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BY E-MAIL AND OVERNIGHT MAIL

April 22, 2024

Director Brandon Phipps
Community and Economic Development Director and Zoning Administrator
City of Sausalito
420 Litho Street
Sausalito, CA 94965

Mayor Ian Patrick Sobieski, Ph.D.
Vice Mayor Joan Cox
Councilmembers Melissa Blaustein, Jill James Hoffman, Janelle Kellman
City of Sausalito
420 Litho Street
Sausalito, CA 94965
cityclerk@sausalito.gov
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jhoffman@sausalito.gov; jkellman@sausalito.gov

RE: 605-613 Bridgeway: Biological Impact Preclude SB 35.

Dear Director Phipps, Mayor Sobieski, and Honorable Members of the City Council:

I write on behalf of Save Our Sausalito ("SOS"), an organization comprised of numerous active residents of the City of Sausalito. SOS and its members are deeply concerned with a proposal to place a massive luxury condominium development in the heart of Sausalito's downtown historic district at 605-613 Bridgeway ("Project"). We provide the information below to assist the City staff and governing bodies as they consider this application. As discussed below, the Project developer is legally precluded from taking advantage of the streamlined, ministerial approval process created by SB 35 because the Project site provides habitat for at least ten (10) protected special status species.

The Project's developer proposes to place a 9-story, 109-foot tall, 59-unit luxury condo building on a parcel zoned by voter-initiative for a maximum of 32-feet. The Project is so out-of-scale with the historic district that it threatens to destroy the historic significance of the internationally-recognized historic downtown Sausalito. The artist rendering attached as Exhibit A speaks volumes. The rendering makes clear that this monstrosity would destroy the character and historic significance of the Downtown Sausalito Historic District – one of only twelve historic districts in the State of California. The Sausalito Historic District has been carefully preserved and is an internationallyrenowned “must-visit” destination noted in almost every travel guide covering the Bay Area. This Project threatens to destroy this precious historic resource.

The Project’s developer seeks approval under the newly amended SB 35 (Gov. Code § 65913.4). SB 35 makes qualifying projects subject to streamlined, ministerial approval, exempt from review under the California Environmental Quality Act (“CEQA”), Public Resources Code § 21000, et seq. However, SB 35 has numerous exceptions intended to protect the environment. One such exception is that SB 35 does not apply if the project site contains:

> Habitat for protected species identified as candidate, sensitive, or species of special status by state or federal agencies, fully protected species, or species protected by the federal Endangered Species Act of 1973 (16 U.S.C. Sec. 1531 et seq.), the California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of Division 3 of the Fish and Game Code), or the Native Plant Protection Act (Chapter 10 (commencing with Section 1900) of Division 2 of the Fish and Game Code).

(Gov. Code § 65913.4(a)(4)(J)).

As discussed in the attached comment letter of Dr. Shawn Smallwood, Ph.D., the Project site contains habitat for at least ten (10) species of special status identified by state and federal agencies. (Exhibit B). As such, the developer may not take advantage of the SB 35 streamlined, ministerial approval process at all.

On April 2 and April 3, 2024, wildlife biologist Dr. Shawn Smallwood, Ph.D. conducted an inspection of the Project site, for a total of almost 4 hours on each day. Dr. Smallwood is an eminently well-qualified expert, with a doctorate in ecology from the University of California at Davis. He has published dozens of peer-reviewed journal articles. He is the former Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. He was Associate Editor of wildlife biology’s premier scientific journal, The Journal of Wildlife Management. He has performed wildlife surveys in California for thirty-seven years.

Dr. Smallwood recorded six coast live oak trees and five California buckeye trees on the Project site, all of which are protected by the City of Sausalito’s tree ordinance. He also noted the presence of California Bay Laurel. Dr. Smallwood positively identified 49 vertebrate species of wildlife on the site, ten (10) of which are special status species. Dr. Smallwood photographed many of the species he observed. Dr. Smallwood identified signs of breeding and nesting on the Project site. Among the special status species positively identified by Dr. Smallwood are:

- Allen’s Hummingbird (Bird of Conservation Concern)
- Western Gull (Bird of Conservation Concern)
- Common Loon (California Species of Special Concern)
- Double-crested Cormorant (Taxa to Watch List)

- California Brown Pelican (California Fully Protected (Fish & Game Code §3511))
- Turkey Vulture (Bird of Prey (Fish & Game Code §3503.5))
- Red-Shouldered Hawk (Bird of Prey (Fish & Game Code §3503.5))
- Red-Tailed Hawk (Bird of Prey (Fish & Game Code §3503.5))
- Great Horned Owl (Bird of Prey (Fish & Game Code §3503.5))
- Oak Titmouse (Bird of Conservation Concern)

Dr. Smallwood states, "Species listed by the US Fish and Wildlife Service as Birds of Conservation Concern, and species protected by California as Birds of Prey, are living and breeding on the project site… The evidence is overwhelming that the project site provides habitat for protected species identified as candidate, sensitive, or species of special status by state or federal agencies, and fully protected species." (Exhibit B, p. 12).

Dr. Smallwood concludes that the Project site contains habitat for the 10 special status species identified. He states:

> Making direct use of the trees on the project site were special-status species including oak titmouse, great horned owl, Allen's hummingbird and red-shouldered hawk. Making direct use of the existing buildings atop which the proposed building would cover were western gulls. The project site is habitat of these species.
>
> True to its name, oak titmouse is a denizen of oak woodlands. Cornell University Lab of Ornithology's All About Birds website (https://www.allaboutbirds.org/guide/Oak _Titmouse/lifehistory) reports, "Oak Titmice live mostly in warm, open, dry oak or oak-pine woodlands." This is where I found multiple interactive members of oak titmouse on the project site.
>
> According to All About Birds, "Great Horned Owls usually gravitate toward secondary-growth woodlands, swamps, orchards, and agricultural areas, but they are found in a wide variety of deciduous, coniferous or mixed forests … [and are] fairly common in wooded parks, suburban area, and even cities. The great horned owl I encountered at the project site was initially calling from residential buildings north-northwest of the site, but later I saw it fly from those buildings directly into the coast live oaks on the project site.
>
> According to All About Birds, "Allen's Hummingbirds breed in a narrow strip of coastal forest, scrub, and chaparral from sea level to around 1,000 feet elevation along the West Coast." It must just so happen that the project site is located within this strip. It was among the coast live oaks and California buckeyes when it circled about me, issuing its "zeeeee" call. I was not surprised to find this species there.

> According to All About Birds, "Red-shouldered Hawks [live] in some suburban areas where houses or other buildings are mixed into woodlands. In the West, they live in riparian and oak woodlands…" This habitat description is entirely consistent with the project site, so I am not surprised to have detected a red-shouldered hawk there.

(Exhibit B, p. 15).

In addition, Dr. Smallwood concludes that the Project site likely provides habitat to several other special status species. He states, "Based on habitat associations, special-status species I expect to use the project site as habitat, but which have yet to be detected there, include monarch, rufous hummingbird, white-tailed kite, Cooper's hawk, sharp-shinned hawk, western screech-owl, Lewis's woodpecker, Nuttall's woodpecker, olive-sited flycatcher, California thrasher, Bullock's oriole, yellow warbler, and at least several of the bat species in Table 2. The project site is most likely habitat of these species, and others in Table 2." (Exhibit B, p. 16).

Dr. Smallwood concludes that the proposed Project will adversely affect these special status species by direct loss of habitat, and bird-window collisions due to the extensive use of glass. Dr. Smallwood predicts that the Project will cause 147 bird deaths annually due to the extensive use of glass and resulting bird-window collisions. (Exhibit B. p. 22).

For the above reasons, SB 35 does not apply to the proposed Project. Please do not hesitate to contact me with any questions about this letter.

Sincerely,

Richard Toshiyuki Drury
LOZEAU DRURY LLP

EXHIBIT A

Rendering based on Francis Gough Illustration and 3/4/2024 project update filed with City of Sausalito

EXHIBIT B

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Richard Drury
Lozeau Drury LLP
1939 Harrison Street, Suite 150
Oakland, CA 94612

21 April 2024

RE: 605-613 Bridgeway

Dear Mr. Drury,

I write to report to you my findings of wildlife reconnaissance surveys I completed at 605-613 Bridgeway, Sausalito, California (APN: 065-132-16), where I understand a 9-story, 109.5-foot-tall building is proposed to include 59 residential units and 119,647 square feet of floor space with lots of glass on its façades, all on 0.53 acres. I surveyed the site to determine whether it provides habitat for protected species identified as candidate, sensitive, or species of special status by state or federal agencies, fully protected species, or species protected by the federal Endangered Species Act of 1973 (16 U.S.C. Sec. 1531 et seq.), the California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of Division 3 of the Fish and Game Code), or the Native Plant Protection Act (Chapter 10 (commencing with Section 1900) of Division 2 of the Fish and Game Code).

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

HABITAT

Critical to my determinations of whether the site of the proposed project provides habitat to sensitive and special-status species is the habitat concept – a topic that has been a focus of much of my research career (Smallwood 1993, 2002, 2015). Habitat is defined as that part of the environment that is used by members of a species (Hall et al. 1997, Morrison et al. 1998). Habitat use is typically measured by ecologists to define habitat associations; that is, the level of association that a species has been observed to use a portion of the measurable environment (Smallwood 2002). Habitat associations are important because habitat at a given site is not always continuously occupied, as members of many species are seasonal or must travel widely to forage, evade predation, or to patrol home ranges or breeding territories. Therefore, whereas my detection of a species in a particular place verifies that that place serves as habitat, my failure to detect a species can be regarded as merely a failure to verify what otherwise I can determine as a high likelihood of occurrence based on a well-founded or strong habitat association. In other words, whereas I failed to detect a yellow warbler at the project site, I can still determine with reasonable confidence that the sites is yellow warbler habitat, because I have many times observed yellow warblers in environments that closely resemble the project site. Observing members of a species on a site is optimal for determining whether the site provides habitat, but habitat associations can also support determinations of whether the site provides habitat.

The definition of habitat I cited above can include a wide range of physical features of the Earth, depending on the species. The habitat of an animal species can include soil, woody debris, particular species of shrubs or trees or vegetation associations, fresh water, salt water, or a portion of the gaseous atmosphere, among many other physical media within which the species must find shelter, forage, and opportunities for socialization, learning, and breeding. The gaseous atmosphere of a site in which volant animals live is referred to as the aerosphere (Davy et al. 2017, Diehl et al. 2017), and is no less tangible as a physical feature of a volant animal's habitat, and no less essential, than is any other part of an animal's habitat. Without access to the aerosphere of a particular place, animals that are morphologically adapted to fly cannot reach breeding sites, cannot escape predators, and cannot appropriately socialize or successfully breed. For these reasons and more, an entire subdiscipline of ecology is aeroecology (Kunz et al. 2008). Aerial habitat is particularly relevant to the proposed project because the proposed building would eliminate access to it by volant species of wildlife that have long relied on it.

SITE VISIT

I visited the site of the proposed project for 3.92 hours from 15:39 to 19:34 hours on 2 April 2024, and for 3.75 hours from 06:33 to 10:18 hours on 3 April 2024. I surveyed from a neighbor's driveway along the western border of the project site, scanning for wildlife with use of binoculars. I recorded all species of vertebrate wildlife I detected, including those whose members flew over the site or were seen nearby, off the site. Animals of uncertain species identity were either omitted or, if possible, recorded to the Genus or higher taxonomic level.

Conditions were clear with a slight north wind and 60° to 54° F on 2 April, and overcast with a slight north wind and 51° to 54° F on 3 April. The western portion of the site was covered by six coast live oaks (*Quercus agrifolia*) and five California buckeyes (*Aesculus California*), all of which are protected by City of Sausalito, and California Bay Laurel (*Umbellularia californica*) (Urban Forestry Associates 2023). These trees and the overlying airspace of the project site support many species of vertebrate wildlife.

I saw Bewick's wrens (Photo 1), black phoebe (Photo 2), California towhees and chestnut-backed chickadees (Photos 3 and 4), California scrub-jays and western gulls (Photos 5 and 6), American crows and oak titmouse (Photos 7 and 8), hermit thrush and western bluebird (Photos 9 and 10), California brown pelicans and eastern gray squirrels (Photos 11 and 12), and golden-crowned sparrows (Photo 13), among other species listed in Table 1. I detected 49 species of vertebrate wildlife, 10 of which are special-status species (Table 1).

Signs of breeding on and near the site abounded. Bewick's wrens defended a nest territory. California scrub-jays were building a nest. Western gulls used the airspace of the site for social interactions leading to copulation on the buildings at 605-613 Bridgeway. Black phoebes defended a nest territory. Chestnut-backed chickadees defended a nest cavity. Birds were very busy on the site, but very difficult to photograph due to cryptic behaviors to hide nest sites.

Photo 1. *Bewick's wren on the project site, 3 April 2024.*

Photo 2. *Black phoebe next to the project site, having just come off the site, 3 April 2024.*

Photos 3 and 4. *California towhee (top) and chestnut-backed chickadee on and next to the project site, 3 April 2024.*

Photos 5 and 6. *California scrub-jay with food from the project site (top) and a pair of western gulls on one of the buildings that would be covered by the project's building, 2 April 2024. Western gull is a special-status species.*

Photo 7. *American crow on the project site, 2 April 2024.*

Photo 8. *Oak titmouse on the project site, 2 April 2024. Oak titmouse is a special-status species.*

Photos 9 and 10. *Hermit thrush on the project site (top) and western bluebird next to the project site (Bottom), 2-3 April 2024.*

Photo 11. *California brown pelicans flew over the project site, 3 April 2024.*

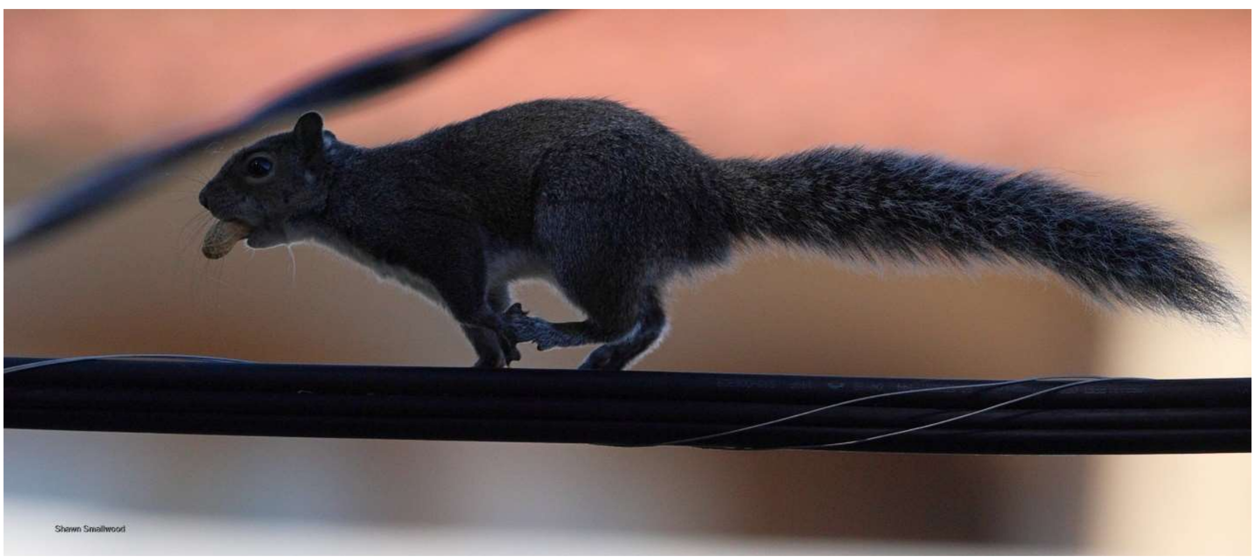


Photo 12. *Eastern gray squirrel on the project site, 3 April 2024.*

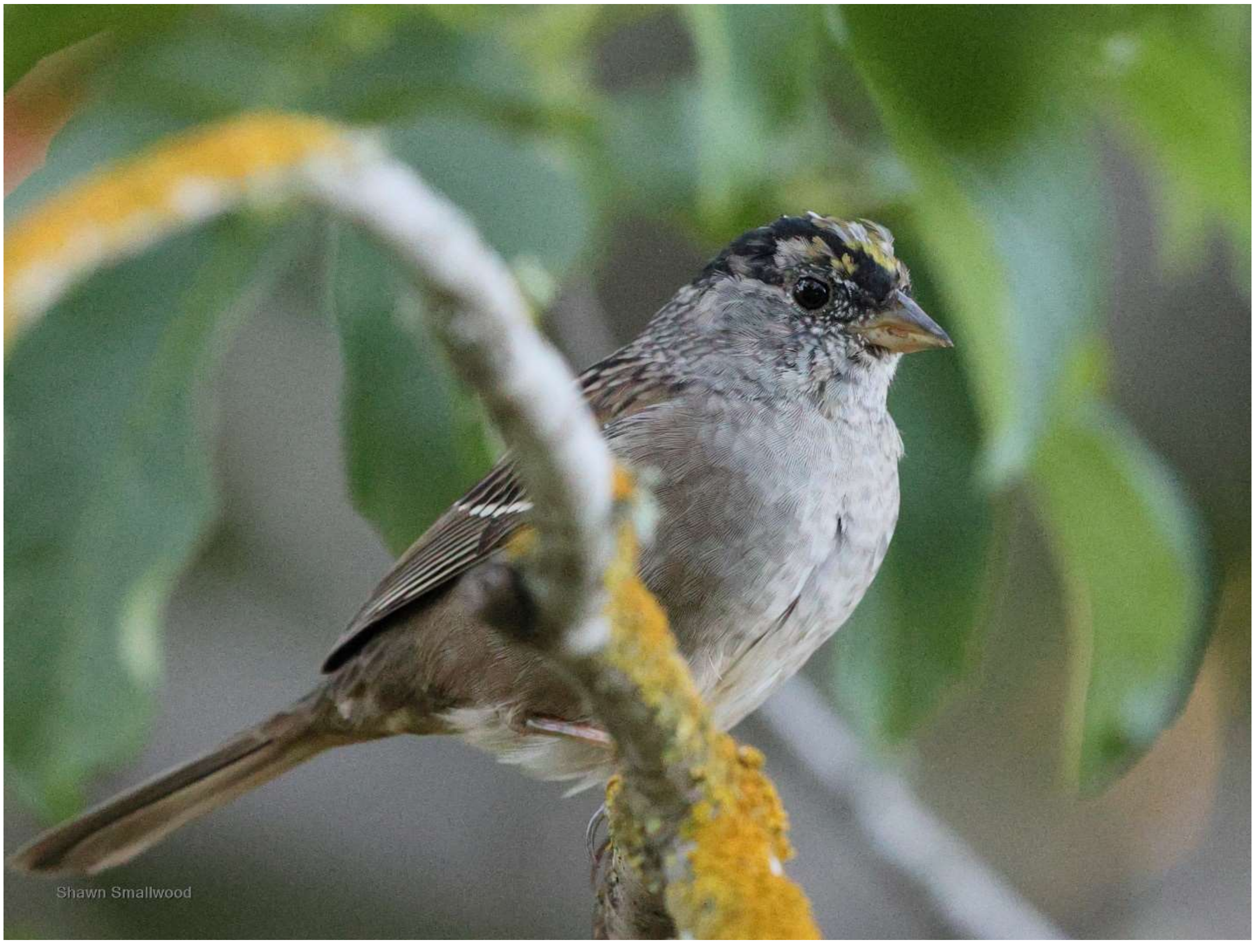


Photo 13. *Golden-crowned sparrow on a California buckeye on the project site, 2 April 2024.*

Table 1. *Species of wildlife I observed during 7.67 hours of survey on 2 and 3 April 2024.*

Common name	***Species name***	**Status[1]**	**Notes**
Canada goose	*Branta canadensis*		Low overflight, pair
Rock pigeon	*Columba livia*	Non-native	Just off site
Band-tailed pigeon	*Patagioenas fasciata*		Low overflight, flock
Eurasian collared-dove	*Streptopelia decaocto*	Non-native	Calling
Mourning dove	*Zenaida macroura*		Low overflight
Anna's hummingbird	*Calypte anna*		Territory defense
Allen's hummingbird	*Selasphorus sasin*	BCC	Territory defense
Ring-billed gull	*Larus delawarensis*		Low overflight
Western gull	*Larus occidentalis*	BCC	Low overflights
Glaucous-winged gull	*Larus glaucescens*		Low overflight
Caspian tern	*Hydroprogne caspia*		Low overflight
Common loon	*Gavia immer*	SSC	On the Bay
Double-crested cormorant	*Nannopterum auritum*	TWL	Low overflight, flock
California brown pelican	*Pelecanus occidentalis californicus*	CFP	Low overflight, pair

Common name	*Species name*	Status[1]	Notes
Great egret	*Ardea alba*		Flew nearby
Snowy egret	*Egretta thula*		Flew nearby
Turkey vulture	*Cathartes aura*	BOP	Overflights
Red-shouldered hawk	*Buteo lineatus*	BOP	Calling
Red-tailed hawk	*Buteo jamaicensis*	BOP	Overflight
Great horned owl	*Bubo virginianus*	BOP	Flew onto site
Tropical kingbird	*Tyrannus melancholicus*		Calling from on site
Black phoebe	*Sayornis nigricans*		Breeding territory
California scrub-jay	*Aphelocoma californica*		Nest-building
American crow	*Corvus brachyrhynchos*		Likely nesting
Common raven	*Corvus corax*		Likely nesting
Chestnut-backed chickadee	*Poecile rufescens*		Nesting
Oak titmouse	*Baeolophus inornatus*	BCC	Likely nesting
Bewick's wren	*Thryomanes bewickii*		Territory defense
House wren	*Troglodytes aedon*		Territory defense
Northern mockingbird	*Mimus polyglottos*		Just off site
European starling	*Sturnus vulgaris*	Non-native	Just off site
Western bluebird	*Sialia mexicana*		Just off site
Hermit thrush	*Catharus guttatus*		
American robin	*Turdus migratorius*		
House sparrow	*Passer domesticus*	Non-native	
House finch	*Haemorphous mexicanus*		
Lesser goldfinch	*Spinus psaltria*		
Chipping sparrow	*Spizella passerina*		
Dark-eyed junco	*Junco hyemalis*		
Golden-crowned sparrow	*Zonotrichia atricapilla*		Small flock
Song sparrow	*Melospiza melodia*		
California towhee	*Melozone crissalis*		
Spotted towhee	*Pipilo maculatus*		On buckeye
Red-winged blackbird	*Agelaius phoeniceus*		Calling
Yellow-rumped warbler	*Setophaga coronata*		
Black-throated gray warbler	*Setophaga nigrescens*		Calling from on site
Townsend's warbler	*Setophaga townsendi*		
Bats			Early morning foraging around roost tree; multiple
Eastern gray squirrel	*Sciurus carolinensis*	Non-native	

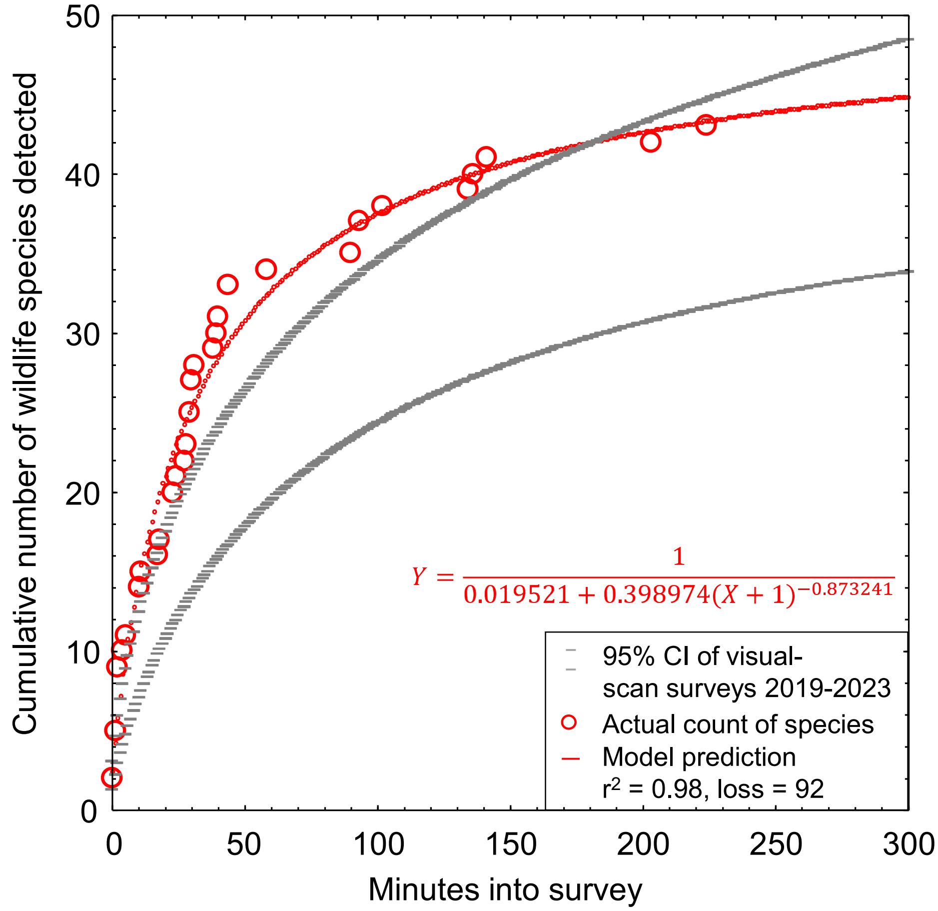
[1] CFP = California Fully Protected (CFG Code 3511), SSC = California Species of Special Concern, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, TWL = Taxa to Watch List (Shuford and Gardali 2008), and BOP = Birds of Prey (California Fish and Game Code 3503.5).

Considering my brief time at the project site, I saw and heard many species of wildlife. The species I detected included 10 special-status species, all of which are sensitive species whose presence obligates my determination that sensitive species occur on the project site. Members of a California Fully Protected species flew through the very airspace that would be occupied by the project's glass-covered building. Species listed by the US Fish and Wildlife Service as Birds of Conservation Concern, and species protected by California as Birds of Prey, are living and breeding on the project site. Most of the birds in Table 1 are protected by the Migratory Bird Treaty Act and by the California Bird Protection Act, largely because birds are sensitive to disturbances to their nest attempts. Furthermore, coast live oak, which dominates the tree canopy of the site, is specifically protected under the City of Sausalito's Tree Ordinance, and the California buckeyes on the project site are regarded as Heritage Trees, and therefore protected under the same Ordinance. Not only are most of the trees on site special as indicated by their protected status, but they support many of the nests of the bird species in Table 1, and they serve as roosts to the bats I saw on site. Although I do not know which species of bats I saw on the site, there is a good chance that some or all of them are special-status species. The evidence is overwhelming that the project site provides habitat for protected species identified as candidate, sensitive, or species of special status by state or federal agencies, and fully protected species.

However, I must point out that the species of wildlife I detected at the project site comprised only a sampling of the species that were present during my surveys. I fit a nonlinear regression model to the cumulative number of vertebrate species detected with time into my 3 April 2024 survey to predict the number of species that I would have detected with a longer survey or perhaps with additional biologists available to assist. The model is a logistic growth model which reaches an asymptote that corresponds with the maximum number of vertebrate wildlife species that could have been detected during the survey. In this case, the model predicts 51 species of vertebrate wildlife were available to be detected after five hours of survey on the morning of 3 April 2024, which left eight species undetected that morning (Figure 1). Unfortunately, I do not know the identities of the undetected species, but the pattern in my data indicates relatively high use of the project site compared to 10 surveys at other sites I have completed in Marin and Sonoma Counties. Compared to models fit to data I collected from other sites in the region between 2019 and 2023, the data from the project site exceeded the upper bound of the 95% confidence interval of the rate of accumulated species detections with time into the survey (Figure 1). Importantly, however, the species that I did and did not detect on 2-3 April 2024 composed only a fraction of the species that would occur at the project site over the period of a year or longer. This is because many species are seasonal in their occurrence.

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

Figure 1*. Actual and predicted relationships between the number of vertebrate wildlife species detected and the elapsed survey time based on my visual-scan survey on 3 April 2024. Note that the relationship would differ if the survey was based on another method or during another season.*



I projected the predictions of each model to thousands of hours to find predicted asymptotes of wildlife species richness. The mean model-predicted asymptote of species richness was 57 after 11,857 hours of visual-scan surveys among the 46 stations of my research site. I also averaged model predictions of species richness at each incremental increase of number of surveys, i.e., number of hours (Figure 2). On average I would have detected 21.7 species over my first 7.67 hours of surveys at my research site in the Altamont Pass (7.67 hours to match the 7.67 hours I surveyed at the project site on 2-3

April 2024), which composed 38% of the predicted total number of species I would detect with a much larger survey effort at the research site. Given the example illustrated in Figure 2, the 49 species I detected after 7.67 hours of survey at the project site on 2-3 April 2024 likely represented 38% of the species to be detected after many more visual-scan surveys over another year or longer. With many more repeat surveys through the year, I would likely detect $^{49}/_{0.38} = 129$ species of vertebrate wildlife at the site. Assuming my ratio of special-status to non-special-status species was to hold through the detections of all 129 predicted species, then continued surveys would eventually detect 26 special-status species of vertebrate wildlife.

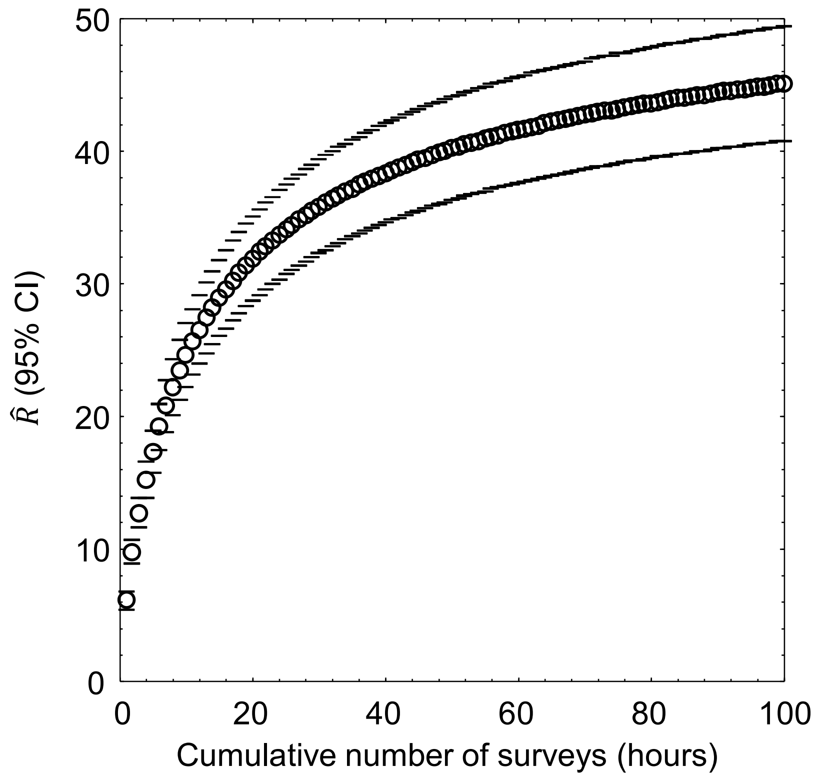


Figure 2. *Mean (95% CI) predicted wildlife species richness, $\hat{R}$, as a nonlinear function of hour-long survey increments across 46 visual-scan survey stations across the Altamont Pass Wind Resource Area, Alameda and Contra Costa Counties, 2015–2019. Note that the location of the study is largely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

Because my prediction of 129 species of vertebrate wildlife, including 26 special-status species of vertebrate wildlife, is derived from daytime visual-scan surveys, and would detect few nocturnal mammals such as bats, the true number of species composing the wildlife community of the site must be larger. my reconnaissance surveys should serve only as a starting point toward characterization of the site's wildlife community, but it certainly cannot alone inform of the inventory of species that use the site. More surveys are needed than my two surveys to inventory use of the project site by wildlife.

In my assessment based on database reviews and site visits, 118 special-status species of wildlife are known to occur near enough to the site to warrant analysis of occurrence potential (Table 2). Of these 118 species, at least 8 (8%) were recorded on the project site, and another 49 (25%) species have been documented within 1.5 miles of the site ('Very close'), another 44 (30%) within 1.5 and 4 miles ('Nearby'), and another 14 (27%) within 4 to 30 miles ('In region'). Nearly all (86%) of the species in Table 2 have been reportedly seen within 4 miles of the project site. The site therefore supports multiple special-status species of wildlife and carries the potential for supporting many more special-status species of wildlife based on proximity of recorded occurrences.

I am certain that at least 10 sensitive species of vertebrate wildlife occur at and near the project site, and that the tree canopy of the site is dominated by species that are protected under the City of Sausalito's Tree Ordinance. According to Urban Forestry Associates, "It is unclear how feasible replacement plantings will be based on the conceptual design," which in my opinion is a polite way of saying that replacement of these trees on site would be impossible. The proposed building would not leave sufficient room for replacements of the trees that would need to be removed. The same can be said of sensitive species of wildlife that find habitat on the project site; they would be permanently displaced, which means the productive capacities of these species would be diminished to the extent of habitat loss and to the degree of the further effects of habitat fragmentation (Smallwood 2015).

Making direct use of the trees on the project site were special-status species including oak titmouse, great horned owl, Allen's hummingbird and red-shouldered hawk. Making direct use of the existing buildings atop which the proposed building would cover were western gulls. The project site is habitat of these species.

True to its name, oak titmouse is a denizen of oak woodlands. Cornell University Lab of Ornithology's All About Birds website (https://www.allaboutbirds.org/guide/Oak_Titmouse/lifehistory) reports, "Oak Titmice live mostly in warm, open, dry oak or oak-pine woodlands." This is where I found multiple interactive members of oak titmouse on the project site.

According to All About Birds, "Great Horned Owls usually gravitate toward secondary-growth woodlands, swamps, orchards, and agricultural areas, but they are found in a wide variety of deciduous, coniferous or mixed forests … [and are] fairly common in wooded parks, suburban area, and even cities. The great horned owl I encountered at the project site was initially calling from residential buildings north-northwest of the site, but later I saw it fly from those buildings directly into the coast live oaks on the project site.

According to All About Birds, "Allen's Hummingbirds breed in a narrow strip of coastal forest, scrub, and chaparral from sea level to around 1,000 feet elevation along the West Coast." It must just so happen that the project site is located within this strip. It was among the coast live oaks and California buckeyes when it circled about me, issuing its "zeeeee" call. I was not surprised to find this species there.

According to All About Birds, "Red-shouldered Hawks [live] in some suburban areas where houses or other buildings are mixed into woodlands. In the West, they live in riparian and oak woodlands…" This habitat description is entirely consistent with the project site, so I am not surprised to have detected a red-shouldered hawk there.

Table 2. *Occurrence likelihoods of special-status species of wildlife at or near the proposed project site, according to eBird/iNaturalist records (https://eBird.org, https://www.inaturalist.org) and on-site survey findings, where 'Very close' indicates within 1.5 miles of the site, "nearby" indicates within 1.5 and 4 miles, and "in region" indicates within 4 and 30 miles, and 'in range' means the species' geographic range overlaps the site. Entries in bold font identify species I detected during my surveys.*

Common name	***Species name***	**Status[1]**	**Databases, Site visits**
San Bruno elfin butterfly	*Callophrys mossii bayensis*	FE	Nearby
Monarch	*Danaus plexippus*	FC	Very close
Bay checkerspot butterfly	*Euphydryas editha bayensis*	FT	In region
Mission blue butterfly	*Icaricia icarioides missionensis*	FE	Nearby
Callippe silverspot butterfly	*Speyeria callippe callippe*	FE	Nearby
Myrtle's silverspot butterfly	*Speyeria zerene myrtleae*	FE	In region
California tiger salamander	*Ambystoma californiense*	FT, CT, WL	In region
California giant salamander	*Dicamptodon ensatus*	SSC	Nearby
Red-bellied newt	*Taricha rivularis*	SSC	In region
Foothill yellow-legged frog	*Rana boylii*	CT, SSC	In region
California red-legged frog	*Rana draytonii*	FT, SSC	Nearby
Western pond turtle	*Emys marmorata*	SSC	Nearby
Brant	*Branta bernicla*	SSC2	Very close
Cackling goose (Aleutian)	*Branta hutchinsii leucopareia*	WL	Nearby
Redhead	*Aythya americana*	SSC2	Nearby
Harlequin duck	*Histrionicus histrionicus*	SSC2	Very close
Barrow's goldeneye	*Bucephala islandica*	SSC	Very close
Fork-tailed storm petrel	*Hydrobates furcatus*	SSC	Nearby
Ashy storm-petrel	*Hydrobates homochroa*	SSC	Nearby
Western grebe	*Aechmophorus occidentalis*	BCC	Very close
Clark's grebe	*Aechmophorus clarkii*	BCC	Very close
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, CE, BCC	In region
Black swift	*Cypseloides niger*	SSC3, BCC	Very close
Vaux's swift	*Chaetura vauxi*	SSC2, BCC	Very close
Costa's hummingbird	*Calypte costae*	BCC	Nearby
Rufous hummingbird	*Selasphorus rufus*	BCC	Very close
Allen's hummingbird	*Selasphorus sasin*	BCC	**On site**
American avocet[2]	*Recurvirostra americana*	BCC	Very close
Snowy plover	*Charadrius nivosus*	BCC	Nearby
Western snowy plover	*Charadrius nivosus nivosus*	FT, SSC, BCC	Nearby
Whimbrel[2]	*Numenius phaeopus*	BCC	Very close
Long-billed curlew	*Numenius americanus*	BCC, WL	Very close
Marbled godwit	*Limosa fedoa*	BCC	Very close
Red knot (Pacific)	*Calidris canutus*	BCC	Nearby
Short-billed dowitcher	*Limnodromus griseus*	BCC	Very close

Common name	*Species name*	Status[1]	Databases, Site visits
Willet	*Tringa semipalmata*	BCC	Very close
Marbled murrelet	*Brachyramphus marmoratus*	FT, CE	Nearby
Rhinoceros auklet	*Cerorhinca monocerata*	WL	Nearby
Tufted puffin	*Fratercula cirrhata*	SSC, BCC	Nearby
Cassin's auklet	*Ptychoramphus aleuticus*	SSC, BCC	Nearby
Laughing gull	*Leucophaeus atricilla*	WL	Very close
Heermann's gull	*Larus heermanni*	BCC	Very close
Western gull	*Larus occidentalis*	BCC	**On site**
California gull	*Larus californicus*	BCC, WL	Very close
California least tern	*Sternula antillarum browni*	FE, CE, CFP	Nearby
Black tern	*Chlidonias niger*	SSC2, BCC	Nearby
Elegant tern	*Thalasseus elegans*	BCC, WL	Very close
Black skimmer	*Rynchops niger*	BCC, SSC3	Nearby
Common loon	*Gavia immer*	SSC	**Next to site**
Brandt's cormorant	*Urile penicillatus*	BCC	Very close
Double-crested cormorant	*Phalacrocorax auritus*	WL	**On site**
American white pelican	*Pelacanus erythrorhynchos*	SSC1, BCC	Very close
California brown pelican	*Pelecanus occidentalis californicus*	CFP	Very close
Least bittern	*Ixobrychus exilis*	SSC2	In region
White-faced ibis	*Plegadis chihi*	WL	Nearby
Turkey vulture	*Cathartes aura*	BOP	**On site**
Osprey	*Pandion haliaetus*	WL, BOP	Very close
White-tailed kite	*Elanus luecurus*	CFP, WL, BOP	Very close
Golden eagle	*Aquila chrysaetos*	BGEPA, CFP, BOP	Very close
Northern harrier	*Circus cyaneus*	BCC, SSC3, BOP	Very close
Sharp-shinned hawk	*Accipiter striatus*	WL, BOP	Very close
Cooper's hawk	*Accipiter cooperii*	WL, BOP	Very close
American goshawk	*Accipiter atricapillus*	SSC2, BOP	Nearby
Bald eagle	*Haliaeetus leucocephalus*	BGEPA, CE, BOP	Very close
Red-shouldered hawk	*Buteo lineatus*	BOP	**On site**
Swainson's hawk	*Buteo swainsoni*	CT, BOP	Very close
Red-tailed hawk	*Buteo jamaicensis*	BOP	**On site**
Ferruginous hawk	*Buteo regalis*	WL, BOP	Very close
Rough-legged hawk	*Buteo lagopus*	BOP	Very close
Barn owl	*Tyto alba*	BOP	Very close
Northern spotted owl	*Strix occidentalis caurina*	FT, CT, BOP	In range
Western screech-owl	*Megascops kennicotti*	BOP	Very close
Great horned owl	*Bubo virginianus*	BOP	**On site**
Burrowing owl	*Athene cunicularia*	BCC, SSC2, BOP	Nearby
Long-eared owl	*Asio Otis*	BCC, SSC3, BOP	In region
Short-eared owl	*Asia flammeus*	BCC, SSC3, BOP	Nearby
Lewis's woodpecker	*Melanerpes lewis*	BCC	Very close

Common name	***Species name***	**Status[1]**	**Databases, Site visits**
Nuttall's woodpecker	*Picoides nuttallii*	BCC	Very close
American kestrel	*Falco sparverius*	BOP	Very close
Merlin	*Falco columbarius*	WL, BOP	Very close
Peregrine falcon	*Falco peregrinus*	BOP	Very close
Prairie falcon	*Falco mexicanus*	BCC, WL, BOP	Nearby
Olive-sided flycatcher	*Contopus cooperi*	BCC, SSC2	Very close
Willow flycatcher	*Empidonax trailii*	CE, BCC	Nearby
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC2	Nearby
Loggerhead shrike	*Lanius ludovicianus*	BCC, SSC2	Nearby
Oak titmouse	*Baeolophus inornatus*	BCC	**On site**
California horned lark	*Eremophila alpestris actia*	WL	Very close
Bank swallow	*Riparia riparia*	CT	Nearby
Purple martin	*Progne subis*	SSC2	Very close
Wrentit	*Chamaea fasciata*	BCC	Very close
California thrasher	*Toxostoma redivivum*	BCC	Nearby
Cassin's finch	*Haemorhous cassinii*	BCC	Nearby
Lawrence's goldfinch	*Spinus lawrencei*	BCC	Nearby
Grasshopper sparrow	*Ammodramus savannarum*	SSC2	Very close
Samuels song sparrow	*Melospiza melodia samueli*	BCC, SSC3	Nearby
Black-chinned sparrow	*Spizella atrogularis*	BCC	In region
Yellow-breasted chat	*Icteria virens*	SSC3	Nearby
Yellow-headed blackbird	*X. xanthocephalus*	SSC3	Nearby
Bullock's oriole	*Icterus bullockii*	BCC	Very close
Tricolored blackbird	*Agelaius tricolor*	CT, BCC, SSC1	Very close
Lucy's warbler	*Leiothlypis luciae*	SSC3, BCC	In region
Virginia's warbler	*Leiothlypis virginiae*	WL, BCC	Nearby
San Francisco common yellowthroat	*Geothlypis trichas sinuosa*	SSC3, BCC	In range
Yellow warbler	*Dendroica petechia*	BCC, SSC2	Very close
Summer tanager	*Piranga rubra*	SSC1	Nearby
Pallid bat	*Antrozous pallidus*	SSC, WBWG:H	In region
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, WBWG:H	Nearby
Silver-haired bat	*Lasionycteris noctivagans*	WBWG:M	Nearby
Western red bat	*Lasiurus blossevillii*	SSC, WBWG:H	Nearby
Hoary bat	*Lasiurus cinereus*	WBWG:M	Nearby
Miller's myotis	*Myotis evotis*	WBWG:M	In region
Little brown myotis	*Myotis lucifugus*	WBWG:M	In region
Fringed myotis	*Myotis thysanodes*	WBWG:H	In range
Yuma myotis	*Myotis yumanensis*	WBWG:LM	In region
Mexican free-tailed bat	*Tadarida brasiliensis*	WBWG: M	Nearby
San Francisco dusky-footed woodrat	*Neotoma fuscipes annectens*	SSC	Nearby
American badger	*Taxidea taxus*	SSC	Very close

[1] Listed as FT or FE = federal threatened or endangered, FC = federal candidate for listing, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, CT or CE = California threatened or endangered, CCT or CCE = Candidate California threatened or endangered, CFP = California Fully Protected (California Fish and Game Code 3511), SSC = California Species of Special Concern (not threatened with extinction, but rare, very restricted in range, declining throughout range, peripheral portion of species' range, associated with habitat that is declining in extent), SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively (Shuford and Gardali 2008), WL = Taxa to Watch List (Shuford and Gardali 2008), and BOP = Birds of Prey (CFG Code 3503.5), and WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H).

According to All About Birds, "Western Gulls nest only in places free from disturbance and isolated from predators such as foxes and coyotes: islands, headlands, and abandoned seaside structures such as piers or old buildings." On old buildings is exactly where I observed western gulls courting each other and attempting copulation. The old buildings the gulls used are the same the project proposes to overtop with its building.

Making use of that portion of the aerosphere which the proposed building would displace were the following special-status species: California brown pelican, double-crested cormorant, turkey vulture, red-tailed hawk, and again western gull. The aerosphere of the project site is habitat of these species.

Based on habitat associations, special-status species I expect to use the project site as habitat, but which have yet to be detected there, include monarch, rufous hummingbird, white-tailed kite, Cooper's hawk, sharp-shinned hawk, western screech-owl, Lewis's woodpecker, Nuttall's woodpecker, olive-sited flycatcher, California thrasher, Bullock's oriole, yellow warbler, and at least several of the bat species in Table 2. The project site is most likely habitat of these species, and others in Table 2.

There is at least a fair argument to be made for the need to prepare an EIR to accurately characterize the existing environmental setting and to appropriately analyze the project impacts to wildlife from habitat fragmentation and from bird-glass collision mortality.

BIRD-WINDOW COLLISIONS

Considering the location of the project between existing oak woodland and the Bay, and considering the proposal to build so much glass onto the façades of the building, I must point out that the project would pose a substantial bird-window collision risk. The project would add a 9-story, 109.5-foot-tall building with 119,647-square-feet of floor space, and according to the renderings I have seen of the building, glass windows and glass railings compose major features of the building. Th renderings depict the glass as both transparent and reflective – the two qualities of glass known to increase the risk of lethal bird-window collisions.

Many special-status species of birds have been recorded at or near the aerosphere of the project site. My database review and my site visits indicate there are 94 special-status species of birds with potential to use the site's aerosphere (Table 2). All of the birds of species in Table 2 can quickly fly from wherever they have been documented to the project site, so they would all be within brief flights to the proposed project's windows. At the nearby California Academy of Sciences, the glass facades facing adjacent gardens killed 0.077 and 0.086 birds per m^2 of glass per year (Kahle et al. 2016), which might not look like large numbers at first read, but which translate to large numbers of dead birds when projected to the extent of glass on the project (see below). And that the California Academy of Sciences is nearby from the perspective of a bird, consider the tropical kingbird I detected on the project site. Tropical kingbird is a very rare species in this part of California, so I looked up eBird records and found a cluster of recent records in Golden Gate Park, quite close to the California Academy of Sciences. The last record of this bird in Golden Gate Park was March 26th, which is only a few days before I detected it on the project site; it was likely the same bird.

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.

Glass-façades of buildings intercept and kill many birds, but are differentially hazardous to birds based on spatial extent, contiguity, orientation, and other factors. At Washington State University, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a three-story glass walkway (no fatality adjustments attempted). Prior to marking the windows to warn birds of the collision hazard, the collision rate was 84.7 per year. At that rate, and not attempting to adjust the fatality estimate for the proportion of fatalities not found, 4,574 birds were likely killed over the 54 years since the start of their study, and that's at a relatively small building façade. Accounting for the proportion of fatalities not found, the number of birds killed by this walkway over the last 54 years would have been about 14,270. And this is just for one 3-story, glass-sided walkway between two college campus buildings.

Klem's (1990) estimate was based on speculation that 1 to 10 birds are killed per building per year, and this speculated range was extended to the number of buildings estimated by the US Census Bureau in 1986. Klem's speculation was supported by fatality monitoring at only two houses, one in Illinois and the other in New York. Also, the basis of his fatality rate extension has changed greatly since 1986. Whereas his estimate served the need to alert the public of the possible magnitude of the bird-window collision issue, it was highly uncertain at the time and undoubtedly outdated more than three decades hence. Indeed, by 2010 Klem (2010) characterized the upper end of his estimated range – 1 billion bird fatalities – as conservative. Furthermore, the estimate lumped species together as if all birds are the same and the loss of all birds to windows has the same level of impact.

By the time Loss et al. (2014) performed their effort to estimate annual USA bird-window fatalities, many more fatality monitoring studies had been reported or were underway. Loss et al. (2014) incorporated many more fatality rates based on scientific monitoring, and they were more careful about which fatality rates to include. However, they included estimates based on fatality monitoring by homeowners, which in one study were found to detect only 38% of the available window fatalities (Bracey et al. 2016). Loss et al. (2014) excluded all fatality records lacking a dead bird in hand, such as injured birds or feather or blood spots on windows. Loss et al.'s (2014) fatality metric was the number of fatalities per building (where in this context a building can include a house, low-rise, or high-rise structure), but they assumed that this metric was based on window collisions. Because most of the bird-window collision studies were limited to migration seasons, Loss et al. (2014) developed an admittedly assumption-laden correction factor for making annual estimates. Also, only 2 of the studies included adjustments for carcass persistence and searcher detection error, and it was unclear how and to what degree fatality rates were adjusted for these factors. Although Loss et al. (2014) attempted to account for some biases as well as for large sources of uncertainty mostly resulting from an opportunistic rather than systematic sampling data source, their estimated annual fatality rate across the USA was highly uncertain and vulnerable to multiple biases, most of which would have resulted in fatality estimates biased low.

In my review of bird-window collision monitoring, I found that the search radius around homes and buildings was very narrow, usually 2 meters. Based on my experience with bird collisions in other contexts, I would expect that a large portion of bird-window collision victims would end up farther than 2 m from the windows, especially when the windows are higher up on tall buildings. In my experience, searcher detection rates tend to be low for small birds deposited on ground with vegetation cover or woodchips or other types of organic matter. Also, vertebrate scavengers entrain on anthropogenic sources of mortality and quickly remove many of the carcasses, thereby preventing the fatality searcher from detecting these fatalities. Adjusting fatality rates for these factors – search radius bias, searcher detection error, and carcass persistence rates – would greatly increase nationwide estimates of bird-window collision fatalities.

Buildings can intercept many nocturnal migrants as well as birds flying in daylight. As mentioned above, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a four-story glass walkway at Washington State University (no adjustments attempted for undetected fatalities). Somerlot (2003) found 21 bird fatalities among 13 buildings on a university campus within only 61 days. Monitoring twice per week, Hager at al. (2008) found 215 bird fatalities of 48 species, or 55 birds/building/year, and at another site they found 142 bird fatalities of 37 species for 24 birds/building/year. Gelb and Delacretaz (2009) recorded 5,400 bird fatalities under buildings in New York City, based on a decade of monitoring only during migration periods, and some of the high-rises were associated with hundreds of fatalities each. Klem et al. (2009) monitored 73 building façades in New York City during 114 days of two migratory periods, tallying 549 collision victims, nearly 5 birds per day. Borden et al. (2010) surveyed a 1.8 km route 3 times per week during 12-month period and found 271 bird fatalities of 50 species. Parkins et al. (2015) found 35 bird fatalities of 16 species within only 45 days of monitoring under 4 building façades. From 24 days of survey over a 48-day span, Porter and Huang (2015) found 47 fatalities under 8 buildings on a university campus. Sabo et al. (2016) found 27 bird fatalities over 61 days of searches under 31 windows. In San Francisco, Kahle et al. (2016) found 355 collision victims within 1,762 days under a 5-story building. Ocampo-Peñuela et al. (2016) searched the perimeters of 6 buildings on a university campus, finding 86 fatalities after 63 days of surveys. One of these buildings produced 61 of the 86 fatalities, and another building with collision-deterrent glass caused only 2 of the fatalities, thereby indicating a wide range in impacts likely influenced by various factors. There is ample evidence available to support my prediction that the proposed project would result in many collision fatalities of birds.

Project Impact Prediction

By the time of these comments, I had reviewed and processed results of bird collision monitoring at 213 buildings and façades for which bird collisions per 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.

Based on the renderings of the proposed new building, I measured window and glass rail extents to estimate the building would expose birds to 2,013 m^2 of exterior glass. Applying the mean fatality rate (above) to my estimate of 2,013 m^2 of window glass in the project, I predict annual bird deaths of 147 (95% CI: 87–207). Relying on the mean fatality rates from the closest building studied for bird-window collision mortality, the fatality rate at the California Academy of Sciences would predict a mean fatality rate of 164 birds per year.

The vast majority of these predicted deaths would be of birds protected under the Migratory Bird Treaty Act and under the California Migratory Bird Protection Act, thus causing significant unmitigated impacts. Given the predicted level of bird-window collision mortality, and the lack of any proposed mitigation, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, including the unmitigated take of both terrestrial and aerial habitat of birds (Photos 14 and 15) and other sensitive species. There is at least a fair argument for the need to prepare an EIR to appropriately analyze the impact of bird-glass collisions that might be caused by the project.

Thank you for your consideration,

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Photo 14. *Western gull over the project site, 3 April 2024.*

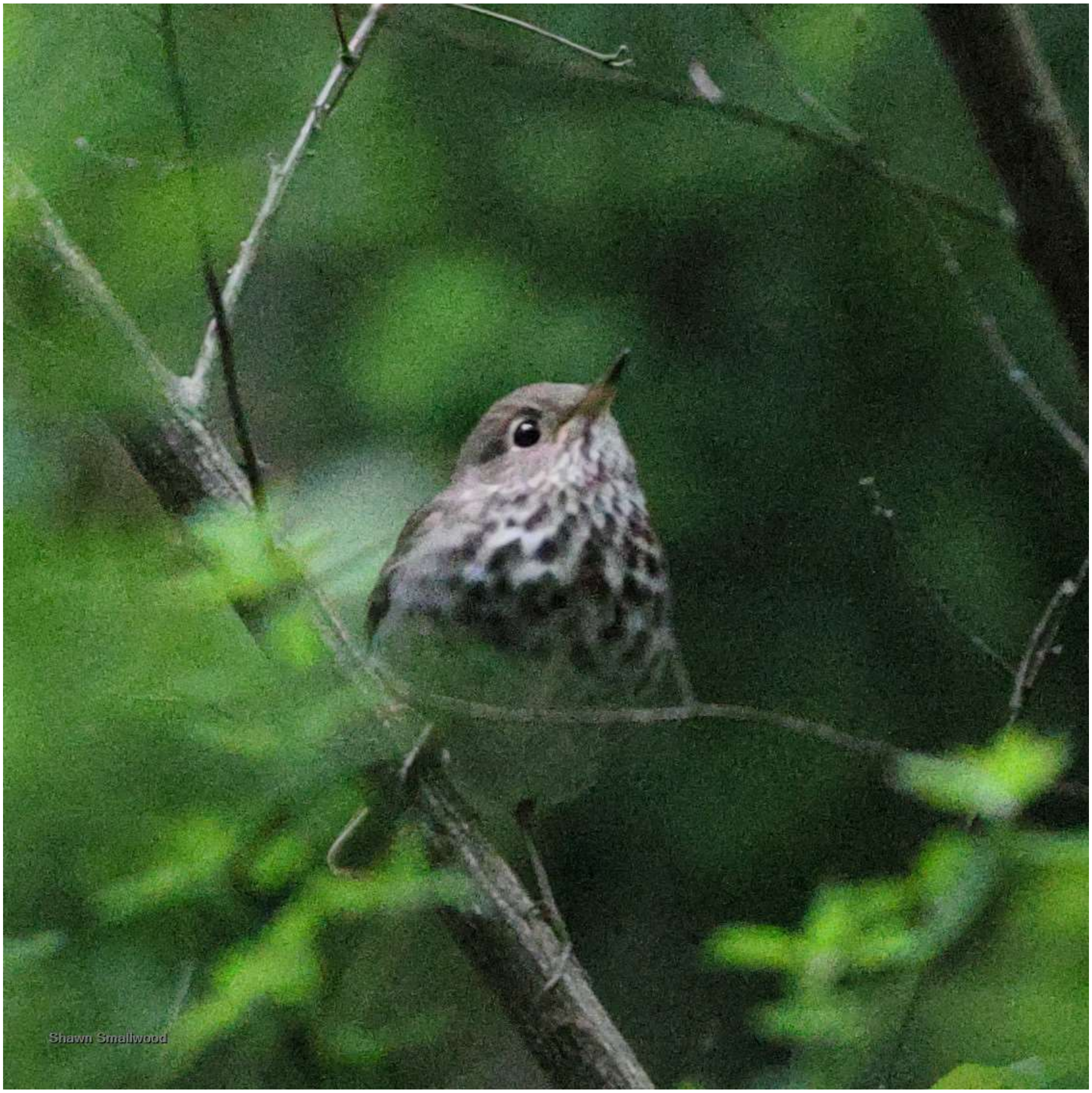

Photo 15. *Hermit thrush on the project site, 3 April 2024.*