. CEQA defines cumulative impacts, and it outlines two general approaches for

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	performing the analysis. The RDEIR needs to refrain from assuring that the environmental reviews for other projects will avoid cumulative impacts. It needs to be revised to perform an appropriate, serious analysis of cumulative impacts.	29
p. 4.3-42 The project Applicants shall obtain all required permits from the USFWS, CDFW, RWQCB, and USACE (e.g., 1600 series permits, 404 and 401 permits), incidental take permits and any others. The project Applicants will submit with the permit application a Wetland Mitigation Program for review and approval by the regulatory agencies. The project Applicants shall implement mitigation measures, as required by federal and state law and included in the permits, to avoid, minimize, or offset impacts to any species listed under either the state or federal Endangered Species Acts or protected under any other state or federal law. Evidence that the project Applicants have secured all required authorization from these agencies shall be submitted to the Community Development Department of the City of Petaluma prior to issuance of any grading or building permits for the project.	p. 22 **Measure BIO-1a – Permits from resource agencies**. It goes without saying that take permits are required prior to construction, but acquisition of permits does not necessarily ensure impacts would be adequately mitigated. Acquisition of permits is more of a required step than it is a mitigation measure.	30
p. 4.3-42 **Measure BIO-1b** A Final California Red-Legged Frog Mitigation Plan (CRLFMP) shall be prepared by a qualified wildlife biologist to minimize and mitigate potential impacts of the project on CRLF. The Final CRLFMP shall be prepared in consultation	p. 22-23 **Measure BIO-1b – Final California Red-Legged Frog Mitigation Plan.** It would help to provide more details related to this plan, because this plan would be critical to mitigating impacts to California red-legged frog, and because members of the public could potentially contribute to a better plan. As formulated, this measure defers the plan development to a time after RDEIR certification, thereby bypassing meaningful public input.	31

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with and be approved by the USFWS, CDFW, USACE, and City, and shall provide for the protection, replacement, and management of habitat for CRLF affected by proposed development and public open space use on the project site. The Final CRLFMP shall be required as a condition of approval for 4.3 Biological Resources Impact Sciences, Inc. 4.3-43 Scott Ranch Project Revised Draft EIR 1222.001 December 2020 the project Tentative Map, and shall include the following components and meet the following standards:	To exemplify my point, I will offer suggestions. I have seen the stock pond where California red-legged frogs were found, and I have seen portions of Kelly Creek. I have also surveyed many miles of streams for California red-legged frogs and I have performed research on the species and formulated a conservation plan involving the management of breeding ponds on Naval Weapons Station, Seal Beach, Detachment Concord (Smallwood and Morrison 2008). The condition of the project site's stock pond reminded me of pond conditions where California red-legged frogs used to breed at Concord Naval Weapons Station. Ponds that were once used for breeding, but which ceased being used, were those that had either filled with silt or where earthen levees had failed. The stock pond on the project site is filling with silt and needs to be dredged. I suggest it be dredged in phases over two to three years. Its earthen levee also appears to be failing, as a gullied channel has appeared below its southern edge and extends all the way to Kelly Creek. The levee needs repair, and outflow from the pond needs to be better managed.
p. 4.3-44, 45, **Measure BIO-1c** Any active nests of raptors or other birds protected under federal and state regulations in the vicinity of construction shall be avoided until young birds are able to leave the nest (i.e., fledged) and forage on their own. Avoidance may be accomplished either by scheduling grading, vegetation removal and demolition activities during the non-nesting period (August 30 through February 14), or if this is not feasible, by conducting a preconstruction survey for raptor and other bird nests. Provisions of the pre-construction survey and nest avoidance, if necessary, shall include the following: **BIO 1d –**	p. 23 **Measure BIO-1c and BIO 1d – Preconstruction surveys for bird nests and bat roosts.** 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 the RDEIR, 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. 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

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Measures shall be taken to avoid possible loss of bats during project construction. Any buildings that are approved for demolition,rehabilitation, or relocation shall be done using the following provisions:	cats, and by habitat loss. Compensatory mitigation is needed for these types of project impacts to wildlife. 32
p. 4.3-58 BIO-4a An interpretive program shall be developed by a qualified biologist in cooperation with the project landscape architect which serves to educate park visitors and trail users of the sensitivity of Kelly Creek and D Street tributary as wildlife movement corridors, and the importance of remaining outside the southern portion of the site to protect the stock pond and surrounding uplands to CRLF and other wildlife that are sensitive to human disturbance	p. 23 **Measure BIO-4 – Interpretive program and management of barriers to movement.** Whereas I concur that a visitor interpretive program would be helpful, and management of fencing could improve movement of large mammals into and out of the property, these measures do not compensate for project interference with wildlife movement in the region. The proposed measures do nothing to minimize or compensate for impacts to movement by volant species, which are largely unaffected by fences. Impacts to volant wildlife would be caused by habitat loss and infiltration of the open spaces by outdoor house cats and people. The proposed measures do nothing to offset the barrier effects the project would pose to nonvolant animals that would normally move between the project site and the remaining open spaces to the east and southeast of Windsor Drive and D Street. Interference with movement to those spaces should be regarded as additional habitat loss, for which compensatory mitigation is needed. 33 p. 24-25 **RECOMMENDED MITIGATION** **Habitat Protection** The RDEIR vaguely implies that habitat would be conserved by payment of a compensatory mitigation fee to be worked out later in a California Red-Legged Frog Mitigation Plan. However, I did not see any indication that loss of upland habitat of California red-legged frog would be mitigated. Nor did I see any compensatory mitigation for other species. Many more special-status species would be significantly and adversely affected by this project. Compensatory mitigation is also 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

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	strategically implemented to reduce the effects of habitat fragmentation (Smallwood 2015). Internal to the project, residential yards should be covered to the extent feasible by natural vegetation. Native plants attract beneficial arthropods, and the increased abundance of arthropods combined with the structures of the plants themselves attract vertebrate wildlife for both stopover and permanent residence (Burghardt et al. 2008, Goddard et al. 2009, Lerman and Warren 2011, Narango et al. 2017, Adams et al. 2020, Berthon et al. 2021). Use of native vegetation would also minimize outflows of pesticides and synthetic fertilizers from the neighborhood to Kelly Creek. 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. 33 **Road Mortality** I recommend funding one or more wildlife crossings at strategic locations along roads used by the project. I also recommend funding research into wildlife mortality caused by car traffic in the area. Traffic-calming measures would also help. **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

Scott Ranch 4.3 Biological Resources	Dr. Shawn Smallwood, Ecologist, February 28, 2021
	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.

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State of California – The Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
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EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

April 15, 2013

Ms. Alicia Giudice
City of Petaluma
Community Development Department
11 English Street
Petaluma, CA 94952

Dear Ms. Giudice:

Subject: Davidon Homes Tentative Subdivision Map and Rezoning Project, Draft Environmental Impact Report; SCH #2004072137, City of Petaluma, Sonoma County

The California Department of Fish and Wildlife (Department) has reviewed the draft Environmental Impact Report (EIR) for the Davidon Homes Tentative Subdivision Map and Rezoning Project (Project) in the City of Petaluma, Sonoma County. The draft EIR was received at our office February 15, 2013.

The Project includes subdivision and rezoning of two parcels on each side of Windsor Drive at the intersection of D Street in the City of Petaluma. The Project site totals approximately 58.7 acres. The Project would create 93 single-family homes on approximately 35 acres. The remaining 23 acres would become open space, including: an approximately 20-acre public open space to the north and south of Kelly Creek; an approximately 100-foot wide public open space area along the southern project boundary; an approximately 300-foot wide open space area at the southwest portion of the site; and an approximately 2.35-acre private open space around the stock pond. Within the Kelly Creek open space, an approximately 200-foot wide corridor would include a meandering public pedestrian/bike path that would connect to Helen Putnam Regional Park.

The Department is identified as a Trustee Agency pursuant to the California Environmental Quality Act (CEQA) § 15386. As a trustee for the State's fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants and the habitat necessary for biologically sustainable populations of those species pursuant to California Fish and Game Code § 1802. In this capacity, the Department administers the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration Program and other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife trust resources. Pursuant to our jurisdiction, the Department has the following concerns, comments, and recommendations regarding the Project.

Giudice, Alicia

From: Patin, Reanna@Wildlife <Reanna.Patin@wildlife.ca.gov>
Sent: Monday, April 15, 2013 3:25 PM
To: Giudice, Alicia
Cc: Weiss, Karen@Wildlife; McKannay, Adam@Wildlife; Hultman, Debbie@Wildlife
Subject: Davidon Homes Tentative Subdivision Map and Rezoning Project
Attachments: Davidon Homes Tentative Subdivision Map and Rezoning Project SCH 2004072137-Giudice-MCKANNAY041513.pdf

Ms. Giudice,

Please see the attached letter. Original to follow.

Thank you,

Reanna Patin
Habitat Conservation Secreteary
Bay Delta Region
California Department of Fish and Wildlife
7329 Silverado Trail
Napa, CA 94558
Phone: (707) 944-5566

Habitat Assessment

A Biological Resources report (Report) by Zander Associates, dated August 25, 2003 (draft EIR: Appendix I,) was initially prepared for the draft EIR. The Report presents the results of special-status plant and wildlife surveys conducted within the proposed Project area during 2003. As more than a decade has passed since the Report was prepared, the Department recommends that the draft EIR be revised to provide an updated habitat assessment and survey results for special-status plant and wildlife species located within the proposed Project area and surrounding lands. Since no detail into the scope and depth of data collected during additional reconnaissance-level surveys performed since 2003 is given in the draft EIR, the Department does not consider the additional surveys, to be sufficient to accurately assess project impacts in the draft EIR.

Botanical surveys should be conducted throughout the blooming period for all sensitive plant species potentially occurring within the proposed Project area. Please refer to Department protocols for surveying and evaluating impacts to rare plants available at http://www.dfg.ca.gov/habcon/plant/. The assessment should include endangered, threatened, and locally unique species and sensitive habitats. Rare, threatened and endangered species to be addressed should include all those which meet the CEQA definition (see CEQA Guidelines, section 15380). The potential for sensitive plant species, including those listed by the California Native Plant Society should be evaluated.

Prior to the assessment, a scoping process using information gathered since 2003 should occur and include various methods of assessing suitability of habitat for both aquatic and terrestrial species, including aerial imagery, historical and recent survey data, field reconnaissance, scientific literature and reports, as well as "positive occurrence" databases such as California Natural Diversity Database (CNDDB). The CNDDB contains only records of species and natural communities which have been observed and documented. Absence of data in such sources does not confirm that the species is absent from the proposed Project area. Sources used in the assessment should be predictive in nature, and discuss occurrence based on habitat type and geographic area.

Special-Status Species: American Badger and Burrowing Owl

The American badger (*Taxidea taxus*; hereafter badger) and burrowing owl (*Athene cunicularia*, hereafter burrowing owl), are both listed by the State of California to be a Species of Special Concern, defined as a species with declining population levels, limited ranges, and/or continuing threats which make them vulnerable to extinction (http://www.dfg.ca.gov/wildlife/nongame/ssc/index.html). Habitat loss, degradation, and fragmentation are the greatest threats to badgers and burrowing owls in California. The State's long history of urbanization in coastal counties has already resulted in either extirpation or drastic reduction in badger and burrowing owl populations in Sonoma County. Further, loss of agricultural and other open lands (such as grazed landscapes) also negatively affect badger and burrowing owl populations. Because of their need for open habitat with low vegetation, badger and burrowing owls are unlikely to persist in agricultural lands dominated by vineyards and orchards or urbanized lands.

Subsequent to the biological surveys conducted for the draft EIR in 2003, Department staff have observed and documented occurrences of the badger within two miles of the Project site along the City of Petaluma's western edge in habitat very similar to that which occurs on the Project site. Also, fossorial mammal burrows, including badger, are important habitat to burrowing owl, especially in southern Sonoma County, where the Department has noted a high correlation between badger burrows and the presence of burrowing owl.

The badger is a grassland specialist with a large home range. They are a medium-sized carnivore with a distinctively flattened body shape due to its broad shoulders and short legs. Badgers are uniquely adapted to maintaining an underground lifestyle. The chance of observing the badger's distinctive burrow is far more likely than sighting the animal itself. Badger burrow entrances are typically slightly wider than they are tall, and measure an average of 20 to 25 centimeters across. There is usually a large mound of soil tailings in front of the entrance. Burrows are often found amongst other badger digs (hunting holes) of varying depths, but occasionally are found alone.

The burrowing owl is a small, long-legged, ground-dwelling bird species, well-adapted to open, relatively flat expanses. In California, preferred habitat is generally typified by short, sparse vegetation with few shrubs, level to gentle topography and well-drained soils. Grassland, shrub steppe, and desert are naturally occurring habitat types used by the species. In addition, burrowing owls may occur in some agricultural areas, ruderal grassy fields, vacant lots and pastures if the vegetation structure is suitable and there are useable burrows and foraging habitat in proximity. Unique among American raptors, the burrowing owl requires underground burrows or other cavities for nesting during the breeding season and for roosting and cover, year-round. Burrows used by the owls are usually dug by other species. In California, California ground squirrel and round-tailed ground squirrel burrows are frequently used by burrowing owls but they may use dens or holes dug by other fossorial species including badger, coyote, and fox. Burrowing owls have been documented in Sonoma County using artificial burrows for nesting and cover.

The Department recommends that systematic surveys for badger, burrowing owl and fossorial mammal burrows, which may indicate the presence of potential habitat for these species, be conducted on the Project site and the draft EIR be updated with the survey results in order to accurately assess impacts to these species.

Burrowing owl surveys should follow the methodology described in the Department's *Staff Report on Burrowing Owl Mitigation Appendix D: Breeding and Non-breeding Season Surveys* (available at http://dfg.ca.gov/wildlife/nongame/docs/BUOWStaffReport.pdf). The Department recommends that a minimum of four survey visits be conducted during the owl breeding season which is typically between February 1 and August 31. A minimum of three survey visits, at least three weeks apart, should be conducted during the peak nesting period which is between April 15 and July 15, with at least one visit after June 15. Pre-construction surveys should be conducted no less than 14 days prior to the start of construction work with a final survey conducted within 24 hours prior to ground disturbance.

If burrowing owls are observed within the Project area during surveys, the extent of burrowing owl habitat on the site should be delineated by a qualified ornithologist. Any impacts to burrowing owls and occupied burrows during the breeding season must be avoided. The Department recommends that any burrows occupied during the non-breeding season by migratory or non-migratory resident burrowing owls also be avoided.

Special-Status Species: Mitigation Measure BIO-1b and BIO-1c

Within Project Impacts and Mitigation Measures, the draft EIR discusses California red-legged frog (CRLF) mitigation in Mitigation Measure BIO-1b, on page 4.4-28:

> *"The proposed project shall be substantially revised to provide additional avoidance of essential habitat for CRLF around the stock pond, and improve opportunities for movement and dispersal between the pond and Kelly Creek, Helen Putman Regional Park and the main tributary drainage along D Street. These project revisions are required to provide minimum habitat avoidance of essential habitat for CRLF necessary to mitigate potential impacts under CEQA. Additional mitigation would be more fully defined as part of the CRLF Mitigation Plan called for below in Mitigation Measure BIO-1c, which would serve to prevent inadvertent take of individual CRLF and refine mitigation details of habitat replacement and enhancement as part of permit authorization from the USFWS and CDFG."*

CEQA Guidelines [Section 15126.4 (a)(1)(B)] stipulate that it is not appropriate to defer feasible mitigation measures to a future date. Also, the Court of Appeal in San Joaquin Raptor Rescue Center v. County of Merced (2007) 149 Cal. App. 4th 645 struck down mitigation measures that required formulating management plans developed in consultation with state and federal wildlife agencies after project approval. As stated above, the draft EIR currently defers development of such measures for CRLF to consultation with the Department and the U.S. Fish and Wildlife Service (USFWS) after the Project has been approved.

The draft EIR should determine and quantify what the impacts are to CRLF, and then present biological mitigation measures, such as avoidance, minimization and potential habitat mitigation, to conclude that the impacts have been mitigated to less-than-significant levels.

Without review of the "California Red-Legged Frog Mitigation Plan" proposed in Mitigation Measure BIO-1c, it is unknown whether or not mitigation measures for CRLF are sufficient to mitigate the Project impacts to less-than-significant. The Mitigation Plan should address both permanent and temporary site impacts. It should also clearly outline feasible mitigation. The Department is concerned that mitigating for the proposed alterative at a 3:1 off-site mitigation ratio would result in needing over 100 acres of suitable CRLF habitat. It is unclear if this quantity of habitat exists nearby or is available for purchase. The CRLF Mitigation Plan may also require activities that in and of themselves have impacts that must be analyzed within the draft EIR. For example, creation or enhancement of a CRLF

breeding pond may convert emergent wetland habitat to open water habitat or vice versa; in which case, impacts to species that use these habitats should be addressed in the draft EIR. A CRLF Mitigation Plan may also require an Invasive Species Management Plan which would impact additional species not analyzed in the draft EIR.

Alternatives to the Proposed Project

The Department concurs with the draft EIR's finding, which was made pursuant to CEQA Guidelines Section 15126.6(e), that Alternative D (28 Single-Family Lots) would be the environmentally superior alternative among the proposed project alternatives. This alternative proposes the fewest homes and no development to the south of Kelly Creek, which would minimize impacts to CRLF and other species. Alternative C (47 Single-Family Lots) also minimizes impacts to CRLF and species occurring south of Kelly Creek. In early 2009, the Project proponent coordinated with the Department and the USFWS on developing the site plan identified as Alternative B (66 Single-Family Lots). While this site plan has greater permanent and temporary biological impacts than either Alternatives C or D, it does protect the CRLF breeding pond, maintains an uninterrupted overland connection to Kelly Creek, and provides additional upland dispersal habitat towards Helen Putnam Regional Park.

If a thorough CRLF Mitigation Plan is developed, as noted above under Mitigation Measure BIO-1c, Alternative B may maintain the integrity of the CRLF population on the site. However, as noted in previous sections of this letter, the CRLF Mitigation Plan should be developed and reviewed within the context of the draft EIR in order to fully understand the Projects mitigation requirements as they relate to each project alternative.

Lake and Streambed Alteration Agreement

A Lake and Streambed Alteration Agreement (LSAA) is needed pursuant to Fish and Game Code Section 1600 et seq. for the proposed Project-related activities within Kelly Creek, and any other 1600-jurisdictional waters within the proposed Project area. Notification is required for any activity that will divert or obstruct the natural flow, change the bed, channel, or bank including associated riparian or wetland resources, use material from the stream/channel bed, or substantially adversely affect fish and wildlife resources. Issuance of an LSAA is subject to CEQA. The Department, as a responsible agency under CEQA, will consider the CEQA document for the Project. The Department may not execute the Final LSAA until it has complied with CEQA (Public Resources Code section 21000 *et. seq.*) as the Responsible Agency.

The Department considers riparian/wetland habitat as a sensitive plant community that is valuable for a diversity of wildlife species. Riparian zones maintain shade, protect against windthrow, produce litterfall, provide important migratory routes for wildlife, and serve to recruit instream woody debris which provides habitats, food and shelter for invertebrates and fish. Riparian vegetation also acts as a filter strip for sedimentation from erosion sources. Any tree, shrub or wetland removed with the bed, bank, or channel of a stream is therefore considered a permanent impact, and should be adequately mitigated.

The draft EIR should include a more detailed description of the physical and hydrologic characteristics of the streams, wetlands and riparian habitat to be affected by the proposed Project. All potential direct and indirect impacts of the proposed Project activities on stream/wetland hydrology should be fully identified. Impacts to the stream and riparian area resulting from the construction of public areas, fencing, pedestrian paths and bridges should be analyzed. Adequate and effective avoidance, mitigation, monitoring and reporting commitments should be provided for completion of the LSAA. Any impacts to the bed and banks of the streams from falling trees and other Project activities should be described. Banks of streams affected by Project activities should be revegetated with native plant species. A detailed Mitigation and Monitoring Plan should be included in the LSAA notification package. To obtain information about the LSAA notification process, please access our website at http://www.dfg.ca.gov/habcon/1600/; or to request a notification package, contact the Lake and Streambed Alteration Program at (707) 944-5520.

The Department appreciates the opportunity to comment on the Project. Department staff is available to meet with you to further clarify our comments and provide technical assistance on any changes necessary to protect resources. If you have any questions, please contact Mr. Adam McKannay, Environmental Scientist, at (707) 944-5534; or Ms. Karen Weiss, Senior Environmental Scientist, at (707) 944-5525.

Sincerely,

Scott Wilson

Scott Wilson
Acting Regional Manager
Bay Delta Region

cc: State Clearinghouse

California Water Boards

Edmund G. Brown Jr.
Governor

Matthew Rodriquez
Secretary for
Environmental Protection

San Francisco Bay Regional Water Quality Control Board

March 29, 2013
CIWQS Place ID 792712

Sent via electronic mail: No hard copy to follow.

Alicia Guidice, Senior Planner
City of Petaluma
Community Development Department
11 English Street
Petaluma, CA 94952-2610
Email: aguidice@ci.petaluma.ca.us

Subject: Comment on Draft Environmental Impact Report (DEIR) for the Proposed Davidon Homes Tentative Subdivision Map and Rezoning Project, City of Petaluma, Sonoma County, SCH No. 2004072137

Dear Ms. Guidice

San Francisco Bay Regional Water Quality Control Board staff (Regional Water Board) have reviewed the DEIR for the proposed Davidon Homes Tentative Subdivision Map and Rezoning Project (Project) located southwest of the intersection of Windsor Drive and D Street in the City of Petaluma. The Project involves the following major components: grading to construct 93 single family lots; constructing housing related infrastructure and a pedestrian bridge over Kelly Creek (Creek). The Creek bisects the Project site with one main tributary and two smaller drainage gullies flowing to it (total of 826 linear feet). There is an additional drainage that drains to the stock pond that is located south of the Creek. There are also a total of 11 seasonal wetlands (approximately 0.24 acres) scattered on the southern portion of the Project site. Based on the information provided in the DEIR, we offer the following comments. These comments are to advise the City of Petaluma Planning Department and the Project sponsor of our regulatory requirements and concerns, so they may be incorporated into the planning and design process at an early date. Any calculations noted in this letter are the best estimates that could be calculated based on the submitted materials.

Alternatives Analysis

The DEIR proposes four alternatives. Alternative B would involve the construction of 66 single family lots, which meets the City of Petaluma's housing density requirements and reduces impacts to waters of the State. Of the four alternatives evaluated, Alternative B appears to be the least environmentally damaging practicable alternative because it avoids the following: 9 of the 11 wetlands, three of the four drainages, and ¾ of the length of the fourth drainage (which is the main tributary). Alternative B would result in filling 0.014 acres of wetlands and 206 linear feet of the main tributary. In contrast the

RESPONSES TO O-PRP-5 LETTER

Response O-PRP-5-1: See **Master Response 1 – Need for Updated Biological Surveys** and the responses to Dr. Smallwood's comments in **Response I-Smallwood-1 through Response I-Smallwood-32**. Also, see **Comment Letter A-CDFW-2-2,** which provides the conclusion from CDFW that major changes to the project, updated studies, and the current RDEIR address their prior comments and concerns in the 2013 comment letter. CDFW letter notes that the RDEIR provides sufficient information for CDFW to rely upon as a responsible agency and in accordance with Fish and Game Code Section 1600.

Response O-PRP-5-2: Recent correspondence between the City and CDFW served to confirm that earlier concerns and comments raised by CDFW in their letter (dated April 15, 2013) regarding the Draft EIR for the previous proposal of 93-lot development for the site have been addressed as a result of the major changes to the Scott Ranch Project, the updated studies, and information provided in the RDEIR (see **Response A-CDFW-2-1**). The USFWS has also confirmed in their correspondence with the City that additional surveys for CRLF are not necessary given that this species has already been detected and that the site is considered occupied habitat for permitting purposes (see **Response A-CDFW-1**). Also, see **Master Response 1 – Need for Updated Biological Surveys, Master Response 2 – California Red-Legged Frog Surveys, Master Response 3 – American Badger and Western Burrowing Owl, Master Response 4 – Special-Status Species Present at the Project Site**, and **Master Response 5- Revisions to Proposed Project and Associated Reduction of Impacts on Biological Resources**.

Response O-PRP-5-3: See **Responses O-PRP-5-1** and **O-PRP-5-2**.

Response O-PRP-5-4: See **Response O-PRP-5-1** and **O-PRP-5-2**.

Response O-PRP-5-5: See Response **I-Smallwood-24** and **Response I-Smallwood-25**. Compensatory mitigation for the loss of upland habitat for CRLF is addressed in detail under "Compensatory Mitigation" on **pages 4.3-39 through 4.3-41 of the RDEIR**. As explained in **Master Response 2 – California Red-Legged Frog Surveys**, requiring a Final CRLF Mitigation Plan called for under **Mitigation Measure BIO-1b in the RDEIR** as a condition of approval for the project Tentative Map is to ensure that it addresses and reflects any refinements to the proposed project plans. The Final CRLF Mitigation Plan must be prepared in consultation with and be approved by the USFWS, CDFW, USACE, and the City. It would provide for the protection, replacement, and management of habitat for CRLF affected by proposed residential development and public open space use on the project site. Permanent impacts associated with the residential component and the park extension component would be approximately 7.09 acres and 2.069 acres, respectively (see **Chapter 2.0, Revised Project Description**). As discussed in **Section 4.3, Biological Resources, of the RDEIR, page 4.3-30**, to offset permanent impacts to

CRLF, onsite preservation areas as compensatory mitigation at a ratio of 3:1 shall be provided. These compensatory measures would be provided through two conservation easements that would encompass the proposed 47-acre park extension, which would appear to exceed the required compensatory mitigation acreage, although further review and approval would be required by the USFWS as part of the formal consultation with the USACE, as discussed on **page 4.3-40 of the RDEIR**. In addition, **Mitigation Measure BIO-1a** has been refined to clarify the City's identified mitigation compensation ratios for impacts to CRLF habitat (See **Master Response 2, California Red-Legged Frog Surveys)**. **Mitigation Measure BIO-1b** contains detailed provisions related to preconstruction and construction avoidance, habitat avoidance and mitigation, and habitat connectivity and on-site management that would be incorporated into the Final CRLF Mitigation Plan. **Mitigation Measure BIO-1b** would serve as performance standards to ensure adequacy and feasibility in fulfilment of the City's CEQA review.

Response O-PRP-5-6: See **Response I-Smallwood-3.**

Response O-PRP-5-7: **See Master Response 1 – Need for Updated Biological Surveys and Master Response 4 – Special-Status Species Present at the Project Site.** Also see **Response I-Smallwood-3, Response I-Smallwood-5** through **Response I-Smallwood-11,** and **Response I-Smallwood-13**.

Response O-PRP-5-8: See **Response I-Smallwood-19.**

Response O-PRP-5-9: See **Response I-Smallwood-20** through **Response I-Smallwood-22.**

Response O-PRP-5-10: Comment noted.

Response O-PRP-5-11: See **Master Response 1 – Need for Updated Biological Surveys** and **Master Response 4 – Special-Status Species Present at the Project Site.**

Response O-PRP-5-12: See **Master Response 1 – Need for Updated Biological Surveys**.

Response O-PRP-5-13: See **Master Response 1 – Need for Updated Biological Surveys** and **Master Response 4 – Special-Status Species Present at the Project Site.**

Response O-PRP-5-14: Concerns of the commentor over habitat loss and declines in bird abundance are noted. However, **Mitigation Measure BIO-1c in the RDEIR** is identified to prevent the inadvertent loss of active bird nests as a result of project implementation, thereby avoiding a possible contribution to that decline noted by the commentor. See **Response I-Smallwood-26**.

Response O-PRP-5-15: See **Response I-Smallwood-20** through **Response I-Smallwood-22**.

Response O-PRP-5-16: See **Response I-Smallwood-2**.

Response O-PRP-5-17: See **Response I-Smallwood-5**.

Response O-PRP-5-18: See **Response I-Smallwood-2.**

Response O-PRP-5-19: See **Response I-Smallwood-2**.

Response O-PRP-5-20: See **Response I-Smallwood-3.**

Response O-PRP-5-21: See **Response I-Smallwood-3** through **Response I-Smallwood-10.**

Response O-PRP-5-22: See **Response I-Smallwood-11** and **Response I-Smallwood-14.**

Response O-PRP-5-23: See **Response I-Smallwood-12, Response I-Smallwood-13,** and **Response I-Smallwood-17.**

Response O-PRP-5-24: See **Response I-Smallwood-18.**

Response O-PRP-5-25: See **Response I-Smallwood-19.**

Response O-PRP-5-26: See **Response I-Smallwood-20.**

Response O-PRP-5-27: See **Response I-Smallwood-21.**

Response O-PRP-5-28: See **Response I-Smallwood-22.**

Response O-PRP-5-29: See **Response I-Smallwood-23.**

Response O-PRP-5-30: See **Response I-Smallwood-24.**

Response O-PRP-5-31: See **Response I-Smallwood-25.**

Response O-PRP-5-32: See **Response I-Smallwood-26.**

Response O-PRP-5-33: See **Response I-Smallwood-26** through **Response I-Smallwood-32.**

O-PRP-6

Ervin, Olivia

From: Petalumans for Responsible Planning <PetRP@comcast.net>
Sent: Thursday, March 11, 2021 3:20 PM
To: Hines, Heather
Cc: Ervin, Olivia; 'Rose M. Zoia'
Subject: Issues with the Davidon / Scott Ranch RDEIR

Dear Ms. Hines,

We reviewed the Biological Resources section before the February 9, 2021, Planning Commission meeting. On February 9, 2021, we sent the Planning Commission a statement of concerns with the RDEIR.

***

On page 6-7 of our comments, we wrote the following:

p. 4.3-5

"Updated Biological Assessment by Zentner Planning & Ecology (2018). This report provides an updated biological assessment of the potential impacts of the Davidon (28-lot) Residential Project component of the Scott Ranch project, and compares the significance levels to previous residential development plans."

https://cityofpetaluma.org/documents/rdeir-appendix-4-3-biological-resources/

1

Comments:

The public is interested in the 2018 updated biological assessment in the residential component of Scott Ranch. In searching the Biological Resources Appendix section, no letter report prepared for Steve Abbs on the Updated Biological Assessment was included.

If updated biological assessments on the 28 homes have been completed, should the public have an opportunity to review those assessments?

***

Petalumans for Responsible Planning process and dates:

January 29, 2021: Contracted with ecologist Shawn Smallwood to peer review the Biological Resources and Appendix section of the Scott Ranch RDEIR.

February 9, 2021: Submitted RDEIR analysis to Planning Department

February 11, 2021: Smallwood completed a site visit to the Scott Ranch

February 28, 2021: Smallwood completed a report and submitted to our organization

March 1: Submitted Smallwood research to City Council

Mach 7, 2021: Discovered the RDEIR was modified on February 24, 2021, to include the missing 2018 report mentioned in our February 9, 2021, comments to the Planning Commission. The missing 2018 letter was uploaded on February 24, 2021.

We noticed purely by accident that the Scott Ranch DEIR had been modified with the inclusion of this 2018 letter. No notice was given on the Website. The report just appeared at the very bottom of the list of PDF files titled “Updated Biological Assessment.”

The Planning Commission did not have an opportunity to review this letter. Could this letter have made a difference in the Planning Commission’s decision?

Dr. Shawn Smallwood did not have an opportunity to review this letter before completing his biological report. Could this letter have given Dr. Smallwood valuable information to add to his peer review? 1

The public assumes that the purpose of the California Environmental Quality Act is to foster transparency and integrity in public decision-making. CEQA should give the community a voice in land use decisions.

Using the Davidon / Scott Ranch RDEIR has been frustrating for the public for the following reasons:

- Incorrect links posted on December 31, 2020, and modified on January 7, 2021.
- Additional update of biological information on February 24, 2021, without public notification.

We have the following questions:

#1 - Can the RDEIR be modified at any time after the public makes a comment? In this case, the RDEIR was modified more than six weeks after the Planning Commission meeting and our comment about the missing 2018 letter. 2

#2 - Can the lead agency randomly modify the RDEIR based upon public comments without notifying the public? 3

#3 - Does the public need to keep checking on a daily basis to determine whether the RDEIR is being modified? 4

Please respond to the three questions above. Also please include this email with the packet to the City Council about the Scott Ranch. Thank you.

Susan Jaderstrom
For the Steering Committee

Petalumans for Responsible Planning
PetRP@comcast.net

RESPONSES TO O-PRP-6 LETTER

Response O-PRP-6-1: As noted by the commentor, the 2018 Updated Biological Assessment was listed on **page 4.3-5 of the RDEIR** as one of the many documents reviewed in preparing the biological resources section of the RDEIR. In compliance with the CEQA Guidelines, all references and background information related to the proposed project are part of the administration records and were available for public review during the public review period of the RDEIR. Additionally, in response to this request, the 2018 Updated Biological Assessment was uploaded to the City's website on February 24, 2021. As described in **Master Response 1 – Need for Updated Biological Surveys**, biological surveys and studies of the project site have spanned the past two decades as the various iterations of the project have been submitted to the City for review.

Response O-PRP-6-2: The RDEIR was not modified after the Planning Commission meeting as the comment notes. As indicated under **Response O-PRP-6-1**, the 2018 Updated Biological Assessment in question was listed on page 4.3-5 of the RDEIR. In response to public request, the 2018 Updated Biological Assessment was uploaded to the City's website on February 24, 2021. However, before that date, similar to all references cited in the RDEIR, the report was part of the administrative records.

Response O-PRP-6-3: See **Response O-PRP-6-2**. In compliance with *CEQA Guidelines* section 15088, the lead agency shall provide written responses to public comment, which may include revisions to the RDEIR. This Responses-to-Comments document addresses public comments received on the RDEIR and notes all revisions made to the RDEIR to address public comments (see **Chapter 5.0, Revisions to the RDEIR**).

Response O-PRP-6-4: In compliance with *CEQA Guidelines*, the City of Petaluma provided public notice of the availability of the RDEIR and the availability of this document that includes the modifications to the RDEIR to address public comments as described under **Response O-PRP-6-3**.

O-PRP-7

From: Pascoe, Samantha
To: Pascoe, Samantha
Subject: FW: Survey Results for the Scott Ranch Development Project
Date: Monday, March 15, 2021 12:40:00 PM

From: Petalumans for Responsible Planning [mailto:PetRP@comcast.net]
Sent: Thursday, March 11, 2021 3:22 PM
To: 'Cityclerk@cityofpetaluma.org' <Cityclerk@cityofpetaluma.org>
Subject: Survey Results for the Scott Ranch Development Project

Please include this information in the Scott Ranch Development packet.

Dear Mayor Barrett and City Council Members,

Before the pandemic, our organization and our many volunteers were able to talk to Petalumans at farmer markets, in shopping centers, downtown, in cafes and businesses, and at Helen Putnam Park. Many volunteers went door-to-door with flyers and petitions. The goal was to inform the public about the Davidon development.

Since the pandemic, outreach efforts have been limited to social media and email. Part of our outreach was conducting a community perception survey and asking input about the Scott Ranch development. In addition, this survey helped determine public priorities about Petaluma.

The survey also gives Petalumans an opportunity to communicate directly to the City Council.

1

The survey ended at 2 p.m. on Thursday, March 11, with 254 respondents.

Attached are four PDF files:

Summary Results of Scott Ranch Survey
Survey Comments 1-100 (raw data of survey respondents)
Survey Comments 101-200 (raw data of survey respondents)
Survey Comments 201-254 (raw data of survey respondents)

We encourage you to look at the results of the survey and read the many sincere responses in “Summary Results of the Scott Ranch Survey.”

Petalumans for Responsible Planning
www.PetRP.org
PetRP@comcast.net

Summary Results of Scott Ranch Survey

Concerns about Scott Ranch

To the Petaluma City Council

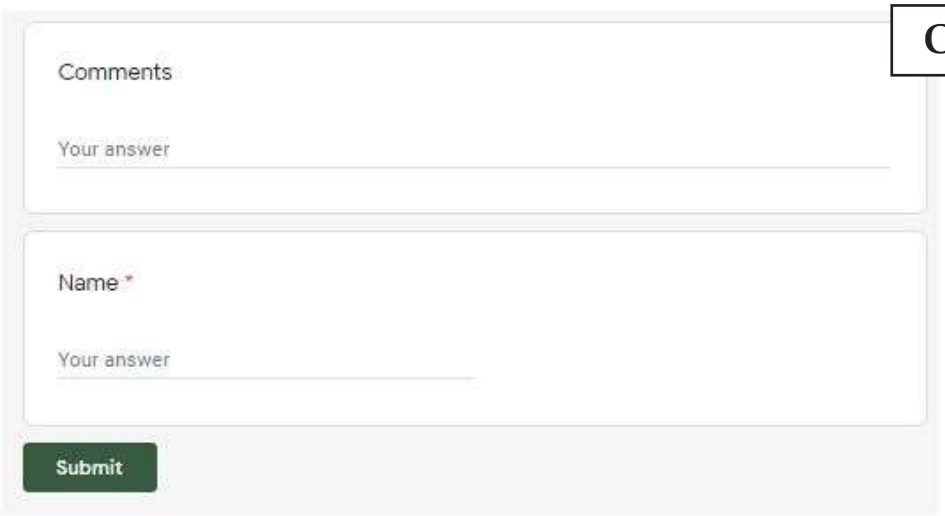
* Required

My concerns about the KCPP / Davidon RDEIR are: (check all that apply)

- [ ] Wildfire in UWI (urban wildfire interface) (Chapter 4.15)
- [ ] Red legged frog destruction / relocation (Chapter 4.3)
- [ ] Traffic - significant & unavoidable (Chapter 4.13)
- [ ] Parking for park in neighborhoods (Chapter 4.13)
- [ ] Disruption of wildlife corridor (Chapter 4.3)
- [ ] Downstream flooding (Chapter 4.8)
- [ ] Other:

I would like the city to: (check all that apply)

- [ ] Recommend parkland for the entire parcel
- [ ] Consider alternatives for the 28 homes. For example: less expensive homes with a smaller footprint, condos, little house community, low-income elderly housing, organic farm or winery, solar field, etc.
- [ ] Focus new development on affordable housing
- [ ] Create a cost / benefit analysis that considers ALL issues together
- [ ] Communicate to the public about the short- and long-term costs to the City of this development
- [ ] Create a RHNA (housing needs) dashboard that shows what our current obligation is, units approved with a drawdown on that total obligation, and how future projects would satisfy this state quota
- [ ] Explain how current VMT (vehicle miles traveled) traffic measures relate to previous traffic measures and if that matters in this project
- [ ] Other:



Results:

My concerns about the KCPP / Davidon RDEIR are:

88.3% = Wildfire in UWI (urban wildfire interface) (Chapter 4.15)

90.2% = Red legged frog destruction / relocation (Chapter 4.3)

90.6% = Traffic - significant & unavoidable (Chapter 4.13)

76.2% = Parking for park in neighborhoods (Chapter 4.13)

93.8% = Disruption of wildlife corridor (Chapter 4.3)

85.2% = Downstream flooding (Chapter 4.8)

I would like the city to: (check all that apply)

1

91.7% = Recommend parkland for the entire parcel

59.8% = Consider alternatives for the 28 homes. For example: less expensive homes with a smaller footprint, condos, little house community, low-income elderly housing, organic farm or winery, solar field, etc.

57.1% = Focus new development on affordable housing

63.4% = Create a cost / benefit analysis that considers ALL issues together

69.3% = Communicate to the public about the short- and long-term costs to the City of this development

58.3% = Create a RHNA (housing needs) dashboard that shows what our current obligation is, units approved with a drawdown on that total obligation, and how future projects would satisfy this state quota

62.6% = Explain how current VMT (vehicle miles traveled) traffic measures relate to previous traffic measures and if that matters in this project

Comments:

- No development
- Really concerned that once developed and the 44 acres are turned over to Sonoma County Parks it will be years before anything is developed. After several years they put the trailhead in by the circle on Windsor Drive with no parking or other amenities. No reason to think this won't happen with this development. Traffic and parking in the surrounding neighborhood is horrible. People using the park refuse to pay for parking which supports the park. 2
- Please do not build in that area. There are enough houses in that area already. We need parkland! 3
- I'd like to see any housing development actually be affordable
- I say it's the right compromise
- It should remain open park land and let the cows graze
- Traffic is already an issue on D St. We live on Grossland Way and there are times we can not make a left turn out of our Street unto D. Even making a right turn off of Grossland is difficult when the traffic is backed up. Afternoon, between 3 and 4:30 seems to be the worst and if the bridge is up, the train is coming and kids are getting out of school, we are in gridlock.I want townspeople to have access to this beautiful park, but am concerned about escape routes in case of fire or floods. 4
- I want our City to recommend parkland for the ENTIRE parcel. When H Putnam Park was established in 1985, the population of Petaluma was 35,000. It's now nearly 2x that, at 63,000 citizens, and the amount of parkland per citizen is significantly less. Putnam park is often very crowded. The park has been a critical refuge during COVID. Building on scenic ridges in the wild land interface is entirely the wrong focus for our beautiful Rivertown. Putting in paths and allowing dogs in close proximity to the Red Barn and creek will sound the final death knell for the red-legged frog, an endangered Special Status Species. We can do this! We CAN set the entire 58 acres aside for preservation as parkland. We don't need new single-family luxury homes where we are built out in excess of 820% of our luxury housing quota (RHNA) for this building cycle. With Measure M and in concert with monies raised by Petalumans for Responsible Development, we can acquire the entire 58 acres to be added to Helen Putnam Park. Thank you. 5
- Environmental concerns, ongoing noise during and after construction in this echoing this valley, landslides, traffic, toxic emissions may cause many health issues for people living in this area 6
- We do not need luxury homes in Petaluma. We need more parks for the people who live here. It is smarter to use the infrastructure we are already have in place for new construction and leave the hills for parks. Unless the City has a plan to build new park for all of the new homes??? Didn't think so.... thx!! 7

- Helen Putnam is our most beautiful place to hike in Petaluma (we don't have many!). Having these 28 homes built there would destroy the natural beauty of the place. Please, let's keep it pristine.
- I like option 2 (Consider alternatives...), but not at this site. We have plenty of vacant downtown property whose development would benefit low income and elder housing and would be within walking distance of stores and other amenities.
- This project is beyond wasteful and environmentally ill balanced. As a resident of Petaluma for 40+ years the growth of this city has maxed out. It is time to be focusing on what is naturally And already in existence here and how we will manage these things. The red legged frog deserves a chance to exist and the people deserve your time to be spent on cleaning up so many things, but I'll mention the house less community, which is affecting our water ways. When do you put your greed and dollar signs away for the sake of peace of all things and beings? Do the right thing Petaluma.
- We are in a climate emergency and a bio-diversity crisis. We should be focused on enlarging our parks and preservation of our ecosystems, which are the most cost effective ways to stabilize our life styles while we put the longer term solutions in place.
- This parcel is not suitable for any housing. It should have been included in the park a long time ago.
- I live in Victoria and DO NOT WANT this project built up against Helen Putnam. There are too many homes as it is.
- Thank you for doing this.
- We need more park for the increased population of Petaluma
- Cities have a right to not over develop. We need to stop approving too much way over RHNA #s.
- Petaluma should acquire the ENTIRE 58 acres and not allow more luxury homes be built on our scenic ridges. When H Putnam Park was established in 1985, the population of Petaluma was 35,000. It's now approaching 2x that, at 63,000 citizens, and the ratio of parkland to citizen is significantly less. The park has been an important respite in COVID, and is a critical draw for folks interested in our town. We are currently built out to > 820% of our regional housing numbers (RHNA) for luxury homes. The last thing we need are more million-dollar homes on our scenic ridges and in our urban/wildland interface. So many species are already imperiled. The red-legged frog is an imperiled special status species. This is one of its 3 last habitats. With Measure M having passed and Petalumans for Responsible Planning having raised ~ $7 mil, the developer can be bought out!
- We don't need a large development on the edge of town. We have stated that we are in a climate crisis, and we need to act like it. We should concentrate on infill development, as well as increasing parklands in the city and access to them.

7

- The city council seems committed to destroying every remaining historic parcel they can. We absolutely do not need 28 large, ugly homes. The parcel as is adds more value - including tourism dollars - than new, ugly homes ever could. Please stop destroying our heritage and our environment.
- All of above, in both sections, are important, but if I marked them all I would come across as totally unthinking. Thank you for your efforts and good luck!
- We need more open space(s) for our growing population and less impingement on wildlife habitat.
- This parcel represents the only opportunity for residents of Petaluma to extend open space/parkland that is walkable from the city center and protects vital watershed, wildlife corridors and species. Please protect our health, wellbeing and our unique 'small town' feel by reducing sprawl and opting for infill projects instead.
- I support your efforts and don't support the deal cut behind scenes by Kelly Creek with developers.
- This is a difficult issue. This open space should be part of Helen Putnam Regional Park and I understand the owner needs to make some profit. Profit over environment. The best mitigation for climate change is preserving open space. 7
- City must start getting tougher on developers and take ownership of current residents' best interests. This is only going to benefit a handful of new people to town at the cost of our open space, watershed protection, wildlife corridor, traffic and safety and pollution for the entire area. Short term thinking will not solve these issues.
- Petaluma is losing its soul to fat-cat developers.
- Petaluma needs more parkland. Helen Putman is a busy, well loved place and the residents of the city would love to see it expanded. The proposed development is in a lovely oak filled valley which would be a wonderful addition to the Park, and would help protect our endangered state amphibian. D street is already a very busy traffic corridor bringing in all the commuters from Marin. Adding even more traffic is a bad idea.
- I have lived in Victoria for 2.5 years. During this time, the traffic has increased substantially. The parking in our neighborhood for Helen Putnam Park is ridiculous. I know there is ample parking for the park and people just don't want to pay the parking fee (to support a park that they are using), but the Victoria neighborhood is paying the price for this. The people that park along Windsor Drive are using our small neighborhood park, even though this is restricted to residents. 8
- Windsor Drive NOW is a noisy and fast-paced highway at least 2x per day, beginning from 6 AM -10AM, then beginning again from 2 pm until 7 pm. This is unacceptable. Building more homes will bring MORE traffic, and our neighborhood cannot sustain the impact. Building out HPP is a fine idea, but parking for HPP cannot be allowed to spill over into adjacent neighborhood

streets. Already Windsor Drive is over-run with cars parking to enter the un-paid entrance on Oxford, and at the new round-about entrance by Westgate.The park needs a parking lot for all of the bikers coming with trailers for their bikes, as the expansion of the bike trails has made HP enormously attractive to mountain bike enthusiasts. This is not objectionable, but the parking of random cars all throughout Windsor neighborhood IS. 8

- It is very unclear to me why we are taking our beautiful and highly limited open space and selling it off to the highest bidder. This land is irreplaceable. Once it's developed it remains so. The city should focus and reward development within the current urban footprint and next to transportation hubs. This proposed development is the antithesis of all of that. Helen Putnam is the only "wild" feeling park that Petaluma has. It is a jewel. It should be expanded not surrounded by luxury homes. Open spaces are for everyone to enjoy, not just for the wealthy and well connected.
- Please look over the impact on this development
- This is not a simple project. It is complicated because of so many issues that need professional adjustments. 9
- I am very opposed to this new construction.
- I don’t know the details of this project and I don’t know if by turning down the 28 houses we will end up with something worse. But I am hoping for something better. I like the idea of a tiny house community or homes for seniors. Not so enthusiastic about winery or farm etc.
- Petaluma stands for something, people like myself chose Petaluma to call home for a reason. Those reasons are that we love the slower pace, rolling hills, and friendly community that Petaluma offers. I didn't choose Marin County with its expensive homes and lifestyle. My dream and vision for Petaluma is to work toward enhancing these charms, not diluting them with modern housing developments. Petaluma has a valuable opportunity that should not be squandered. We've finally dredged our river. Now let's fix our streets and return it to the luster that it stands for rather than introducing suburban sprawl
- This 'deal' for a park and 28 homes was developed by 2 people, NOT the entire community. And these 2 are not aware of, nor seem to care about Petaluma's Climate Action Framework. Does City Council care more about these out-of-town/out-of-touch developers and future occupants of the 28 homes, than they care about current residents?
- Please consider all of these concerns.
- Air Quality is a big concern about this project. 10
- Biological concerns for this development on such a dangerous hill.
- Gas Emissions are not going to be healthy for residents in Petaluma.
- The small-town charm of Petaluma is in jeopardy. Don't let it disappear completely or be compromised by the greedy out-of-towners who have no vision or interest in the affect this visual assault, on one of nature's jewels, will have on this area. They can pack up and leave us in their dust! 11

- These 28 expensive homes in the style of the dated suburban model is not what Petaluma needs and not what Petalumans can afford to buy. These homes would be car-dependent and add to the traffic problems and green house gas emissions. " 11
- This development has no place on the west side of town where the rural beauty is slowly being encroached upon. This area should be preserved and incorporated into Helen Putnam Park, one of the very few public spaces available to us in Petaluma.
- The detriment to our landscape and our safety (MORE TRAFFIC???) is not worth whatever financial gain (if any) the city would get.
- NO on the luxury homes!!! Say NO to Davidon!!!
- I do not support this development. Leave the land and nature alone.
- Too much traffic already. Please keep as open space.
- It is imperative that we don't develop this beautiful land in Petaluma and throughout California. The new houses will further stress natural resources and infrastructure. They will mar a pastoral landscape. I urge you not to approve this development.
- Respect our wishes about the goals for Petaluma.
- Fell in love with Petaluma in 1993. I moved here 13 years ago because it was perfect as it was. Now trying to move away as it's become just another disgusting money monger town.
- Many concerns over the safety of residents of Petaluma. Need more reports that more current. 12
- Helen Putnam is a Petaluma treasure and should be expanded, not reduced with more urban sprawl that is not even affordable housing. We have other sites to build that would not rob Petaluman of this beautiful open space for ever.
- We need more affordable housing! Not unaffordable housing!
- The high road is saving this natural treasure. I say we raise all the money needed to satisfy the gluttonous developer and be remembered for all time a community that saved the impossible. Will same thinking ever overrule making money????? 13
- We feel quite strongly that we do not want Davidon to build homes up against Helen Putnam Park. There are enough homes there already. We need to keep the beautiful open land. Well the credit is deserved for all the people involved in KCPP, it’s not a solution that we want. In fact, we don’t want it at all. I feel quite strongly that this housing development should not go up at this location.
- I support city goal for carbon neutral by 2030-this development does nothing to this end 14
- How are we building more housing and no relief for our traffic concerns. And now the Council wants to close roads for electric bikes? What!!! But yet the people who are paying transportation costs, via registration and other taxes 15

are actually paying for this and not the bicyclists? This City Council makes zero sense.

- A really bad idea. Are we that short sighted
- No, no, no, no, no
- There are so many problems with this development I don't know where to begin.
- To many large homes and not enough places for people to go. Should become part of park. Traffic is already horrible along there. Petaluma is losing its charm becoming anothe traffic ridden place, The roads cannot keep handling the load of more and more people. Infrastructure is in desperate need of help before more building. God help you getting to the hospital across town as its always gridlocked.
- What if I support this development? Where is that on this survey? This is very one sided.
- This city has been slowly siphoning off it's character in the interest of big money for many years. You can't build character with dollars - in fact, they are often mutually opposed. This community has plenty of money if it looks inward and multi-million dollar homes in exclusive neighborhoods is the exact opposite of Petaluma heritage of farming, unique-character of stores, entertainment and the people that live here. For what exactly? 15
- PLEASE stop further housing development in Petaluma. This city is saturated as it is!! Find tax dollars from other sources and be fiscally responsible.
- Petaluma must pursue in-fill development near easy public transit options.
- This land should be preserved, it is a vital part of the essence of Petaluma that makes it so special and to sell it off to the highest bidder is the work of speculators and developers, not the citizens of Petaluma, custodians of our children's future, the people you are supposed to represent. Petaluma will not be enhanced by this development it will be diminished.
- Stop this project.
- Petaluma will be permanently and negatively impacted by the loss of this open space.
- This is a wildlife corridor, without much knowledge about the area they cross at the same place all year, as well as up and over the hill near the water tower. 16
- More congestion is not better for long term environmental health 17
- Just because a developer buys land does not mean that the City guarantees approving the project. Davidon has been trying to make a profit on this environmentally sensitive land for decades.
- The presentative to the Planning Commission was very slick and expensive. Makes an average person wonder how much this developer is willing to spend in order to convince the city council to approve this development. 18

Added responses to

My concerns about the KCPP / Davidon RDEIR are:

Keep this beautiful pristine parcel intact,

Project at UBG- no affordable housing on site

Kelly Creek overflow and change

Construction is one of the most greenhouse gas intensive industries.

Building on scenic ridges

Noise , toxic emissions , story poles needed

Urban Sprawl - Should be building In Fill in town first

We need affordable housing, not more luxury homes in land that has never been built on.

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Erosion, excessive luxury housing development that is NOT WALKABLE

This is not the type of housing that Petaluma needs.

need for affortable multiple family planned unit developments

Ruin of a historic area

Unnecessary additional luxury housing IS A DEVELOPER'S BOONDOGGLE!

Increased noise, air and water pollution in this valley from traffic, visitors and residents dumping chemicals into this watershed.

VMTS and GHGs, poor growth pattern

Project at UBG- no affordable housing on site

Noise during construction. After as well. The valley has high sounds across.

flies in face of our climate emergency:

This type of development is inconsistent with our goal to be carbon neutral – it's not the type of housing we need and it will cause irreparable harm to our local environment.

Noise is a big concern.

Greenhouse gases have far-ranging environmental and health effects. They cause climate change by trapping heat, and they also contribute to respiratory disease from smog and air pollution. Extreme weather, food supply disruptions, and increased wildfires are other effects of climate change caused by greenhouse gases

Money does hideous things to beautiful places!

Update the reports. They seem to be out of date.

The reports in the DEIR are outdated. They need to be updated.

Toxic gas from this development could be dangerous for the people in the area.

Old reports are in the Davidon report. Need new ones.

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If this project is unexpected approved, story poles would be needed.

Geology and soils concerns. Landslides in this area.

Endangered species should not be destroyed.

Loss of Habitat for birds and other wildlife. And poisons i.e., herbicides, rat poisons used by homeowners that can end up in the creek or be ingested by wildlife.

Protect all the Western Hillsides just as the General Plan stipulates

destruction of even more beautiful open space!!

Once the land is desecrated it will never be the same again, and for what? Short term profit.