

October 2, 2009

To: Rich Marovich

Subject: Cyanobacteria at Mace Blvd. - Putah Creek

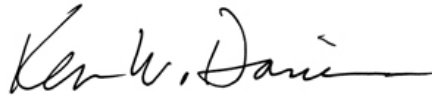
Report

During routine New Zealand Mudsnaill surveys at Mace Blvd. I noticed a developing Cyanobacteria bloom that I have identified as *Oscillatoria* sp. Please note that *Oscillatoria* has several synonyms, the taxonomy is complex with many numbered variants that I cannot identify.

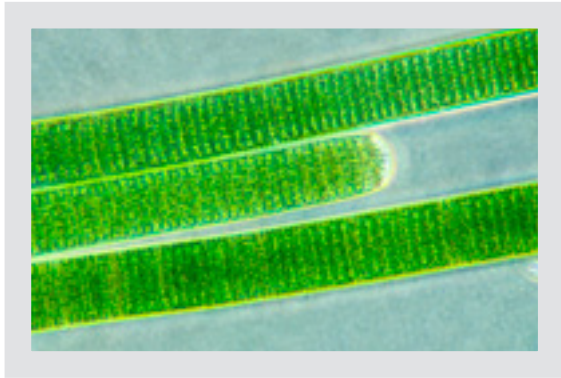
Oscillatoria is a common blue-green alga and a known cyanotoxin producer under certain conditions that can show highly-potent LD/50s.

Oscillatoria, like most cyanobacteria, can be the result of eutrophic waters caused by nutrient outflows. I did not determine if there is an upstream source of nutrient loading.

The site has a limited invertebrate population. I found only three organisms with a significant effort.



Ken W. Davis



***Oscillatoria* sp. filaments under a direct light microscope at 400 x.**



***Oscillatoria* is appropriately named as the filaments oscillate and slide in a very creepy manner. Image shows a damselfly nymph in the colony.**



Oscillatoria colonies cover aquatic macrophytes in Putah Creek at Mace Blvd. Photo 10/3/09