

Harmful Algal Bloom Report 1743, 1802, 1805 – Discovery Bay

The information in this bloom report is intended only for the agencies directly notified. Do not distribute to others without the authorization from the Water Board. Updated information appears at the top of the bloom report. All previous reported information appears under the “Archived Information” section.

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|---|---|
| REPORT ID(s): | 1743, 1802, and 1805 |
| WATER BODY: | Discovery Bay (multiple locations within DB) |
| COUNTY: | Contra Costa |
| GPS COORDINATES: | Multiple Locations |
| MOST RECENT OBSERVATION DATE: | June 27, 2018 by Contra Costa County Environmental Health Services staff |
| REPORTING PARTY: | Various Residents |
| CYANOBACTERIA IDENTIFIED: | Cell ID not performed but most likely Microcystis |
| TOXIN(s) DETECTED: | <input checked="" type="checkbox"/> Microcystin <input type="checkbox"/> Anatoxin-a <input type="checkbox"/> Cylindrospermopsin <input type="checkbox"/> Saxitoxin <input type="checkbox"/> Other: <input type="checkbox"/> Not Tested |
| TOXIN CONCENTRATION(s): | Varies from 50 µg/L down to 0.25 µg/L |
| ADVISORY LEVEL RECOMMENDED: | <input checked="" type="checkbox"/> Caution <input type="checkbox"/> Warning <input checked="" type="checkbox"/> Danger <input type="checkbox"/> No Advisory Recommended <input type="checkbox"/> Other: |
| MAIN BENEFICIAL USES (if known): | <input checked="" type="checkbox"/> Municipal and Domestic Supply – Drinking Water Supply <input checked="" type="checkbox"/> Water Contact Recreation (Rec-1) – Swimming, Wading, Fishing <input checked="" type="checkbox"/> Non-contact Water Recreation (Rec-2) – Hiking, Camping, Boating <input checked="" type="checkbox"/> Agricultural Supply <input type="checkbox"/> Cultural/Tribal Uses <input type="checkbox"/> Unsure |
| AGENCIES/INDIVIDUALS NOTIFIED: | Contra Costa Environmental Health Services staff, Reclamation District 800, EPA, OEHHA, Div Drinking Water District 4 SF, State Board HAB leads, State Board legislative affairs, RB mgmt |
| WATER BOARD STAFF: <i>For follow-up information</i> | <input checked="" type="checkbox"/> Christine Joab, Christine.Joab@waterboards.ca.gov (916) 464-4655 <input type="checkbox"/> Alisha Wenzel, Alisha.Wenzel@waterboards.ca.gov (916) 464-4717 <input type="checkbox"/> Matt Krause, Matthew.Krause@waterboards.ca.gov (916) 464-4845 |

July 13, 2018 – Discovery Bay (Multiple Locations) – **Danger and Caution Advisories Recommended**

On June 27, 2018, staff from the Contra Costa Environmental Health Services (CCHS) collected water samples from 12 locations around Discovery Bay (Figure 1) to test for the cyanotoxin, Microcystin. Microcystin was detected in all the samples with one sample above the Danger advisory level for recreational health and seven samples above the Caution advisory level for recreational health. Lab results and locations shown in Table 1.

CCHS staff have provided the appropriate Danger and Caution signs to the Harbor Master for posting. In addition, the Environmental Health staff will post public access areas and advise residents of harmful toxin levels via social media and other electronic communication. Questions on postings and sampling location should be directed to the Contra Costa Environmental Health at (925) 692-2500.

Outside of the CCHS sampling at Discovery Bay, two residents reported their observations to the state’s online HAB Portal. The first report was from Driftwood Bay on June 04 (report ID 1743) of observations of a bloom starting and the second report was from near Capstan Place on July 04 (report ID 1802) of an observation of a bloom in the water and a dead fish.

Figure 1. CCHS Sampling Locations for Microcystin Testing (June 27, 2018) and other HAB Reports

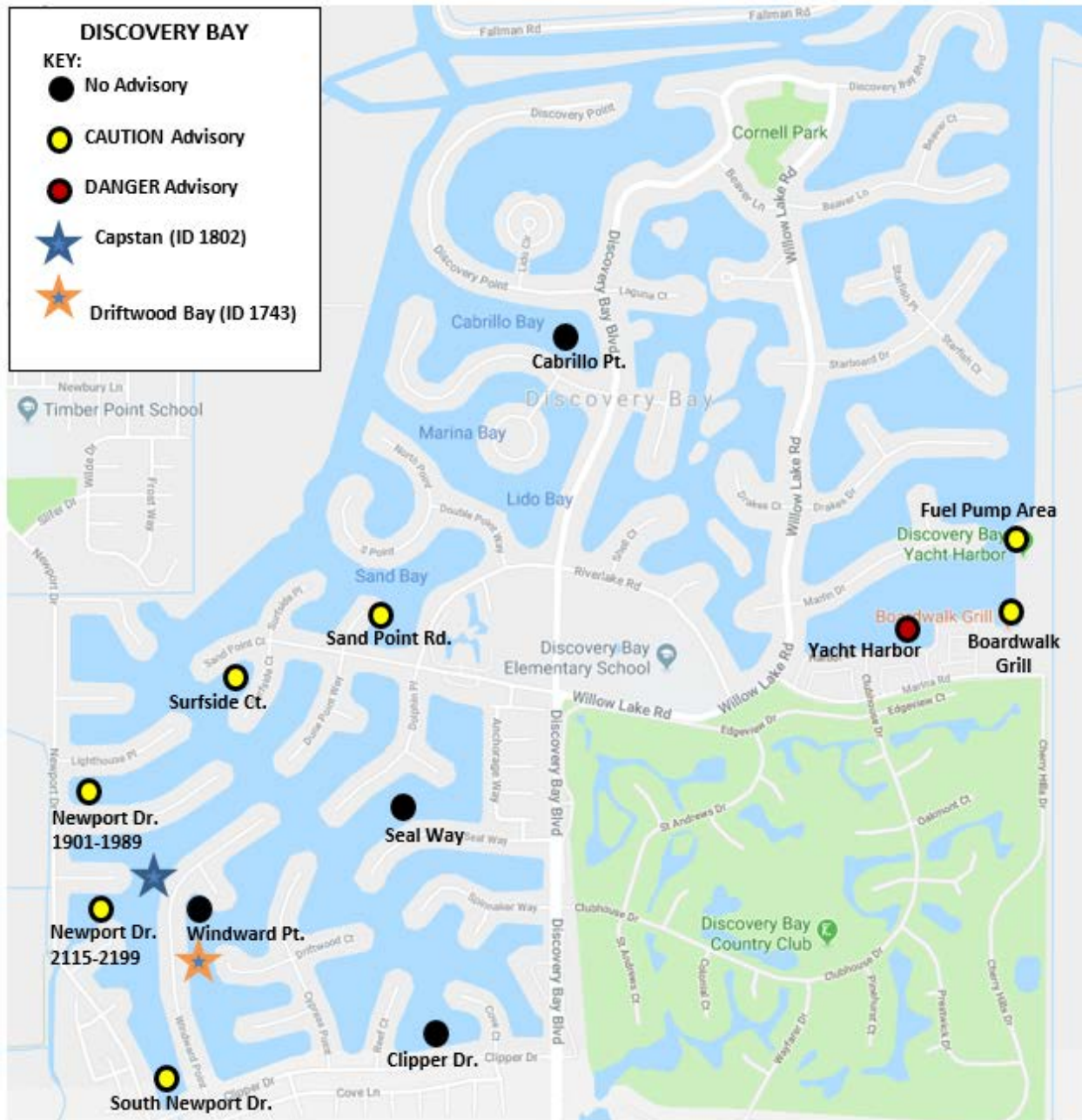


Table 1. Cyanotoxin Lab Results for CCHS Sampling at Discovery Bay

| Sample Date | Sampling Location | Microcystin µg/L | Advisory Level |
|-------------|------------------------|------------------|----------------|
| 06/27/2018 | Yacht Harbor | 50 | DANGER |
| 06/27/2018 | Newport Dr. 2115-2199 | 4.5 | CAUTION |
| 06/27/2018 | Sand Point Road | 4.4 | CAUTION |
| 06/27/2018 | Boardwalk Grill | 4.0 | CAUTION |
| 06/27/2018 | Fuel Pump | 3.9 | CAUTION |
| 06/27/2018 | South Newport Drive | 2.3 | CAUTION |
| 06/27/2018 | Surfside Court | 1.2 | CAUTION |
| 06/27/2018 | Newport Dr. 1901-1989 | 1.2 | CAUTION |
| 06/27/2018 | Windward Point | 0.71 | No Advisory |
| 06/27/2018 | Clipper Drive | 0.40 | No Advisory |
| 06/27/2018 | Seal Way | 0.26 | No Advisory |
| 06/27/2018 | Cabrillo Pt. 5115-5135 | 0.25 | No Advisory |

Photo of cyanobacteria in a bay along the Cypress Channel of Discovery Bay
(photo courtesy of resident, Jim Mattison)



Central Valley Regional Water Quality Control Board

Cyanotoxin advisory levels for finished drinking water and recreational waters (these are not regulatory):

| Toxin Type | US EPA finished drinking water 10-day health advisory levels | | California Recreational Action Levels (for posting and public notification) | | |
|---------------------------|---|------------------------------------|--|---------|--------|
| | Children < 6 years old | Children > 6 years old & adults | Caution | Warning | Danger |
| Microcystins (µg/L) | 0.3 | 1.6 | 0.8 | 6 | 20 |
| Anatoxin-a (µg/L) | None developed | None developed | Detection | 20 | 90 |
| Cylindrospermopsin (µg/L) | 0.7 | 3.0 | 1 | 4 | 17 |

Archived Information appears below.