

## US EPA Benthic HABs Discussion Group

Date & Time: December 2, 2022, 9:30 am – 11:00 am PST

Webinar registration: https://zoom.us/webinar/register/

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## Final Agenda

## 1) Introduction and announcements

-Upcoming meetings, recent papers, other news, etc.

2) Kurt Carpenter, research hydrologist at the USGS Oregon Water Science Center Benthic HAB surveys in Oregon's Cascade Range Rivers using hyperspectral technology

**Abstract:** In 2022, we conducted riffle scale hyperspectral surveys of periphyton, including potential toxin producing benthic cyanobacteria, in the Clackamas and McKenzie Rivers using drones and field based cameras. Spectral reflectance profiles of different periphyton types were assessed using a hyperspectral microscopic, and included Nostoc, Phormidium, and different types of green algae and stalked diatoms.

**3)** Dr. Elvira Perona & PhD candidate Albano Diez-Chiappe, faculty and researchers at La Universidad Autónoma de Madrid, Spain

Assessing risks of benthic cyanobacterial communities in National Parks

**Abstract:** Cyanotoxin-producing cyanobacteria are present in high proportion of Spanish rivers. Our research focuses on the proliferation of benthic cyanobacterial communities within National Parks, with the aim of minimizing the risks to citizens and fauna. The presence of potentially toxin-producing cyanobacteria has been confirmed in rivers from both parks. Actually, an alarming occurrence of mats, dominated by Microcoleus autumnalis, has been observed and seasonally monitored in Guadarrama Mountains National Parks. The presence of some cyanotoxin biosynthesis genes (mcyE, anaF and sxtA) have been confirmed at more than 80% of sampling sites. Metabarcoding analyses have been carried out to study cyanobacterial diversity.

## **Benthic HAB Workgroup Facilitators**

 Refer to <u>webpage</u> for content and recordings of previous meetings. Contact us if you would like to be added to our list serve and receive communications.

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