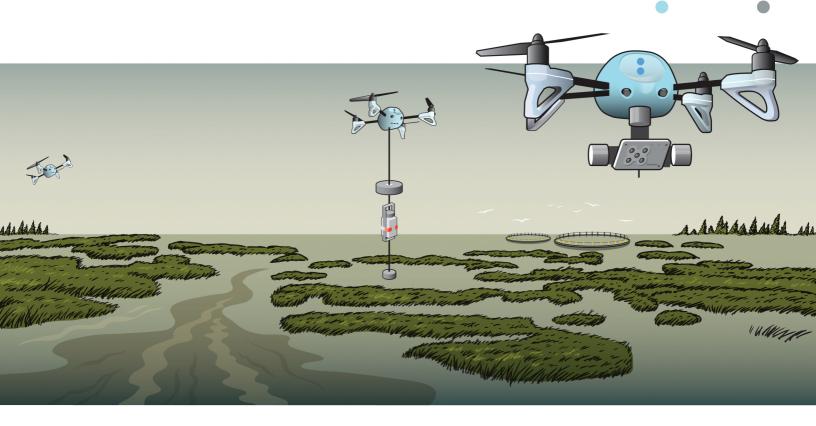
# Detection of Harmful Algal Blooms

## **Spiri**





### **HARDWARE**

- Spiri Mu
- Spiri Star
- Spiri Water Sampler

#### **OVERVIEW**



Harmful Algal Blooms (HABs) develop quickly and unpredictably, producing toxins that kill both marine and terrestrial organisms. This causes extensive seasonal economic and ecosystem damage, particularly to fisheries.

HABs are becoming more common as a result of many factors; including agriculture, development, and climate change.

Spiri's end-to-end solution enables the early detection and classification of HABs. Fully autonomous, it needs minimal human effort, and buys time to avoid disaster.

#### REMOTE SENSING

Spiri Stars, equipped with chlorophyll a (chl-a) sensors and on-board intelligence, are put in position to detect and communicate early signs of a HAB.

### CONFIRMATION

Any troubling concentration of chl-a is investigated by a flock of Spiri Mu, which self-organizes and operates without human pilots. Visual imagery and water samples are collected for the purpose of classification and population growth estimation.

#### **TRACKING**

A HAB can last multiple weeks, with growth and movement influenced by the tides and currents. Our cloud computing service provides forecasting to enable timely action on behalf of those at risk.



PEPORT







