

# Chlorophyll Monitoring

Berowra Creek, Sydney, NSW

## Background

Algal blooms in estuaries pose a threat to local aquaculture industries, commercial and recreational fishing, and public health. An algal monitoring system was developed for the Berowra Creek estuary and provides waterway managers with an early warning system that assists in reducing the risks of algal blooms.

The system was developed as a collaborative effort between Manly Hydraulics Laboratory (MHL) and Hornsby Shire Council.



Berowra Creek estuary

## Project Scope

Hornsby Shire Council sought MHL's expertise in real-time data delivery systems to design and install a chlorophyll monitoring system in Berowra Creek. Due to advances in technology it is now possible to monitor chlorophyll levels as an indicator of algal blooms.



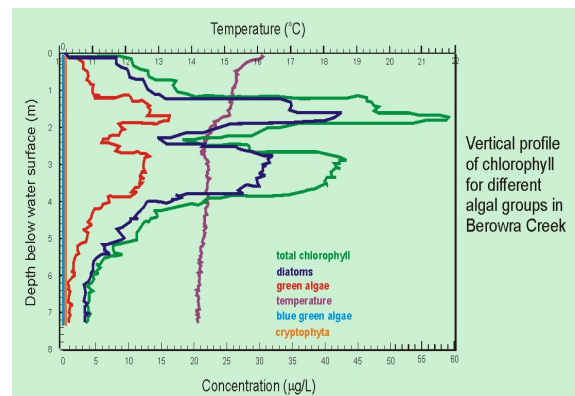
Chlorophyll monitoring buoy

## Our Role

MHL developed a data collection system for remote monitoring of algal blooms. It involves a moored buoy that transmits data to the cellular telephone network from a chlorophyll sensor in the water column. Information is then recovered, analysed and displayed on a dedicated web page.

## Outcomes

MHL has developed the first real-time data collection system in NSW that recovers chlorophyll information remotely and in real time. This will assist Hornsby Shire Council to safeguard the health of aquaculture industries and the public who use Berowra Creek. The technology has proven to be cost effective compared to other algal bloom monitoring techniques.



Data plot from monitoring system