

From: GISunsetNeighbors@hotmail.com
To: [BOS Legislation, \(BOS\); Board.of.Supevisors@sf.org](#)
Cc: [Mar. Gordon \(BOS\)](#)
Subject: Email 5 of 5: BOS File #200992 and #200996, CEQA and CUA Appeal Supplement – Saint Ignatius Stadium Lighting (Planning #2018-021648CUA)
Date: Thursday, September 17, 2020 11:39:00 AM
Attachments: [Outlook-dnvmirkc.png](#)
[BOS File #200992 and #200996 - SINA Commission Submittal 3 - 2020_07_22.pdf](#)

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To: Clerk of the Board of Supervisors

Fr: SI Neighborhood Association

Attached please find the final document we are submitting today that supplements the CEQA and CUA appeals filed under BOS File #200992 and #200996 for the Saint Ignatius Stadium Lighting Project.

This document was originally submitted to the Planning Commission in advance of the 7/23/20 Commission hearing on the project.

We would like to put this in the Board of Supervisors records for our appeals.

Kindly confirm receipt of all 5 emails submitted today, 9/17/20.

Thank you

Deborah Brown, Secretary



SI Neighborhood Association

July 22, 2020

Via Email To: Planning Commission Affairs Commissions.Secretary@sfgov.org
Mr. Jeff Horn, Senior Planner, Current Planning jeffrey.horn@sfgov.org

cc: Planning Commissioners:
Mr. Joel Koppel, President joel.koppel@sfgov.org
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RE: 2nd Supplement to SINA Advance Submissions dated May 6, 2020 and June 9, 2020
PLANNING CASE NUMBER 2018-012648CUA - SAINT IGNATIUS STADIUM LIGHTING PROJECT

Dear Planning Commission Secretary and Mr. Horn,

The Saint Ignatius Neighborhood Association (SINA) is hereby submitting a 2nd supplement to our prior Advance Submission Documents filed May 6, 2020 and June 9, 2020 concerning the proposal to install stadium lighting at the Saint Ignatius athletic field as a Conditional Use (Planning Case No. 2018012648CUA).

Both prior comment sets are included in the current hearing packet for the July 23, 2020 hearing and available at: https://drive.google.com/file/d/1Z1eyXDgRwApIPKLKnXIEVh-cXC1TyhY_/view?usp=sharing, and <https://drive.google.com/file/d/1SoVI9OkGWPPhj8N5PI8Imye7aLTuvck4w/view>.

This additional supplement is necessary because new information has become available since our two prior submittals. The two continuances of the project hearing (originally scheduled for May 14 and rescheduled to June 11, 2020) has also given us the time to review project documents in more detail and engage additional experts for their input.

Sincerely,

Deborah Brown

Deborah Brown, Association Secretary
Saint Ignatius Neighborhood Association
sisunsetneighbors@hotmail.com

Attachment: July 22, 2020 SINA Supplement to SINA Advance Submissions

**2nd Supplement to SINA Advance Material Submittal
for the Saint Ignatius Stadium Lighting Proposal,
CUA application #2018-012648CUA**

The comments below supplement the May 6, 2020 and June 9, 2020 Saint Ignatius Neighborhood Association (SINA) Advance Materials Submittals to the San Francisco Planning Commission for the Saint Ignatius College Preparatory High School's Stadium Lighting Project (#2018-012648CUA). SINA filed the first set of comments in advance of the previously scheduled May 14, 2020 Commission hearing and the second set in advance of the previously scheduled June 11, 2020 hearing. Both comment sets are included in the current hearing packet for the July 23, 2020 hearing and are available here as well: https://drive.google.com/file/d/1Z1eyXDgRwApIPKLKnXIEVh-cXC1TyhY_/view?usp=sharing, and <https://drive.google.com/file/d/1SoVI9OkGWPPhj8N5Pl8lmye7aLTuvck4w/view>.

This submittal summarizes additional information that has come to light since our June 9, 2020 submittal, discusses how the proposed project is inconsistent with the San Francisco General Plan, and reiterates SINA's continued key concerns about the project's adverse impacts.

A. New information

1. Saint Ignatius - SINA meeting July 7, 2020

School representatives held a July 7, 2020 Zoom meeting with four SINA representatives as a means to engage with the neighbor community, apparently at the request of the Planning Department. During that meeting, school representatives made the following statements that continue to concern SINA about the lighting project:

- a) When asked if they would consider having another neighborhood-wide remote meeting – this time without muting the neighbors and in the interest of true dialog – the school replied that this four-person neighbor meeting would be the extent of engagement, stating: “All the pre-planning is done for the July 23 Commission hearing. The Planning Department asked us to have this meeting.”
- b) They confirmed that night use of the athletic field would occur virtually every weeknight during the school year (August 15 – May 31) or up to 200 nights per year, and for 20 large games on Friday or Saturday nights. This is double the number of nights stated in their revised project description (see hearing packet pdf p. 104). Currently, night use of the field has ended at dark or was extended under limited use of temporary lighting only for large games. Projected attendance would be up to 1,000 people on Mondays – Thursdays, and up to 2,800 people on Friday and Saturday night games. We remain extremely concerned about the adverse impacts on traffic, parking, noise, trash, and other noxious emissions and behaviors that this new level and intensity of activity would bring to the neighborhood virtually every night throughout the school year.
- c) They stated that their request to modify the practice field lighting CUA (Record #2003.1273C) from the currently authorized 7:30 pm to 9 pm on weeknights, 10 pm on Fridays, and 8 pm on weekends is no longer a part of the current CUA application. However, they indicated that they may request that modification again in

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the future. The request is still described in the project proposal of the draft Commission CUA motion (see project hearing packet pdf pages 96, 98, and 101) and should be removed from the current stadium lighting proposal so that the Commission does not inadvertently approve that modification without sufficient review.

- d) The school did not address noise in their proposed CUA draft motion Exhibit A Condition #11 language saying that they “probably did not consider noise”. This is troubling since the CEQA Impacts section of the draft motion (see hearing package pdf p. 71) contends (without any scientific or technical basis) that the project would not result in a substantial increase in ambient noise levels. Given that field noise would now occur at least 200 nights per year, there will undoubtedly be increased noise levels. Without a noise study there is no way to determine whether the increase would be substantial or not. SINA requested such a study in our May 6 and June 9, 2020 comments.
- e) At SINA’s request, the school provided dimensions of the lighting arrays at the top of the 90-foot poles. According to the plan drawings provided, the arrays would occupy a space over 17 feet long, nearly 5 feet tall and nearly 4 feet deep. This bulk is approximately equivalent to the size of some 10-yard trash dumpsters¹ or three typical 4-yard trash dumpsters lined up end to end². This bulk at the top of each pole would create a permanent blight on the landscape, especially during daytime and visible from the entire surrounding area.
- f) The school representatives were unaware that they had not responded to neighbor questions submitted to the ASK SI webpage³ over the last several months and said they would review those submittals and respond to them. To date, we are unaware that they have done so.
- g) The school representatives agreed to obtain information from Musco on the effects of fog on lighting levels and reflection. To date, SINA has not received that information.

2. Musco Photometrics Study

The repeated Commission hearing continuances have allowed SINA to conduct a more in-depth review of the revised Musco photometrics documents with the assistance of a highly qualified, award-winning lighting design consultant and architect (see lighting report in Appendix A).

The report author concluded that the proposed stadium lighting installation would have a severe and negative impact on the neighborhood, and in particular, the residences located directly across the street from the school athletic field on 39th Avenue. Due to the quantity, height and most importantly, the use schedule of the lights, they would create a significant problem for the health and wellbeing of the neighbors and neighborhood. While intermittent

¹ <https://www.republicservices.com/dumpster-rental?tab=residential>

² <https://wasteindustries.com/commercial/dumpster/rentalservices>

³ https://docs.google.com/forms/d/e/1FAIpQLSd5bSWGLQ_px_pDpDe1CMdTMDgZiQakm20cqbFShiWTew_Zqw/viewform

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use of the lighting (e.g. one night game a week in the fall, as is currently done with temporary lights) is generally tolerable, the use of the lights for up to 200 nights of the year (55% of the entire year and virtually every weeknight during the school year) for hours at a time, ostensibly when the nights are the longest (fall and winter), will fundamentally change the nature of the neighborhood and eliminate the darkness currently present there. Furthermore, the presence of such high light levels during hours of natural darkness will not only create problems with light pollution and glare, but has the potential to disrupt circadian cycles, particularly for the residents immediately opposite the athletic field.

The lighting consultant's report goes into detail about the fundamental issues related to the proposed lights and problems with Musco's photometrics study, including:

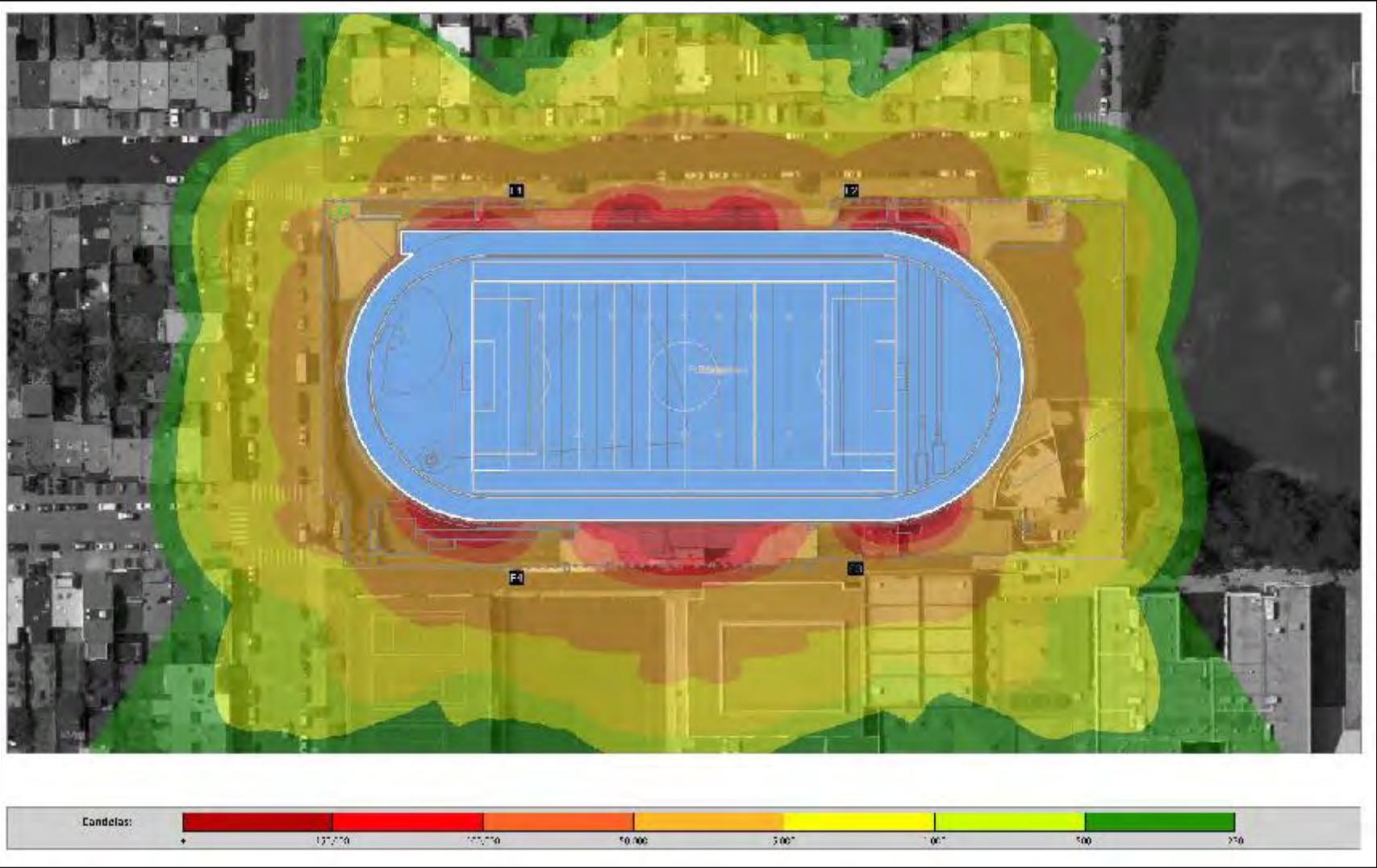
- a) Light levels at the 39th Avenue home façades are 2-3 times higher than recommended by the Illuminating Engineering Society (IES) for those residential areas.
- b) Light levels at the school's property line are 6 to 7 times higher than even a "high" pedestrian light level of 1 foot candle.
- c) Misleading vertical illuminance levels measured at 3 feet off the ground significantly under-represent what the light levels would be at the 2nd floor windows of the homes (homes in the neighborhood have garages and entries on the first floor and living areas on the 2nd floor). Light trespass into windows would be 26 times higher than LEED guidelines of 0.1 foot candle.
- d) The Musco photometrics do not show measurements of luminance, roughly a measure of "brightness". The addition of 50 foot candles of light onto and across the athletic field will turn the field into a bright, light-reflecting surface, and will do the same to other surfaces nearby (sidewalks, bleachers, out-building walls, etc.).

The report confirms SINA's comments submitted previously (June 9, 2020 submittal Comment 1.2) and supplemented in Sections A.3 and A.4 below, including:

- a) Musco's glare map (Figure 1 below) shows the façades of the houses along 39th Avenue to be mostly in the yellow band, indicating a range of 1,000 to 5,000 candela. By Musco's own map legend, this is not negligible in terms of the amount of glare (which they indicate as ≤ 500 candela shown in dark green). Candela levels outside of the school's property line on the 39th Avenue sidewalk and street are even higher, shown in the range of 5,000 to 50,000 candela. Musco defines "significant glare" as starting at 25,000 candela and being equivalent to a car's high beam headlights. Since Musco has not provided the IES data files for their luminaires, it is not possible to do a separate analysis of the installation, particularly the characteristics of the luminaires as they relate to glare, backlight and uplight.

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Figure 1. Musco Glare Map



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- b) Typically, sports lighting is not well shielded in any direction and contributes greatly to light pollution as the luminaires are angled. In order to verify any claims of shielding, Musco needs to provide the IES files and a detailed luminaire photometric report.
- c) Fog increases the amount of light pollution because it disperses light through the water molecules suspended in air and serves as an outdoor “ceiling” which the light bounces off of and reflects back down to the ground.
- d) The significant increase in the quantity and duration of blue-enriched light during dark hours has the potential to have significant impacts on circadian rhythm-related health, especially in children who are much more vulnerable to such disruptions. Animals and plants are also susceptible to disruptions in behavior, growth, and reproduction from excess blue-white light.

3. Adverse Human Health Effects

- a) SINA’s May 6, 2020 comments (Fact 5.F and associated comments) discussed some of the adverse health effects of the proposed LED lighting, and the American Medical Association’s concerns for and guidelines over use of such lights.
- b) The New York Times published an article on July 13, 2020⁴ summarizing the results of a recent study that found that the more intense the lighting in teenagers’ neighborhoods, the poorer their sleep and the greater their risk for depression and anxiety. The NY Times article quoted the senior author as saying: “At least as individuals, we ought to try to minimize exposure to light at night.” SINA obtained and reviewed the report published in JAMA Psychiatry⁵. We are concerned about the study’s findings not only for our neighborhood children but also for the student athletes who would have direct exposure to the high intensity lighting on the athletic field for several hours at a time most nights of the week. In addition to games, the school’s three football teams and six soccer teams practice six days a week. The four lacrosse teams and four track and field teams practice five day a week. This continual high level of exposure should be of grave concern to parents and school administrators who claim that the school needs to start later in the day for student health reasons and that the lights are needed to provide sufficient time for games and practices after a later-ending school day. This perspective is incompatible with the scientific evidence on the harm to adolescents from over exposure to high-intensity light.

⁴ https://www.nytimes.com/2020/07/13/well/mind/bright-outdoor-lights-tied-to-less-sleep-more-anxiety-in-teenagers.html?action=click&module=Top%20Stories&pgtype=Homepage&contentCollection=AtHome&package_index=0

⁵ https://jamanetwork.com/journals/jamapsychiatry/article-abstract/2767698?utm_campaign=articlePDF&utm_medium=articlePDFlink&utm_source=articlePDF&utm_content=jamapsychiatry.2020.1935

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4. Adverse Biological Effects

- a) The Musco photometrics study indicates that the total illumination for all pole-mounted lighting would exceed to 6.3 million lumens over the 2.5-acre athletic field. This amount of additional concentrated lighting is several orders of magnitude higher than the ambient nighttime lighting levels in the immediate neighborhood which is limited to street lighting and some minimal home and building façade lighting (see Figure 2 below). The amount of reflected light from the athletic field has not been determined by Musco but, as noted above it is likely to be significant, and exacerbated by the regularly occurring fog in the area.
- b) In addition to the adverse human health effects, these lights would have significant adverse biological effects on wildlife. Extensive peer-reviewed literature is available ^{6, 7, 8, 9} that documents these effects, including disruption of the nocturnal environment, attraction of sea birds and migratory birds to bright lights, alterations in amphibian, reptile, insect and pollinator behavior, reproductive changes in many species, and reduction in foraging and roosting behavior of bats.

⁶ For instance, the Journal of Experimental Zoology Part A devoted an entire issue to Artificial Light at Night as an Environmental Pollutant. Volume 329 Issue 8-9, October/November 1, 2018.

<https://onlinelibrary.wiley.com/toc/24715646/2018/329/8-9>

⁷

https://www.researchgate.net/publication/272889669_Impacts_of_artificial_lighting_on_bats_A_review_of_challenges_and_solutions

⁸

https://www.researchgate.net/profile/Michael_Salmon3/publication/235602286_Perry_G_B_W_Buchanan_R_Fisher_M_Salmon_and_S_Wise_2008_Effects_of_night_lighting_on_urban_reptiles_and_amphibians_Chapter_16_in_Urban_Herpetology_Ecology_Conservation_and_Management_of_Amphibians_and_links/57486e6108aeae389f4e1792.pdf

⁹ <https://www.nature.com/articles/s41598-018-21577-6>

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Figure 2. Musco Nighttime Photo Rendition



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- c) The US Fish and Wildlife Service’s online IPaC mapping system¹⁰ provides information on the known or expected ranges of threatened and endangered species protected under the federal Endangered Species Act as well as migratory birds protected under the federal Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act. An online data check was conducted on July 20, 2020 and lists the species that could be affected by activities in the 98-acre area bounded by Ortega and Santiago Streets, and 36th and 41st Avenues, including the school (see Appendix B). Some of the species are also state-listed threatened or endangered species. In addition, over 67 more common bird species have been observed since 2015 at the West Sunset Playground, as reported on the eBird website¹¹ (see Appendix C). There are also 16 bat species within the Bay area¹² and at least four in the City¹³ that would also be adversely affected by the stadium lighting. Lastly, as noted in SINA’s May 6, 2020 comments the area along Sunset Boulevard is an urban bird refuge¹⁴.
- d) It is not the role of SINA to investigate the potential adverse effects on these sensitive species. However, it is highly likely that the new high-intensity lighting would adversely impact at least some of them. A CEQA review would typically trigger consultation with the US Fish and Wildlife Service and California Department of Fish and Wildlife; however, the lighting project has been determined to be CEQA exempt, so this review has not occurred.
- e) We firmly believe that CEQA review is warranted as discussed in our May 6 and June 9, 2020 comments. But, irrespective of CEQA applicability, the school is responsible for conducting sufficient due diligence to first identify and then to mitigate adverse effects of the proposed lighting on sensitive species in accordance with state and federal law. The Planning Department must also support the City’s Biodiversity Program and the Department’s own Biodiversity Policy by providing robust oversight on projects that could imperil biodiversity. The Department’s policy states: *“In San Francisco, 95% of our land area is developed and its remaining natural heritage, including a dozen distinct ecological communities and several endangered species, is in a precarious state. From the Pacific Ocean to the Bay, the City is a unique natural environment worth protecting. The Planning Department has an important role (in-dependently and in collaboration with our fellow City agencies) to help San Francisco be a sustainable and healthy city for all its inhabitants; human, animal, and plant.”* The presence of sensitive species must be investigated and potential adverse impacts of the stadium lighting project on them must be evaluated and mitigated to the extent possible.

¹⁰ <https://ecos.fws.gov/ipac/>

¹¹ <https://ebird.org/hotspot/L6317907?yr=all&m=>

¹² <https://baynature.org/article/where-are-there-bats-in-the-bay-area/>

¹³ <https://www.krauel.com/publications/Krauel2016plosone.pdf>

¹⁴ <https://sfplanning.org/sites/default/files/resources/2018-08/Urban%20Bird%20Refuge.pdf>

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B. Supplemental Comments - San Francisco General Plan Consistency

SINA's prior comments were focused primarily on the stadium lighting project in relation to CEQA and the San Francisco Planning Code. These supplemental comments focus specifically on consistency with the General Plan.

The draft Commission motion states: "The Department finds that the Project is, on balance, consistent with the Objectives and Policies of the General Plan." However, the Department limited its evaluation and discussion only the few General Plan elements, objectives, and policies that could be leveraged to make the project appear to be consistent with the General Plan, when it is not. The draft motion ignores the spirit and intent of the General Plan, dismisses several pertinent policies, and fails to quantify even the minimal benefits stated.

1. Environmental Protection Element

This Element is completely ignored in the draft motion. Policy 11.1 is relevant and discourages new uses in areas in which noise levels exceed the noise compatibility guidelines for the new use. The policy recommends that new development be examined to determine whether background and/or thoroughfare noise level is consistent with guidelines for the proposed use.

- a) The policy's associated Map 1 shows background levels in the immediate neighborhood from 50 decibels to at most 65 decibels based on 2009 information¹⁵. The associated Land Use Compatibility Chart of Community Noise¹⁶ for outdoor spectator sports uses specifies that for all background noise levels, new construction or development should be undertaken "only after a detailed analysis (underlines added for emphasis) of the noise reduction requirements is made". For background levels at about 72 decibels (typical background traffic noise) or higher, new construction or development "should generally not be undertaken."
- b) The additional project-related noise will come primarily from the school's sound system and loud speakers, amplified recorded music, band music, cheering, car horns and air-horns (bleachers are located directly inside the school property line on 39th Avenue). The Verizon wireless ground-based equipment would create another new noise source.
- c) SINA noted the need for a valid noise study in our May 6, 2020 comments (Fact and Comment 5.D) in the context of Planning Code Section 303(c)(2)(C). In our June 9, 2020 comments we noted that noise studies were conducted under CEQA review for numerous other stadium lighting projects. We also discussed the inadequacy of this project's CEQA exemption determination that dismissed potential noise impacts.
- d) Unfortunately, with the ongoing COVID situation, there is no way to obtain an accurate background noise level since regular traffic and non-school related activities are not occurring normally. Similarly, there is also no way to obtain athletic field noise levels,

¹⁵ https://generalplan.sfplanning.org/images/16.environmental/ENV_Map1_Background_Noise%20Levels.pdf

¹⁶ https://generalplan.sfplanning.org/16_Environmental_Protection.htm#ENV_TRA_10

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particularly during high attendance night football games since those games are also not occurring at this time. We reiterate our contention that the project should not be approved until a valid noise study can be conducted and confirms no adverse impact.

2. Commerce and Industry Element, Policy 1.1 and 1.2

These policies are mis-applied in the draft motion which states: “The Project will enhance the total city living and working environment by providing recreational and communications services for residents and workers within the City.”

- a) Our prior comments noted that the project will not provide any recreational benefit to most residents, only to the school’s students and competing teams. Our June 9, 2020 Comment 2.1 also urged the Commission to decouple the Verizon wireless installation from the stadium lighting project since each project uses the other proposed project to justify its supposed benefits and the Verizon project does not require a 90-foot pole but assumes the presence of the light poles to justify their preferred wireless location at the school. The impacts and benefits of each should be evaluated on their individual not their combined assumed merits. We reiterate our prior comments that the Verizon wireless project must consider alternative sites for the proposed wireless installation.
- b) The draft motion disregards important context for Policy 1.1, which states in part: “...environmental impacts of proposed developments, often previously ignored, are to be carefully evaluated before approval of a development. The economic and social benefits of such developments are often presumed, and they sometimes are still unstated and unanalyzed.” Policy 1.2 states: “A critical aspect of development management is to mitigate negative impacts created by new development: economic, aesthetic, physical, environmental, and social.”
- c) We agree with these statements and contend that both the draft motion and CEQA exemption ignore or minimize without any basis, the stadium lighting project’s environmental, aesthetic, physical and social impacts. Both the draft motion and CEQA exemption presume benefits without quantifying or analyzing them relative to the impacts which are also not quantified.

3. Commerce and Industry Element, Policies 2.1, 2.3, 4.1, 4.2, and 8.3; and Community Safety Element Policies

These policies are mostly and correctly applied only to the Verizon wireless installation, yet they presume benefits larger than would occur.

- a) Again, the wireless project should be decoupled from the lighting project which does not provide benefits consistent with these policies. Furthermore, the proposed wireless coverage would provide these benefits only within a localized area where little business (other than possibly home-based business) occurs. The same is true for any benefits associated with the Community Safety Element. The current and proposed wireless coverage maps are shown in Figures 3 and 4 below and illustrate the limited extent of new or improved wireless coverage expected.

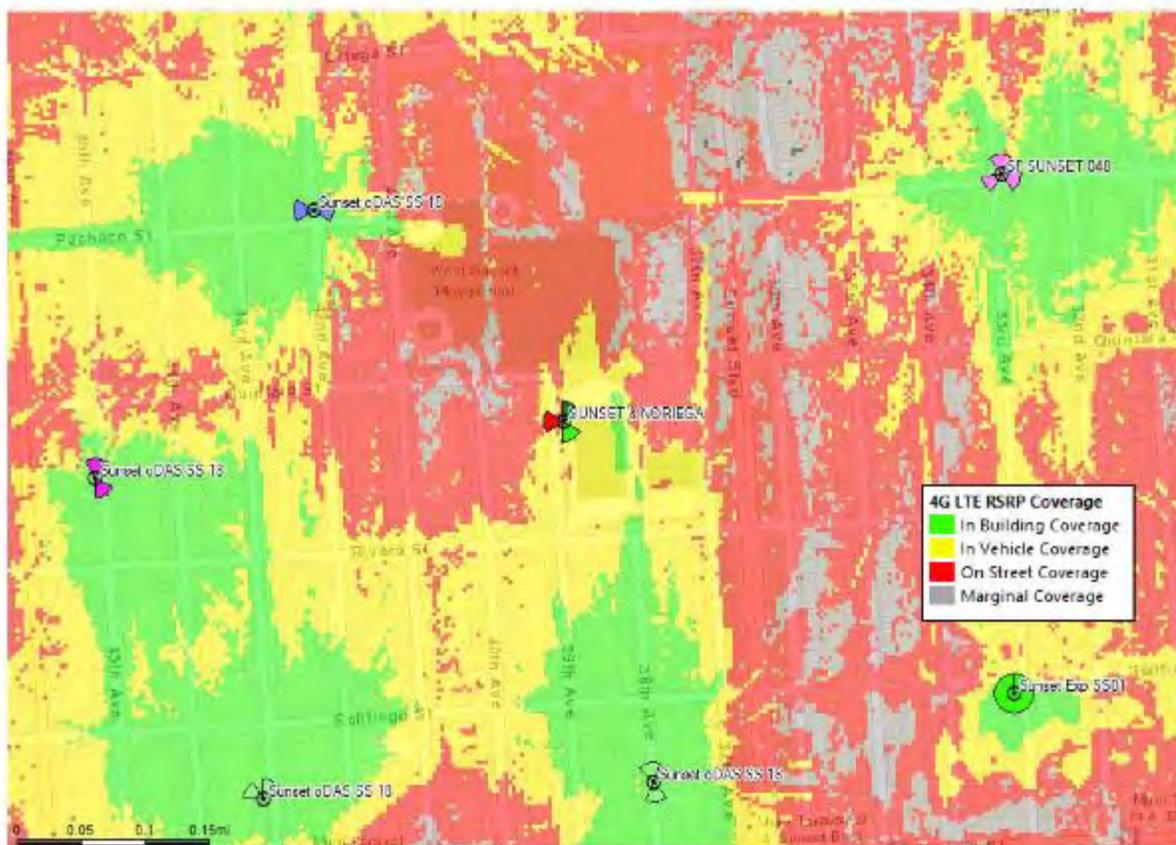
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- b) Mysteriously, the draft motion under Policy 4.2 assumes that the lighting project will enhance the business climate from hosting sporting events. Perhaps this assertion comes directly from the original 2018 project application which states: “The lights will bring people to the neighborhood, increasing business for local restaurants and stores.” However, there are very few businesses within walking distance of the school that might benefit from an influx of pre- or post-game attendees as shown in Figure 5 below.
- c) Visitor Trade Policy 8.3 is also mis-applied in the draft motion since the policy states: “Assure that areas of particular visitor attraction are provided with adequate public services...” Even if applicable to just the Verizon wireless installation, there is no basis upon which to declare a private school athletic field a “particular visitor attraction” nor does the new wireless coverage enhance communications in areas of the City with specific visitor attractions (see Figure 4).

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Figure 3. Verizon Current Coverage Map (the project location is identified as Sunset & Noriega in the map center)

Existing LTE Coverage

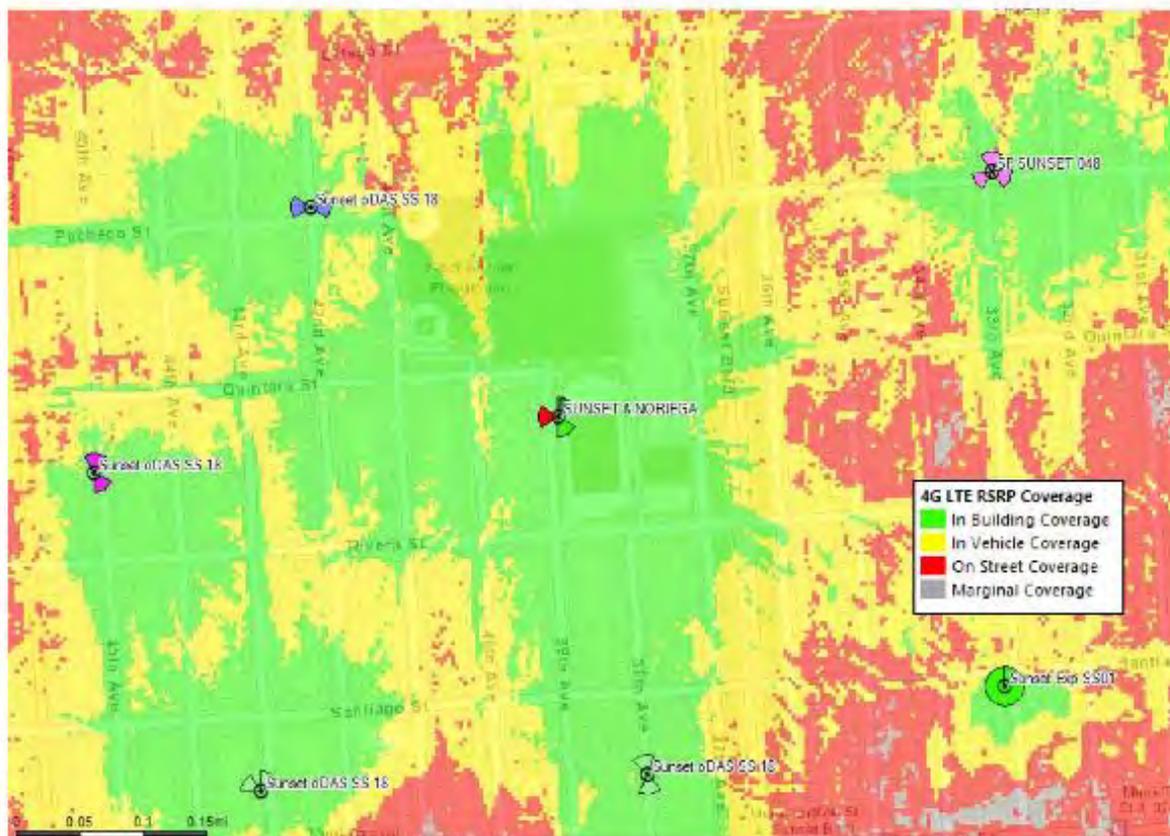


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Figure 4. Verizon Coverage Map with new Wireless Installation (the project location is identified as Sunset & Noriega in the map center)

Proposed LTE Coverage



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Figure 5. Local Business Map



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4. Commerce and Industry Element, Policies 7.2 and 7.3

The draft motion suggests that educational services benefits would arise from the stadium lighting project, but disregards key context that must also be considered.

- a) Objective 7 states: “However, future growth must be managed to achieve equitable distribution of benefits to all geographical and cultural sub-populations of the city and to minimize associated adverse effects on surrounding areas.” Policy 7.2 states: “To minimize the disruption caused by institutional expansion, the city should continue its policy of reviewing expansion plans. This review examines the needs of adjacent resident areas for housing, on-street parking and safe, quiet streets as well as the needs of the institution.” Policy 7.3 states, in part: “Unfortunately, the clustering of many of these major facilities in relatively few areas creates problems in the adjacent residential neighborhoods.”
- b) SINA’s concerns with the draft motion’s application of these policies are discussed in detail in our May 6, 2020 Facts and Comments 5.G and 5.H, and in our June 9, 2020 Comment 2.2. Here we simply reiterate that Saint Ignatius is an expensive private school whose benefits apply only to those students selected to attend. While the school may provide tuition assistance, it does not disclose data about the social and economic diversity of the student body or where students originate from. The school is not a neighborhood-serving school and does not provide a neighborhood benefit that could offset the stadium lighting project’s adverse impacts on the neighborhood.

5. Commerce and Industry Element, Policy 6.9

This policy is ignored in the draft motion but is highly relevant to the stadium lighting proposal, and the additional traffic and parking strains on the neighborhood that would occur with games and practices every weeknight and some weekend nights during the school year.

- a) The policy goes into great detail about conducting evaluations of traffic and parking and requires consideration of the surrounding residential neighborhoods. Most importantly, the Policy states that the proposed use should not be allowed if there is significant traffic congestion or inadequate parking.
- b) The policy details what a traffic and parking analysis should involve including obtaining estimates of numbers of people and trips generated; the level of parking problems and shortages especially (but not only) during peak traffic hours; the level of additional traffic in adjacent neighborhoods; and pedestrian circulation and the potential for pedestrian/vehicle conflicts.
- c) We reiterate Comment 5.C in our May 6, 2020 submittal and Comments 1.2 and 2.2 in our June 9, 2020 submittal. Namely, that a valid traffic and parking study must be conducted in order to quantify these impacts before determining if they are minimal or not. As noted above for noise in the Environmental Protection Element, it is impossible during the current COVID situation to obtain a valid baseline or to test *in situ* project-related impacts on traffic and parking. We reiterate our contention that the project

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should not be approved until a valid traffic and parking study can be conducted and confirms no adverse impacts.

6. Housing Element, Policy 10.1

This policy is not included in the draft motion but provides important context relevant to the lighting project. The policy states in part: “There is a clear public benefit to creating, and applying, a strict approach to regulatory land use controls.” This statement is more applicable to Comments 1.2 and 2.2 in our June 9, 2020 submittal related to CEQA and to the Planning Code as applied in the RH-1 district for this project. The school requests a rear yard modification that would allow two of the stadium lights and the Verizon wireless ground-based installation directly inside the property line. The project is exempt from the 40-foot height restriction as “light standards” or alternatively as “wireless communications facilities”. As noted above, the bulk of the light arrays at each of the pole tops would be huge and we contend that these abnormal applications of the planning code (and CEQA) ignore the spirit and intent of the General Plan’s strict approach.

7. Housing Element, Policy 11.3

This policy is also ignored in the draft motion. The policy states: “Ensure growth is accommodated without substantially and adversely impacting existing residential neighborhood character.” Our prior and current comments detail the many ways that the stadium lighting project would adversely substantially, adversely, and permanently impact the neighborhood.

8. Housing Element, Policy 11.8

The draft motion includes this policy which states: “The scale and design of permitted commercial and institutional buildings should acknowledge and respond to the surrounding neighborhood context, incorporating neighborhood specific design guidelines whenever possible.”

- a) The draft motion twists the intent of this policy in a bizarre way, by stating: “the Project will minimize disruption by expanding the school vertically on the existing campus, which has been a part of the neighborhood since 1969.”
- b) We commented on this in Comment 2.2 of our June 9, 2020 but it remains a baffling and extremely weak argument and is certainly not within the spirit or intent of the General Plan. Furthermore, the school has been in the neighborhood for over 50 years and has undertaken numerous expansions that have incrementally changed the nature and character of the surrounding neighborhood. The proposed stadium lights would be the most glaring addition and would be grossly out of scale with the neighborhood.

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9. Urban Design Element

The draft motion completely ignores the Urban Design Element although there are several important policies that are very relevant to the stadium lighting project.

- a) Policy 1.1 addresses the importance of protecting major views in the city. It states: “Overlooks and other viewpoints for appreciation of the city and its environs should be protected and supplemented, by limitation of buildings and other obstructions where necessary...Visibility of open spaces, especially those on hilltops, should be maintained and improved...” The addition of four 90-foot poles with large lighting arrays at the top in an area with 40-foot height restrictions would clearly constitute an obstruction that would adversely impact viewpoints from locations such as Golden Gate Heights Park, Larson Peak, and Sunset Reservoir Park which all have sweeping views of the Sunset District and ocean.
- b) Policy 1.12 states: “There are other developed areas which, though they may not contain individual buildings that are historic or otherwise outstanding, have a special character worthy of preservation. These areas have an unusually fortunate relationship of building scale, landscaping, topography and other attributes that makes them indispensable to San Francisco's image. Threats to the character of these areas are sure to be met with intense concern by their own residents and by the public at large.” We contend that the Outer Sunset District has these qualities and a majority of immediate neighbors strongly oppose, and the public at large would also oppose, these stadium lights which will create a huge visual blight on the landscape during both daytime and nighttime and clearly threaten the character of this area. At this time, SINA is aware of at least 73% of residents on the closest blocks of 39th Avenue and Rivera Street who have explicitly opposed the lighting project. In the next closest blocks on Rivera and Quintara Streets at least 83% of residents are opposed, as are at least 50% of residents on the closest block of 40th Avenue.
- c) Objective 2 covers conservation of resources. In the table entitled Fundamental Principles for Conservation, item #17 states: “Blocking, construction or other impairment of pleasing street views of the Bay or Ocean, distant hills, or other parts of the city can destroy an important characteristic of the unique setting and quality of the city.” The addition of 90-foot poles with large arrays would certainly impair pleasing street views from uphill toward the ocean and from downhill toward the hills.
- d) Objective 3 covers neighborhood environments and states: “Studies show that the outstanding concerns of people today in their neighborhood environment are matters of health and safety. Traffic is the leading issue, with automobiles moving through residential areas in large volumes and at high speeds, producing noise and pollutants and putting pedestrians in constant danger. With each increase in traffic the streets become less a part of the living environment and more a world of their own. Residents find the streets unsafe and unpleasant, and try to shut them out...Some neighborhoods have greater needs because their residents live in conditions of greater density, or because the residents include more children and older people who tend to live within a smaller world in which the resources close at hand are the most important.” The neighborhood surrounding the

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school has a large population of elderly and families with small children, as well as two public schools, a library, playground, and public recreation area used by neighborhood children and adults would be most affected by the increased traffic and related health and safety impacts that the stadium lighting project would bring.

- e) Objective 4 covers improving neighborhood environments to increase personal safety, comfort, pride and opportunity. Policy 4.1 states: “In order to reduce the hazards and discomfort of traffic in residential neighborhoods, a plan for protected residential areas should be put into effect...The speed and volume of traffic on protected streets should be limited by all practical means.” We note that the area surrounding the school between Noriega and Taraval Streets is a protected residential area¹⁷ and this designation should be taken into consideration when considering traffic impacts from the project.
- f) Policy 4.1.4 states: “Other clutter is produced by elements placed in the street areas. The undergrounding of overhead wires should continue at the most rapid pace possible, with the goal the complete elimination of such wires within a foreseeable period of time. Every other element in street areas, including public signs, should be examined with a view toward improvement of design and elimination of unnecessary elements.” We contend that 90-foot poles with their large light arrays constitute significant clutter that is unnecessary for the neighborhood and should be avoided in the protected residential area. Furthermore, stadium lighting is not necessary for the school’s athletic program to continue be successful like at other, larger schools in the City that do not have lights (see Comment 3.2 in SINA’s June 9, 2020 submittal).
- g) Policy 4.15 states: “In residential areas of lower density, the established form of development is protected by limitations on coverage and requirements for yards and front setbacks. These standards assure provision of open space with new buildings and maintenance of sunlight and views. Such standards, and others that contribute to the livability and character of residential neighborhoods, should be safeguarded and strengthened.” We contend that allowing the school to modify its rear yard restriction down to virtually no setback in an RH-1 district and allowing 90-foot poles in a 40-foot height district even if exempted, is inconsistent with this policy.

C. Concluding Comments

The draft motion states: “Overall, the Department also finds the project to be necessary, desirable, and compatible with the surrounding neighborhood, and not to be detrimental to persons or adjacent properties in the vicinity. The Project complies with all relevant requirements and standards of the Planning Code and is consistent with objectives and policies of the General Plan.”

¹⁷ https://generalplan.sfplanning.org/images/15.urban_design/urb_map7.pdf

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For all the reasons explained herein and in SINA's two prior comment submittals, we strongly refute to this conclusion. SINA has consulted with a number of key experts and we have been able to expose and detail the many compelling reasons why the Saint Ignatius Stadium Lighting project should not be approved. In addition, the Verizon wireless project should be decoupled from the lighting project and a separate application submitted to the Planning Department for that project - to ensure that impacts, benefits, and alternatives to each project are considered on their own and not conflated between the two projects.

We hope you recognize the significant gaps in the project plan, the flawed permit application, the lack of thorough CEQA review, and the project's incompatibility with the General Plan. We are particularly concerned with the lack of CEQA review and dismissal of numerous portions of the General Plan that are applicable to this project. The CEQA exemption determination states: "Based on the planning department's experience of conducting environmental review on similar projects near residential areas, the effects of nighttime lighting would not substantially impact people or properties in the project vicinity, and would not result in a significant impact on biological resources." As noted in Comment 1.2 of our June 9, 2020 submittal, we question this assertion as a valid basis for complete disregard of the potentially significant impacts of this project.

When they first proposed stadium lighting (in 2015) , Saint Ignatius hosted two in-person neighborhood discussion meetings and engaged in email communications with SINA during 2016. We engaged in open discussions with the school administration regarding their plans and the neighbors' objections. Now the school is refuses to engage further with the neighborhood community and directly answer questions or to have an open dialogue, even by remote meetings. Additionally, the school has dismissed SINA's suggestions of an alternative plan for their large night time games despite our repeated requests to jointly discuss, brainstorm, and craft a viable alternate option.

The school is giving its neighbors only one option – permanent stadium lights – impacting the neighborhood every weeknight of the school year and for up to 20 large nighttime events (up to 2,800 people) a year. The school insists these lights are necessary for their current sports programs, however SI's student body has not increased, and we are unaware of any new sports teams or activities. Permanent lighting would clearly enhance the school's exclusive reputation, recruitment efforts, and would provide a benefit to its private school students. However, if the lights are installed the adverse impacts would also be permanent.

We believe it would be impossible to mitigate for all of the potentially significant impacts of this project. Furthermore, oversight of compliance with the CUA conditions would, in practicality, fall to the neighbors – a difficult, if not impossible, and certainly unreasonable burden. We have clearly shown how these stadium lights would, in no conceivable way, benefit the public, or enhance our neighborhood or its character. We therefore urge you to not approve this stadium lighting project.

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APPENDIX A

LIGHTING CONSULTANT REPORT

St. Ignatius Sports Lighting Proposal Response

Kera Lagios, LEED AP, Assoc. IALD

2020-07-20

In order to understand the impacts of the proposed lighting installation at St. Ignatius, it is important to understand several fundamental issues related to light and specifically light at night.

A. Light Levels

The addition of the sports lighting significantly increases the quantity of light in the area, both from what it is currently, and above what is recommended by the IES (Illuminating Engineering Society), and vertical illuminances are underestimated by Musco's photometrics.

1. IES recommended light levels:

- a. According to the IES RP-33-14_Lighting for Exterior Environments¹, lighting for low-activity pedestrian areas (residential areas) in LZ1 and LZ2 range from 0.9 fc (10 lux) horizontal, 0.19 fc (2 lux) vertical immediately near entries and exits (e.g. front doors), to 0.09 fc (1 lux) horizontal, 0.0 fc (0 lux) vertical for paths to curbs.
- b. The Musco photometrics show 0.33 fc horizontal, 0.42 fc vertical at the facades of the houses directly across 39th avenue.² **These light levels are 2-3 times higher than recommended for those residential areas.**
- c. In addition, Musco is showing 6 fc horizontally and almost 7 fc vertically at the property line, which is much higher than even a "high" pedestrian light level of 1 fc.

2. Vertical illuminance is more important than horizontal in this case

- a. While many lighting studies focus on horizontal measurements, here we are very concerned with vertical measurements for two reasons:
 - i. Given the height of the poles, the lighting impact will be more extreme on the vertical plane, and
 - ii. We are concerned with "what people see" both at ground level and from the windows.
- b. Musco's photometrics show the vertical illuminance of 0.42 fc (~4.2 lux) at the facades of the residences, however, this measurement is taken 3'-0" above the ground. Not only is a typical adult eye height around 5'-0" or more, this does not at all represent the amount of light entering the windows which are mostly on the 2nd level of the homes. Given the mounting heights of the lights (15', 16', 22', and 65', 87', 90'), much more light will be present at eye level above grade and entering the residential windows, approx. 12'-20'

¹ "Lighting for Exterior Environments", IES RP-33-14, Illuminating Engineering Society, 2014.

² 2020 Musco Photometrics, St. Ignatius Prep School FB/SO, pages 11, 12.

above grade. The light levels there are going to be higher than what Musco is representing.

- c. We can use LEED v4.1 Sustainable Sites, Light Pollution Reduction credit as a guideline for acceptable levels of light trespass. Following LEED we see that, measured at the centerline of 39th Avenue, on a vertical plane extending up to 33' above grade, the limits on illuminance are: 0.05 fc (0.54 lux) for LZ1, and 0.10 fc (1.07 lux) for LZ2.³ The project's photometrics show as much as 2.6 fc at 0'-0" off the ground, 26 times the higher value (LZ2). Clearly, even if LEED is not being pursued, this is an excessive amount of light spilling off of the property.

B. Glare and Brightness

The negative issues caused by the proposed sports lighting not only include the glare produced by the fixtures themselves, but by how much brighter the area, as a whole, will be.

1. Luminance ("brightness") is important

- a. The Musco photometrics do not show measurements of luminance. Loosely speaking, luminance is a measure of "brightness". The addition of 50 fc of light across the field will turn the field itself into a bright, light reflecting surface, as well as any other surfaces nearby (sidewalks, bleachers, out-building walls, etc.). These surfaces themselves, especially when seen from the 2nd story windows of homes will have a significant deleterious impact on the nighttime environment of the neighborhood.
- b. Below are two images showing the effect of a sports lighting installation on brightness of the adjacent areas. While this is a different installation, the concept of brightness is clearly illustrated.

³ "Light Pollution Reduction - Language," LEED BD+C: New Construction v4.1 - LEED v4.1 <https://www.usgbc.org/credits/new-construction-core-and-shell-schools-new-construction-retail-new-construction-healthc-163?return=/credits/New%20Construction/v4.1/Sustainable%20sites>



These two photos were taken at the same facility, on opposite sides of the access road. (Left) Pointed toward the athletic field. (Right) Pointed toward the neighborhood.

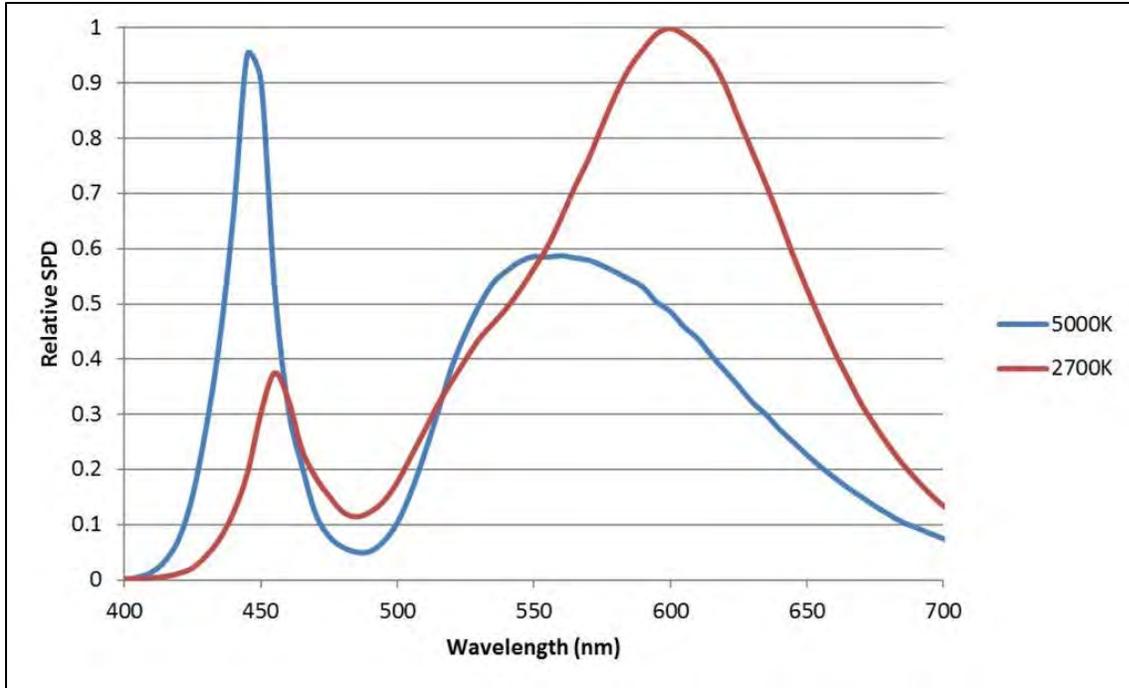
Image Source: IDA-Criteria for Community-Friendly Outdoor Sports Lighting v1.0, November 28, 2018

2. Glare due to nighttime scotopic v. photopic vision

- a. At night, our eyes “shift” from what is called “photopic” to “mesopic” or “scotopic” vision. You’ve experienced this if you have come out of a dark movie theater into the daylight. In the theater, your eyes have adapted to the dark and switched over to mesopic or scotopic vision, and then attempt to switch back to photopic in the daylight.
- b. Scotopic and mesopic vision are more sensitive to green and blue light than photopic vision is, meaning that ‘cooler’ light will appear brighter than a similar light source that is more yellow.
- c. The Musco lights are 5700K, which are considered very “cool” and mimic daylight. In fact, 5500K is equivalent to noon-time sunlight and 6000K is equivalent to a camera’s electronic flash.⁴ While these are more efficient in terms of energy, they produce more glare than a similar fixture with a lower color temperature (e.g. 3000K). Thus, the same quantity of light will appear even brighter. This effect is worse for people over 65.⁵

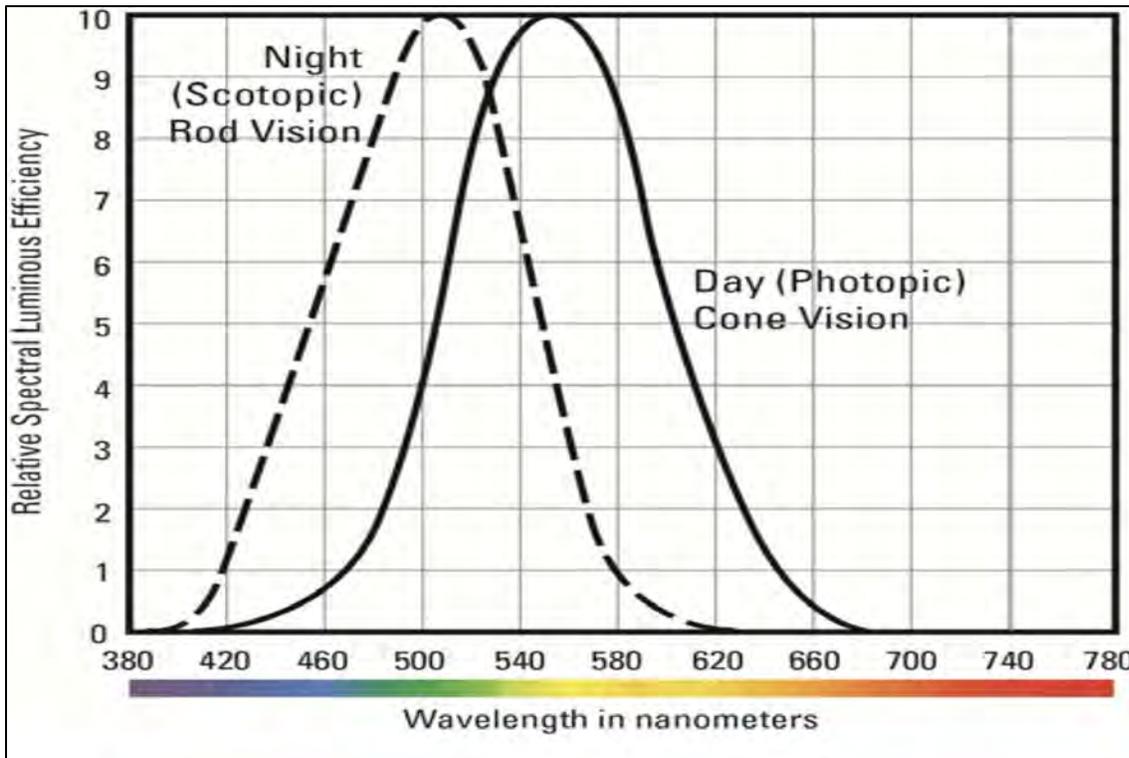
⁴ <https://hci-led.com/wp-content/uploads/2015/08/Don-Werthmann-on-Kelvin.pdf>

⁵ “Light and Vision”, IES Ready Reference App, Illuminating Engineering Society, 2020.



Notice the larger peak in the 440-450 nm range with the 5000k (cooler) LED source, as opposed to the 2700K (warmer) LED source. This is significant for scotopic sensitivity as well as melanopic sensitivity.

Image source: <https://www.allthingslighting.org/index.php/2019/02/15/filtered-leds-and-light-pollution/>



Notice how the Night (Scotopic) peak is shifted to the left, closer to the blue and green wavelengths (around 500 nm).

Image source: "Light and Vision", IES Ready Reference App, Illuminating Engineering Society, 2020.

3. Glare (Musco lights)

- a. In Musco's diagram addressing glare, the facades of the houses along 39th avenue are mostly in the yellow band, indicating 1,000 to 5,000 candela. By Musco's own legend, this is not negligible in terms of the amount of glare (which they indicate as ≤ 500 candela).⁶
- b. Musco has not provided the IES files for their luminaires. As such it is not possible to do a separate analysis of the installation, particularly the characteristics of the luminaires as they relate to glare, backlight and uplight.
- c. It should be noted, that while Musco provided a diagram showing their TLC technology emits fewer candelas than other sources⁷, it is not clear which luminaire is being used in that diagram, nor how many are used in the proposed installation.
- d. While the Musco fixtures may be better than other sources/installations, due to the proximity and duration of the proposed lighting and schedule, it is still too much for this residential area.

C. Light + Health

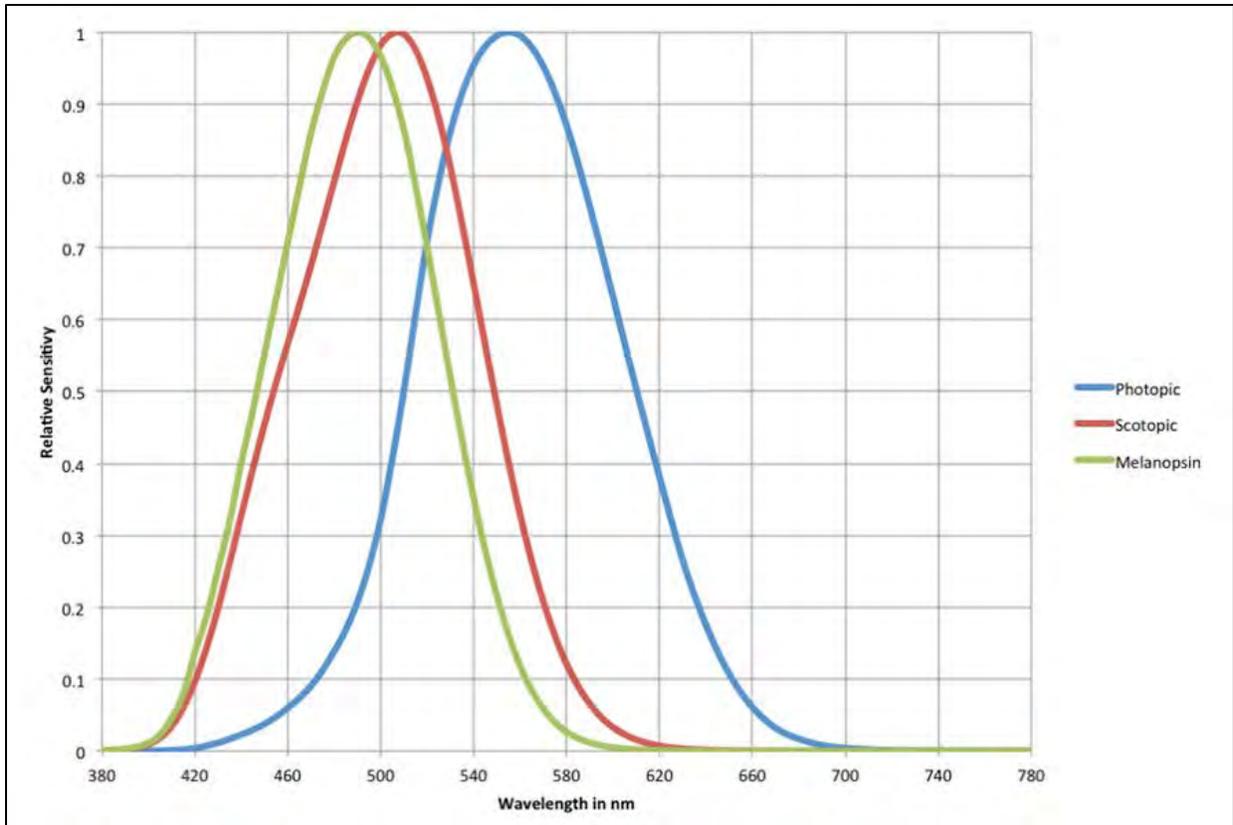
Research over the past few decades has shown that our bodies regulate our health in part due to the natural cycle of light and dark, called the circadian cycle.⁸ Disruptions to that cycle have been shown to impact health through changes to hormones, sleep and body temperature. The regulation of circadian rhythms by light is controlled by suppression of melatonin. In the morning, bright, blue light suppresses melatonin and encourages us to wake up, and later in the evening, lower light levels help to stimulate melatonin and encourage our bodies to go to sleep.

It should be noted that the cells in the eye that control this are different than the rods and cones that control vision. These cells (called intrinsically photosensitive retinal ganglion cells or "iprgcs") respond to light differently and are most sensitive to light in the blue range around 480 nm, and this system is termed "melanopic".

⁶ 2020 Musco Photometrics, St. Ignatius Prep School FB/SO, page 18.

⁷ Evolution of Light Control - Musco - St. Ignatius Light Poles.

⁸ Light and Human Health: An Overview of the Impact of Optical Radiation on Visual, Circadian, Neuroendocrine and Neurobehavioral Responses, IES TM-18-18, Illuminating Engineering Society, 2018.



Graph showing photopic, scotopic and melanopic responses to visible wavelengths of light showing differing peak sensitivities.

Image source: <https://www.ies.org/fires/simplifying-melanopsin-metrology/>

1. Circadian rhythms are affected by many things including: the age of the individual, recent sleep patterns, time during the day/night when blue light is present, quantity of blue light, duration of exposure to blue light, and angle/location of the light.⁹

- a. The Musco lights, as mentioned, are 5700K CCT (correlated color temperature) which are “blue-er” lights than, say a 3000K source. There is a larger percentage of the light emitted in the 480 nm range, which stimulates the melanopic system. Therefore, it has a greater tendency to disrupt the circadian system.
- b. Because the circadian system responds to the quantity of light received at eye level, the higher vertical illuminances created by the Musco lights are going to elevate the impact.
- c. Most importantly, the lights will be on for up to 55% of the entire year and virtually every weeknight during the school year, for up to 4 or 5 hours at a time in winter. This significant increase in the quantity and duration of blue-enriched light during dark hours has the potential to have significant impacts on circadian health, especially in children who are much more vulnerable to such disruptions.

⁹ Light and Human Health: An Overview of the Impact of Optical Radiation on Visual, Circadian, Neuroendocrine and Neurobehavioral Responses, IES TM-18-18, Illuminating Engineering Society, 2018.

D. Light pollution

Finally, the Musco lights will negatively affect light pollution in the area, particularly due to the frequency of fog, and they will have a potential negative effect on the ecosystems in the relatively nearby ocean and shoreline habitats.

1. Fog increases the light pollution because it both disperses light through the water molecules suspended in the air and serves as an outdoor “ceiling” which the light bounces off of and distributes back down to the ground.
2. Musco has not provided the IES photometric data files (.ies files) or any report on the photometric distribution of the luminaires, so it is not possible to evaluate the BUG (backlight-uplight-glare) ratings of the selected luminaires to evaluate their characteristics. Typically, sports lighting is not well shielded in any direction and contributes greatly to light pollution as the luminaires are angled. In order to verify any claims of shielding, Musco needs to provide the IES files and luminaire photometric report.
3. Like humans, animals and plants also have circadian rhythms which are impacted by changes in light and dark. Sea turtles are probably the most well-known example of animals whose reproductive processes are disrupted by light levels near beaches, however, other plants and animals are susceptible as well.¹⁰

¹⁰ “Lighting for Exterior Environments”, IES RP-33-14, Illuminating Engineering Society, 2014.

APPENDIX B

**US FISH AND WILDLIFE SERVICE IPAC REPORT
OF THREATENED AND ENDANGERED SPECIES**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Francisco County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Salt Marsh Harvest Mouse <i>Reithrodontomys raviventris</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/613	Endangered
Southern Sea Otter <i>Enhydra lutris nereis</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8560	Threatened Marine mammal

Birds

NAME	STATUS
California Clapper Rail <i>Rallus longirostris obsoletus</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4240	Endangered
California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	Endangered
Marbled Murrelet <i>Brachyramphus marmoratus</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/4467	Threatened
Short-tailed Albatross <i>Phoebastria (=Diomedea) albatrus</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/433	Endangered
Western Snowy Plover <i>Charadrius nivosus nivosus</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8035	Threatened
Yellow-billed Cuckoo <i>Coccyzus americanus</i> There is proposed critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6199	Threatened
San Francisco Garter Snake <i>Thamnophis sirtalis tetrataenia</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5956	Endangered

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened
Tidewater Goby <i>Eucyclogobius newberryi</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/57	Endangered

Insects

NAME	STATUS
Bay Checkerspot Butterfly <i>Euphydryas editha bayensis</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2320	Threatened

Callippe Silverspot Butterfly *Speyeria callippe callippe* **Endangered**

There is **proposed** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/3779>

Mission Blue Butterfly *Icaricia icarioides missionensis* **Endangered**

There is **proposed** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/6928>

Myrtle's Silverspot Butterfly *Speyeria zerene myrtleae* **Endangered**

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/6929>

San Bruno Elfin Butterfly *Callophrys mossii bayensis* **Endangered**

There is **proposed** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/3394>

Flowering Plants

NAME	STATUS
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Franciscan Manzanita *Arctostaphylos franciscana* **Endangered**

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/5350>

Marin Dwarf-flax *Hesperolinon congestum* **Threatened**

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/5363>

Marsh Sandwort *Arenaria paludicola* **Endangered**

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/2229>

Presidio Clarkia *Clarkia franciscana* **Endangered**

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/3890>

Presidio Manzanita *Arctostaphylos hookeri* var. *ravenii* **Endangered**
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/7216>

Robust Spineflower *Chorizanthe robusta* var. *robusta* **Endangered**
 There is **final** critical habitat for this species. Your location is outside the critical habitat.
<https://ecos.fws.gov/ecp/species/9287>

San Francisco Lessingia *Lessingia germanorum* (=L.g. var. *germanorum*) **Endangered**
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/8174>

Showy Indian Clover *Trifolium amoenum* **Endangered**
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/6459>

White-rayed Pentachaeta *Pentachaeta bellidiflora* **Endangered**
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/7782>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.

2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the [FAQ below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
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Allen's Hummingbird *Selasphorus sasin***Breeds Feb 1 to Jul 15**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9637>

Bald Eagle *Haliaeetus leucocephalus***Breeds Jan 1 to Aug 31**

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Black Oystercatcher *Haematopus bachmani***Breeds Apr 15 to Oct 31**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9591>

Black Swift *Cypseloides niger***Breeds Jun 15 to Sep 10**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8878>

Black Turnstone *Arenaria melanocephala***Breeds elsewhere**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Burrowing Owl *Athene cunicularia***Breeds Mar 15 to Aug 31**

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9737>

Clark's Grebe *Aechmophorus clarkii***Breeds Jan 1 to Dec 31**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat *Geothlypis trichas sinuosa***Breeds May 20 to Jul 31**

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/2084>

Costa's Hummingbird <i>Calypte costae</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9470	Breeds Jan 15 to Jun 10
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Lawrence's Goldfinch <i>Carduelis lawrencei</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Lewis's Woodpecker <i>Melanerpes lewis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9408	Breeds Apr 20 to Sep 30
Long-billed Curlew <i>Numenius americanus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5511	Breeds elsewhere
Marbled Godwit <i>Limosa fedoa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Nuttall's Woodpecker <i>Picoides nuttallii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse <i>Baeolophus inornatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15

Rufous Hummingbird *selasphorus rufus***Breeds elsewhere**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

Short-billed Dowitcher *Limnodromus griseus***Breeds elsewhere**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9480>

Song Sparrow *Melospiza melodia***Breeds Feb 20 to Sep 5**

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Spotted Towhee *Pipilo maculatus clementae***Breeds Apr 15 to Jul 20**

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/4243>

Tricolored Blackbird *Agelaius tricolor***Breeds Mar 15 to Aug 10**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3910>

Whimbrel *Numenius phaeopus***Breeds elsewhere**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9483>

Willet *Tringa semipalmata***Breeds elsewhere**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit *Chamaea fasciata***Breeds Mar 15 to Aug 10**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ

“Proper Interpretation and Use of Your Migratory Bird Report” before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

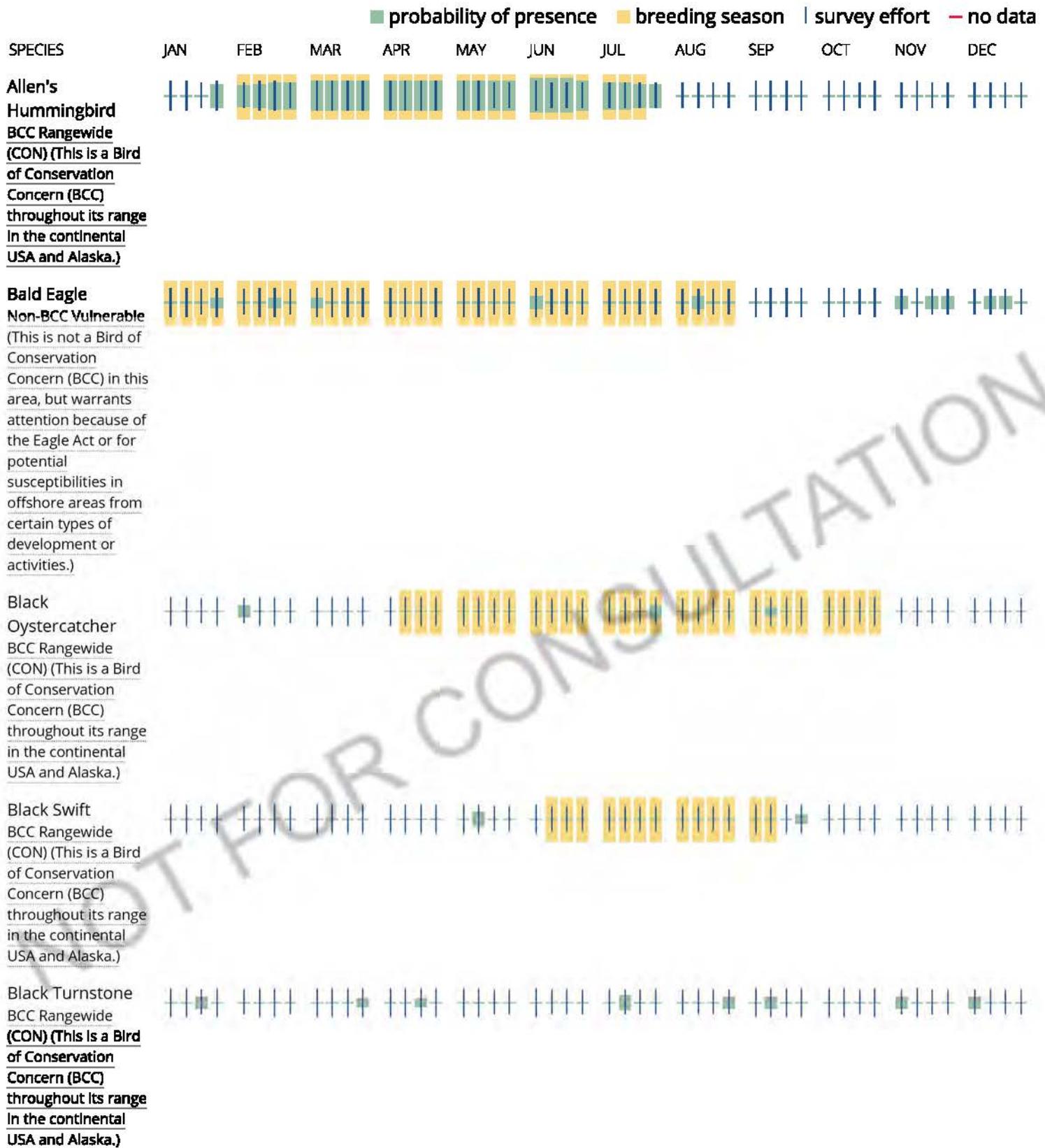
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

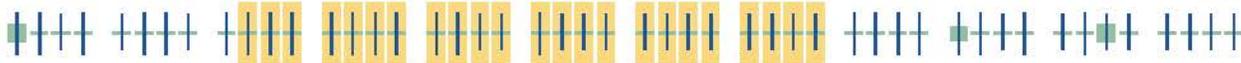
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

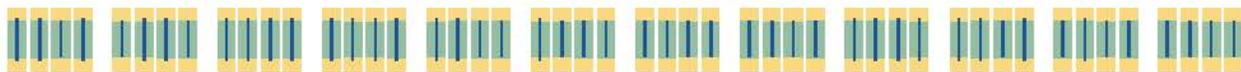
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Burrowing Owl
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Clark's Grebe
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Common Yellowthroat
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



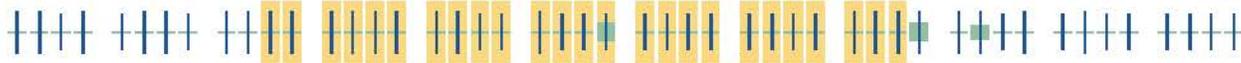
Costa's Hummingbird
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Golden Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Lawrence's Goldfinch
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Lewis's Woodpecker
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

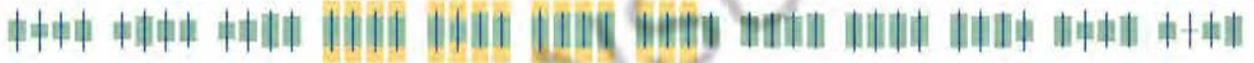
Long-billed Curlew
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Marbled Godwit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Nuttall's Woodpecker
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Oak Titmouse
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Rufous Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

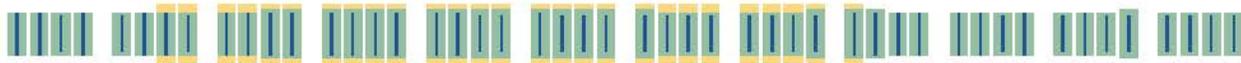


Short-billed Dowitcher
BCC Rangewide (CON) (This Is a Bird of Conservation



Concern (BCC) throughout its range in the continental USA and Alaska.)

Song Sparrow
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



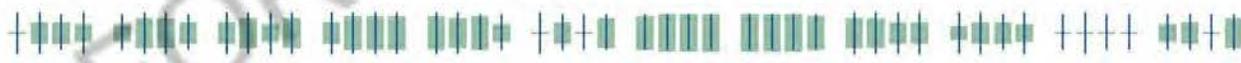
Spotted Towhee
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



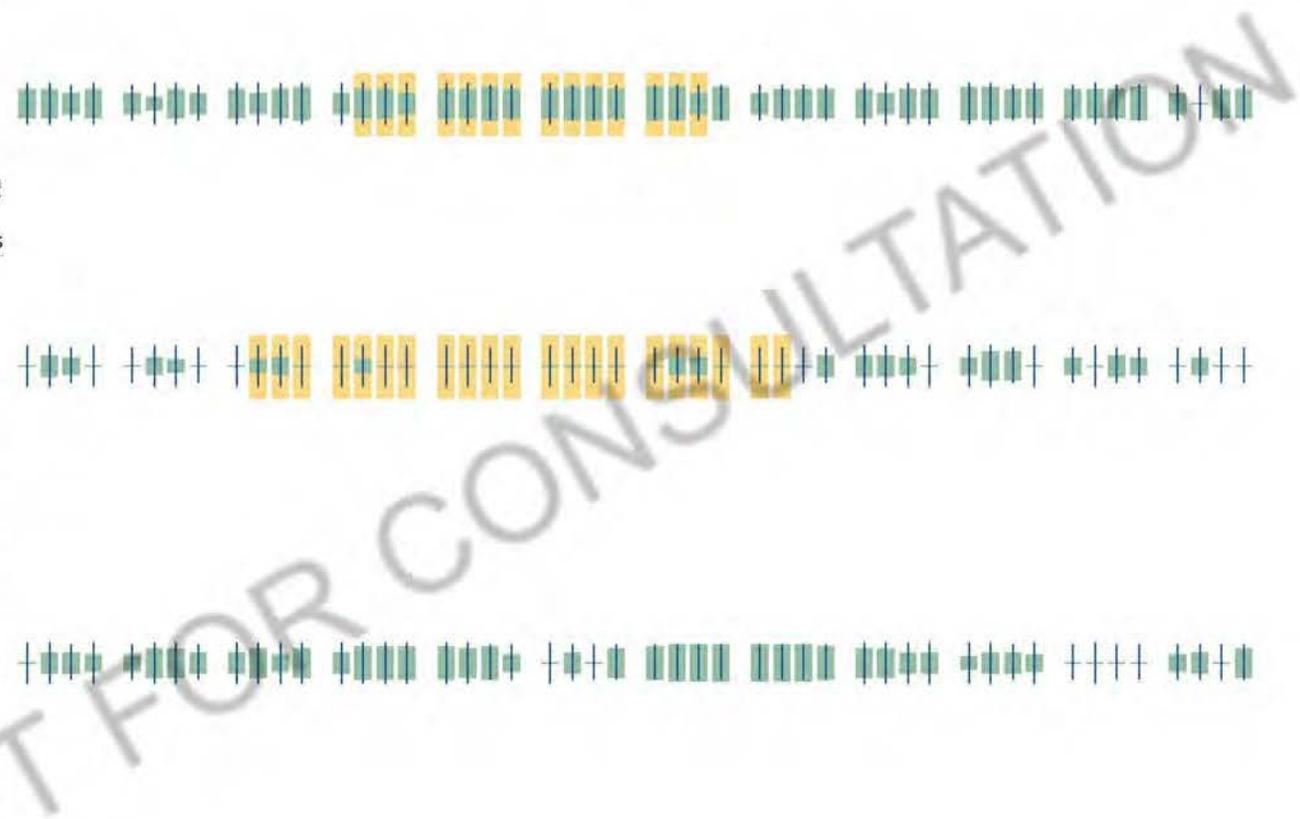
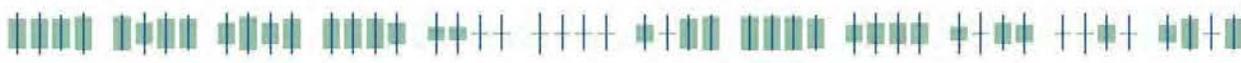
Tricolored Blackbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



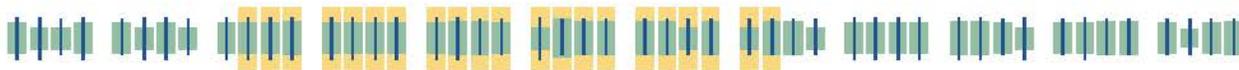
Whimbrel
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Willet
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Wrentit
BCC Rangewide
(CON) (This is a Bird
of Conservation
Concern (BCC)
throughout its range
in the continental



USA and Alaska.)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#),

or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the [Eagle Act](#) should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a

red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

NOT FOR CONSULTATION

APPENDIX C

**BIRDS OBSERVED AT WEST SUNSET PLAYGROUND,
2015 - PRESENT**

Birds Observed at West Sunset Playground

Source: Ebird <https://ebird.org/hotspot/L6317907?yr=all&m=> Accessed July 20, 2020

	<u>Species Name</u>	<u>Count</u>	<u>Date</u>
1	Killdeer	1	30 Mar 2020
2	Rock Pigeon	6	18 Jan 2020
3	Mourning Dove	1	18 Jan 2020
4	Anna's Hummingbird	1	18 Jan 2020
5	Western Gull	6	18 Jan 2020
6	Black Phoebe	1	18 Jan 2020
7	European Starling	26	18 Jan 2020
8	House Sparrow	6	18 Jan 2020
9	Tricolored Blackbird	25	18 Jan 2020
10	Brewer's Blackbird	40	18 Jan 2020
11	American Crow	4	2 Jan 2020
12	Common Raven	2	2 Jan 2020
13	Chestnut-backed Chickadee	1	2 Jan 2020
14	Ruby-crowned Kinglet	1	2 Jan 2020
15	Pygmy Nuthatch	3	2 Jan 2020
16	American Robin	4	2 Jan 2020
17	House Finch	2	2 Jan 2020
18	Dark-eyed Junco	4	2 Jan 2020
19	White-crowned Sparrow	12	2 Jan 2020
20	Yellow-rumped Warbler	5	2 Jan 2020
	blackbird sp.	15	26 Nov 2019
21	Eurasian Collared-Dove	2	10 Nov 2019
22	Brown-headed Cowbird	2	10 Nov 2019
23	Townsend's Warbler	1	10 Nov 2019
24	Red-necked Phalarope	6	21 Aug 2019
25	Lark Sparrow	1	12 Aug 2019
26	Turkey Vulture	1	14 Apr 2019
27	Peregrine Falcon	1	14 Apr 2019
28	Hooded Oriole	1	31 Mar 2019
29	Merlin	1	28 Mar 2019
30	Barn Owl	1	21 Mar 2019
31	Western Bluebird	2	5 Feb 2019
32	Red-tailed Hawk	1	26 Jan 2019

	<u>Species Name</u>	<u>Count</u>	<u>Date</u>
33	California Gull	15	20 Jan 2019
	Larus sp.	30	20 Jan 2019
34	Northern Flicker	1	20 Jan 2019
35	Say's Phoebe	1	20 Jan 2019
36	Bushtit	16	20 Jan 2019
	Zonotrichia sp.	4	20 Jan 2019
37	California Towhee	1	20 Jan 2019
38	Cooper's Hawk	1	2 Jan 2019
39	Lesser Goldfinch	2	21 Oct 2018
40	Yellow Warbler	1	23 Sep 2018
41	Osprey	1	9 Sep 2018
	shorebird sp.	1	3 Sep 2018
	warbler sp. (Parulidae sp.)	2	3 Sep 2018
42	Canada Goose	11	26 Aug 2018
43	Double-crested Cormorant	2	26 Aug 2018
44	White-tailed Kite	1	5 Aug 2018
45	American Goldfinch	1	1 Apr 2018
46	Tropical Kingbird	1	31 Mar 2018
47	Mallard	3	27 Mar 2018
48	Barn Swallow	1	27 Mar 2018
49	Red-shouldered Hawk	1	26 Mar 2018
50	Red-breasted Nuthatch	2	18 Mar 2018
51	Golden-crowned Sparrow	2	18 Mar 2018
52	Song Sparrow	1	18 Mar 2018
53	Spotted Towhee	1	18 Mar 2018
54	Red-winged Blackbird	1	18 Mar 2018
	gull sp.	1	2 Mar 2018
55	Pine Siskin	2	25 Feb 2018
56	Fox Sparrow	1	25 Feb 2018
57	Northern Pintail	4	10 Dec 2017
58	Glaucous-winged Gull	1	10 Dec 2017
	pigeon/dove sp.	1	26 Nov 2017
59	Orange-crowned Warbler	1	26 Nov 2017
60	Cedar Waxwing	5	20 Nov 2017
61	Downy Woodpecker	1	11 Nov 2017
62	Purple Finch	1	11 Nov 2017

	<u>Species Name</u>	<u>Count</u>	<u>Date</u>
63	American Pipit	7	7 Oct 2017
64	California Scrub-Jay	2	2 Oct 2017
65	Great Blue Heron	1	10 Mar 2017
66	Wilson's Snipe	1	20 Nov 2016
	peep sp.	1	28 Aug 2016
	passerine sp.	2	28 Aug 2016
67	Hermit Thrush	1	19 Jan 2015