

## Lake Elsinore & San Jacinto Watersheds Authority



City of Lake Elsinore • City of Canyon Lake • County of Riverside  
Elsinore Valley Municipal Water District • Santa Ana Watershed Project Authority

# Algal Blooms

## Frequently Asked Questions

### 1. What's that thick green substance floating on the lake?

**That green substance is called an algal bloom. It's a heavy growth of blue-green algae in and on a body of water. Algal blooms usually result from high amounts of nutrients – like nitrate and phosphate – that enter lakes or rivers from the soil when it rains.**

### 2. What is algae?

**The term “algae” refers to a large group of simple plant-like organisms that contain chlorophyll, but do not have roots, stems and leaves. They do not produce seeds and include the seaweeds, related freshwater plants and land plants.**

### 3. Is it safe to swim in the lake when algal blooms are present?

**Yes. When algal blooms are present, water in the lake is safe for swimming, water skiing all other recreational activities. Considering that on rare occasions certain species of algae are known to be unhealthful, it is advisable not to drink the lake-water. Incidental ingestion during recreation activity poses no significant health risk.**

### 4. Why do algal blooms happen?

**Algal blooms occur naturally in some lakes during the warmer months of the year. Blue-green algae forms when nutrients in the lake water are subjected to conditions such as high temperatures, low oxygen levels in the water and very little water movement.**

**5. What is being done to prevent the algal blooms from occurring?**

**The Lake Elsinore and San Jacinto Watersheds Authority (LESJWA) has been addressing the algal bloom situation in Lake Elsinore since it formed in 2001. Algal blooms occur partly due to low oxygen levels in the water that cause the release of nutrients from the sediment; therefore, projects to increase oxygen amounts in the water are one of the best solution. LESJWA'S new Lake Mixing System, installed in Lake Elsinore September of 2004, circulates more than 800 million gallons per day to increase the oxygen distribution in the lake. LESJWA'S new Aeration Project will also increase the oxygen level in Lake Elsinore by releasing oxygen bubbles from pipes lying on the lake bottom.**

**LESJWA is a joint powers authority entrusted with \$15 million in state and local funds to improve water quality and wildlife habitats, primarily in Lake Elsinore, as well as in Canyon Lake and the surrounding watersheds.**

**6. How often do algal blooms occur?**

**Although algal blooms can occur at any time of the year, they usually appear in the warmer months when high temperatures are frequent. Lake Elsinore in particular has a long history of annually occurring algal blooms. Low oxygen levels in the water, high nutrient input from upstream and very little water movement have always made Lake Elsinore vulnerable to algal blooms.**

**7. Why does the water have a foul smell?**

**The odor is caused by decaying algae located on the bottom of the lake.**

**8. What other effects do algal blooms have on lakes?**

**When Blue-green algae decays, it consumes oxygen in the lake. Sometimes, algal blooms consume so much of the available oxygen in a lake that it leads to fish kills or large populations of fish dying. We hope that LESJWA projects designed to maintain oxygen levels in the lake will help us better manage and control this problem.**