

# Fact Sheet

## Ban Fireworks in the City of San Diego, California



### Summary

Public fireworks displays cause a myriad of problems for the environment, companion animals, wildlife, and people. While all consumer fireworks are already illegal in the City and County of San Diego, this municipality is not doing enough to protect the vulnerable wildlife and habitats that are being disrupted by the use of fireworks. Therefore, the City of San Diego must take immediate action to implement a city-wide ban on public fireworks displays.

### Background

While fireworks were invented roughly 2,000 years ago in China to ward off evil spirits, they continue to be in use today to celebrate our most beloved holidays, most commonly Independence Day. In San Diego County alone, approximately twenty different fireworks displays take place on or around the Fourth of July, with SeaWorld hosting nightly fireworks shows throughout the summer. These public displays cost a minimum of \$25,000, with some costing upwards of \$600,000.

### Problem

#### **FIREWORKS POLLUTE THE ENVIRONMENT**

Fireworks release a host of contaminants that affect air quality and contribute to climate change, including carbon dioxide, carbon monoxide, nitrogen, sulfur dioxide, and particulate matter. Perchlorate—a chemical compound added to fireworks—is especially harmful, as it remains in the environment for long periods, contaminating soil and water. Other highly toxic chemicals such as lead, titanium, strontium, and copper are also commonly found in fireworks. The debris from fireworks displays along the coast pollute our oceans and can adversely impact water quality. Moreover, the fireworks shows in more inland areas can ignite wildfires.

#### **FIREWORKS FRIGHTEN COMPANION ANIMALS**

Some dogs and cats have a fight-or-flight response to fireworks, and more cats and dogs go missing around the Fourth of July than any other time of year due to the frightening sounds of these explosions.

#### **FIREWORKS DISTURB WILDLIFE**

Fireworks are known to cause harm to a multitude of wildlife species, but they especially affect the Brandt's Cormorant. These sensitive seabirds live along the Pacific coast, and they are listed on the IUCN Red List as Least Concern, with a dramatically decreasing population. July fireworks displays, which inconveniently coincide with the species's nesting season, have been connected to the decline of Brandt's Cormorant colonies in California. These birds have been observed immediately taking flight and abandoning their nests at the onset of fireworks displays. Fireworks are therefore a major concern for the future of the Brandt's Cormorant.



#### **FIREWORKS TRIGGER VETERANS**

San Diego County is estimated to have the third highest number of veterans of any county in the United States—military veterans make up more than 13% of the county's population. Post-traumatic Stress Disorder (PTSD), a common disorder among veterans, is often exacerbated by fireworks shows. Fireworks trigger symptoms such as nightmares, flashbacks, and heart palpitations in those suffering from PTSD.

## Solution

The solution is simple—to implement a city-wide ban on public fireworks displays in the city of San Diego.

There is no rational basis for holding ceremonial fireworks shows along California's coast, especially in San Diego, as San Diego is home to a large population of Brandt's cormorants, who are in need of protection. Given that these birds are easily startled and their population is in decline, discontinuing the use of fireworks in the San Diego area can have an overall positive impact on this species's future.

New technology allows for safer, and even cheaper, alternatives, such as drone light shows, laser shows, and water displays. The San Diego communities of La Jolla and Ocean Beach are already on board, as they have started a new tradition of hosting drone light shows to celebrate the Fourth of July. The drone show in La Jolla, for example, utilized 100 drones at a cost of \$25,000. These alternatives provide the same awe-inspiring experience while preventing continuing harm to our water, air, pets, wildlife, and people.

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## Questions & Answers

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Q: Isn't it important to preserve the tradition of celebrating the 4th of July with a fireworks display?

A: Although it can be important to preserve tradition, this campaign is not advocating for abandoning the tradition of celebrating the 4th of July, just one small aspect of HOW we celebrate it. Drone light shows are an improvement to the typical fireworks displays, as they involve more creativity and technological sophistication.

Q: What other animals are affected by fireworks?

A: Horses have been observed getting stressed by the noise pollution and trying to flee, and many other mammals run in fear, leaving their young vulnerable to starvation and predation. Studies have also detected firework pollutants, such as aluminum, mercury, and lead, in bodies of sharks.

Q: Have any other municipalities implemented a city-wide ban on public fireworks displays?

A: Yes, Gualala Point Island in Sonoma County, CA has banned 4th of July fireworks displays. The California Coastal Commission denied the required permit for the city to host these shows because of their interference with the nesting of birds, specifically the Brandt's Cormorant.

Q: Fireworks shows only occur once per year, how bad can they really be?

A: While 4th of July fireworks displays occur on one night, San Diego County typically hosts 20-24 simultaneous shows. Additionally, SeaWorld hosts nightly fireworks displays throughout the summer. And, the particles that are deposited into the ocean from the explosions don't just disappear--perchlorates, for example, can persist in toxic concentrations in water.