

# JAWS

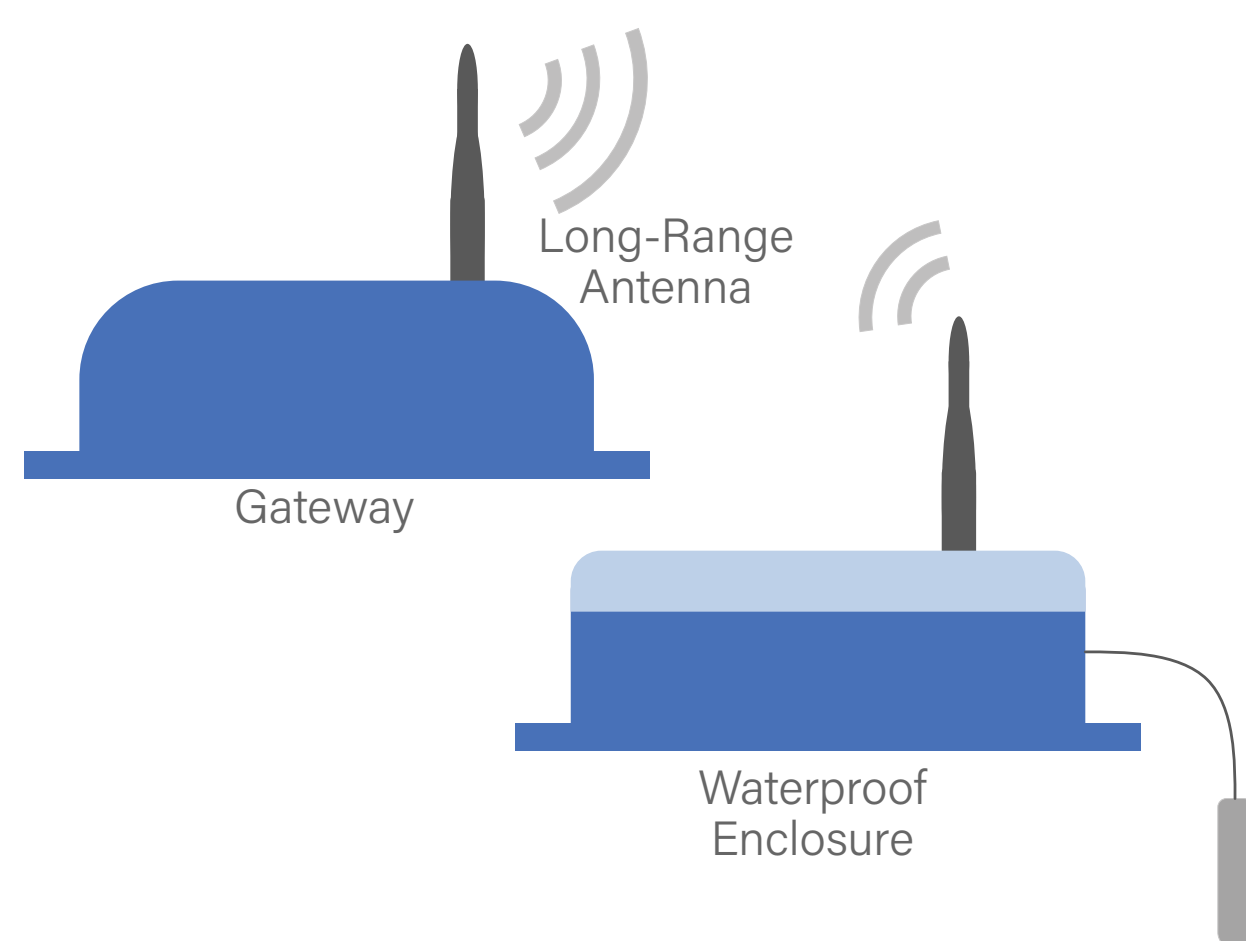
## A sensor for detecting Algal Blooms

### Who are we?

We are team water quality and our focus is on public safety. Team members: Jacob Huebner, Jeremy Rashkow, Helena Janinah, Corey McNamara, Jessica Soto, and Zahir Vayani.

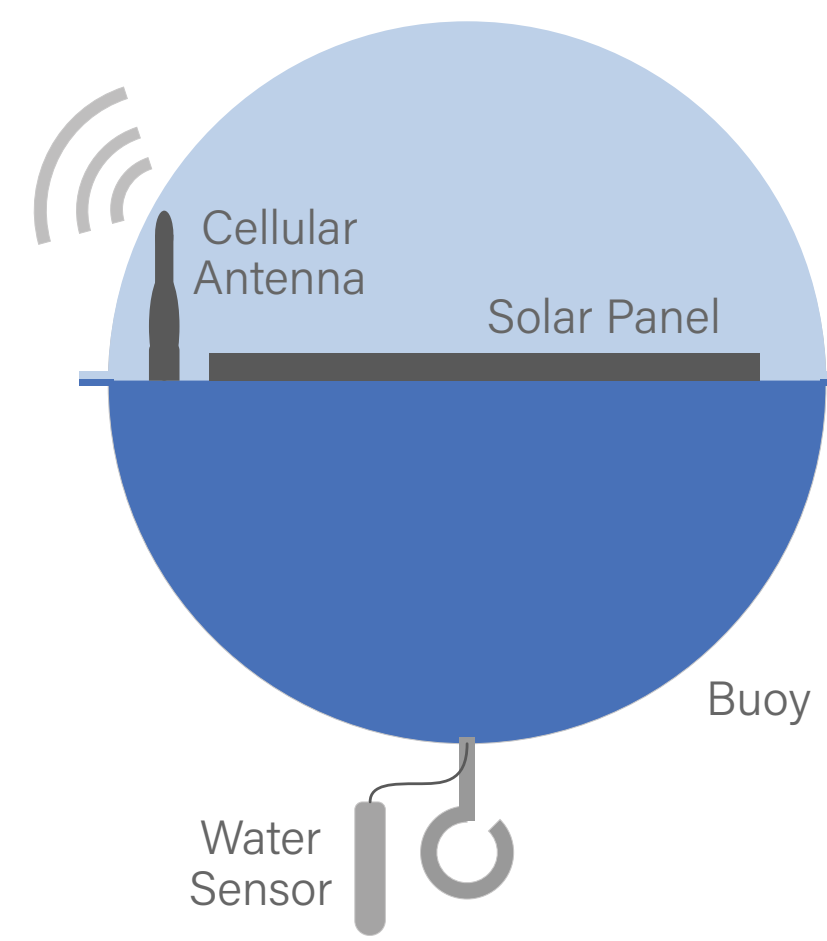
### What is JAWS?

JAWS is short for "Just Another Water Sensor". It is a wireless water sensor that detects harmful algal blooms in lakes and rivers.



**JAWS**

- Wireless LoRa transceiver
- Long-range up to 10 miles
- Low-power for long deployments
- Wall mountable
- 1 Gateway supports 200 sensors



**JAWS 2**

- Wireless cellular transceiver
- Long-range works anywhere with LTE
- Solar powered
- Buoy
- All-in-one device

### Who is our user?

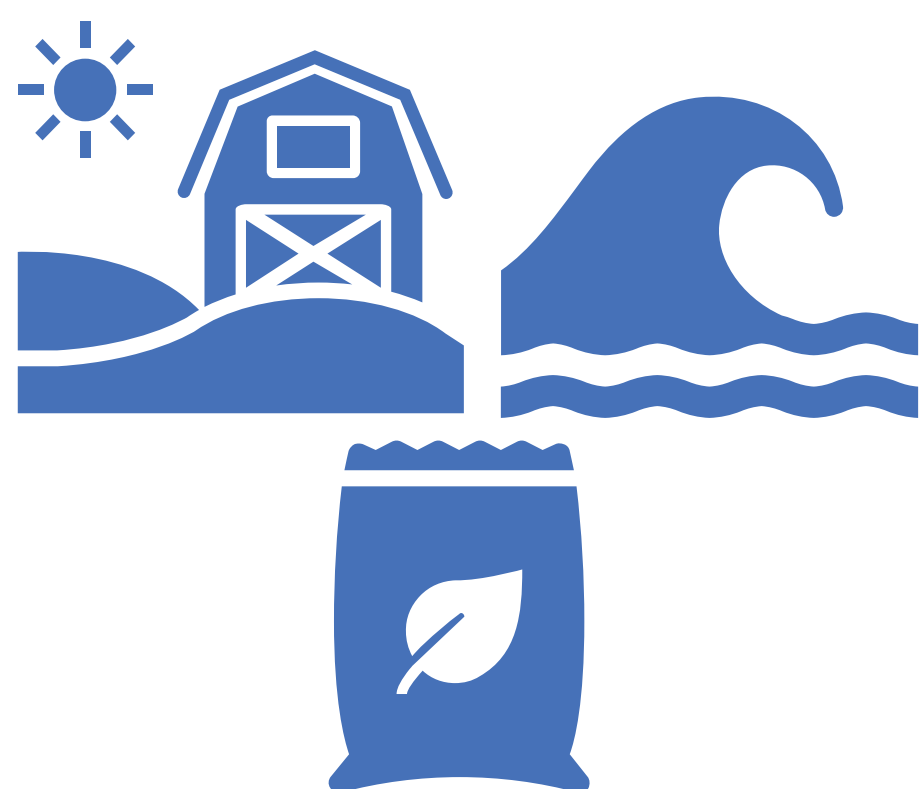
Our current user is the Chicago Park District. We have been working with the Chicago Park District to design a product that fits their needs. In the future, we intend to expand our audience to include other environmental agencies like the EPA.

### What is the need?

Currently, there are no buoys on the market that detect algal blooms. Water testing is insufficient to effectively monitor water quality for algal blooms.

### Why is this problem worth solving?

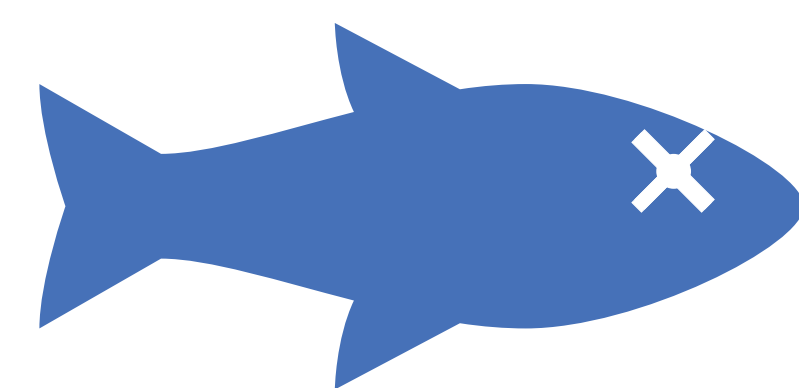
Algal blooms can harm or kill marine life, animals, and even people. The solutions used today are only intended to fix the problem after it occurs. Our proactive solution aims to detect the problem before it's too late. This saves money, protects the environment, and may even save lives.



Rain water carries fertilizer into lakes and rivers.



Algae feed off the fertilizer, creating an algal bloom that rapidly depletes the oxygen in the water.



Marine life asphyxiates.

### What is our mission?

To create a device that monitors multiple factors affecting water quality.

### What is our vision?

To detect contaminants before they have a chance to harm the public and aquatic wildlife.