

## Santa Cruz Bird Club

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Director of Special Projects, Research, and Evaluation
Chip Odom
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Live Oak School District
984-1/960 Bostwick Lane Santa Cruz, CA 95062
Annette Olson
Santa Cruz County Planning Dept.

Re: Stadium Lighting at Shoreline Middle School

Dear Live Oak School District Governing Board:

The Santa Cruz Bird Club has been active in the conservation efforts of local birds in the Santa Cruz Community for over 60 years and would like to address the proposed stadium lighting project at Shoreline Middle School. This school is located near a riparian area and Schwann Lake where many birds reside and rest from migration. In fact, nearly 200 bird species are found at Schwan Lake and over 150 Double-crested Cormorant nests are currently active. Sixteen species of raptors have occurred there, including the fully protected Bald Eagle and Peregrine Falcon. Furthermore, endangered birds use this area during migration, including the state endangered Willow Flycatcher.

Numerous peer review studies have been conducted concerning the effects of high intensity lights on birds at night including evidence that:

-Many birds migrate at night using starlight to navigate and become confused by human lights. They can detour off course and go towards these lights; thus using up energy reserves they would use to continue on their migration.

-There is a high risk of collisions when birds are drawn to artificial light, especially in foggy or stormy weather. Early ornithologists recorded higher bird mortality rates at lighthouses during periods of inclement weather.

-Finally, birds living in the adjacent riparian area exposed to light pollution may be impacted by changes in their circadian clock and seasonal rhythms. This can cause changes in reproduction, foraging, and immunological responses.

We recommend the following:

-Consider a "NO NIGHT-TIME" light scenario where no impacts will result to wildlife.

Sincerely,

Lisa Sheridan, President, Santa Cruz Bird Club Jennifer Parkin, Conservation Officer, Santa Cruz Bird Club