

# **AB 38 SAVE OUR NIGHT SKIES ACT**

## ASSEMBLYMEMBER ALEX LEE

#### THIS BILL

AB 38 limits outdoor night lighting on state buildings to promote safety for people, ecosystems, and other wildlife. In addition, this reform conserves energy and reduces our carbon footprint.

#### BACKGROUND

Artificial Light at Night (ALAN) has increased to unprecedented levels globally and in California. This has resulted in a disruption to circadian rhythms in plants and animals, which harm our ecosystems.

California <u>requires</u> a minimum efficiency level of 45 lumens per watt for most lighting fixtures, which reduces our energy consumption. However, this has <u>resulted</u> in a significant increase in the number of lighting fixtures.

Light attracts nocturnal-migratory birds and diverts them from safe migration routes to human environments, where they are more susceptible to collisions with buildings and other human-made structures. A <u>study</u> found that reducing indoor artificial night light by half can result in roughly 60% fewer bird collisions.

Insects are <u>attracted</u> to light as well, and when caught in a light plume of a light fixture, they circle around it until they die or the light is extinguished.

At <u>least 19 states</u>, the District of Columbia, and Puerto Rico have laws in place to reduce light pollution including limiting ALAN. All address similar concerns central to this bill – protecting humans, ecosystems, and other wildlife from hazards caused by excessive night lighting.

#### **PROBLEM**

ALAN disrupts ecological processes and functions that life on earth depends on.

According to the National Audubon Society, 70% of bird species migrate each year. And of those birds, 80% migrate at night, using the night sky to help them navigate to and from their breeding grounds. Every day in the U.S., there is an estimated one million birds that die due to building or structure collisions related to ALAN. This past year in New York City, 200 birds were found dead on the street after a mass collision with a high-rise building.

Excessive artificial lighting also has detrimental effects on humans. Teens and adolescents who live in areas that have high levels of ALAN are more likely to have mood and anxiety disorders, and interrupted sleep patterns. In a separate study by the United Nations, ALAN was found to suppress the production of melatonin, which is a crucial hormone in regulating our sleep and is an aid to the immune system.

Last, the International Dark-Sky Association estimates that at least 30% of all outdoor lighting in the United States alone is wasted – primarily by lights that aren't covered. That wasted light totals \$3.3 billion in lost electricity costs and the release of 21 million tons of carbon dioxide per year. It is time to reverse this trend and protect our night sky and biosphere.

#### SOLUTION

AB 38 will require all outdoor lighting fixtures on state buildings and structures, including state parks and lands, to have an external shield to direct light to where it is needed and be equipped with a shutoff device. This sensible reform promotes safety for migratory birds, insects, and people.

#### **SUPPORT**

Audubon California (Sponsor)

### **CONTACT**

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