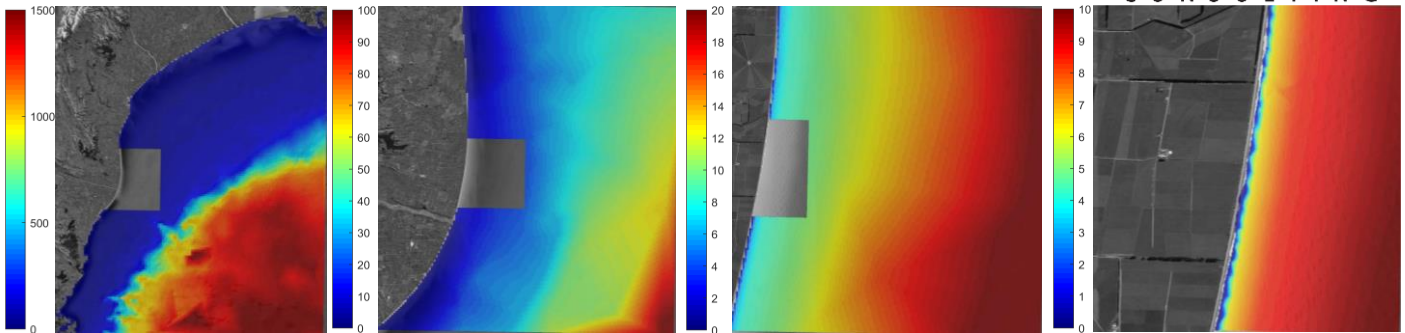


# Oceania Dairy Outfall Dispersal Modelling

## CANTERBURY, NEW ZEALAND



Nested bathymetry grids used in the hydrodynamic model with increasing resolution from left to right.

### INFO:

**Location:** Canterbury, New Zealand

**Client:** Oceania Dairy Ltd

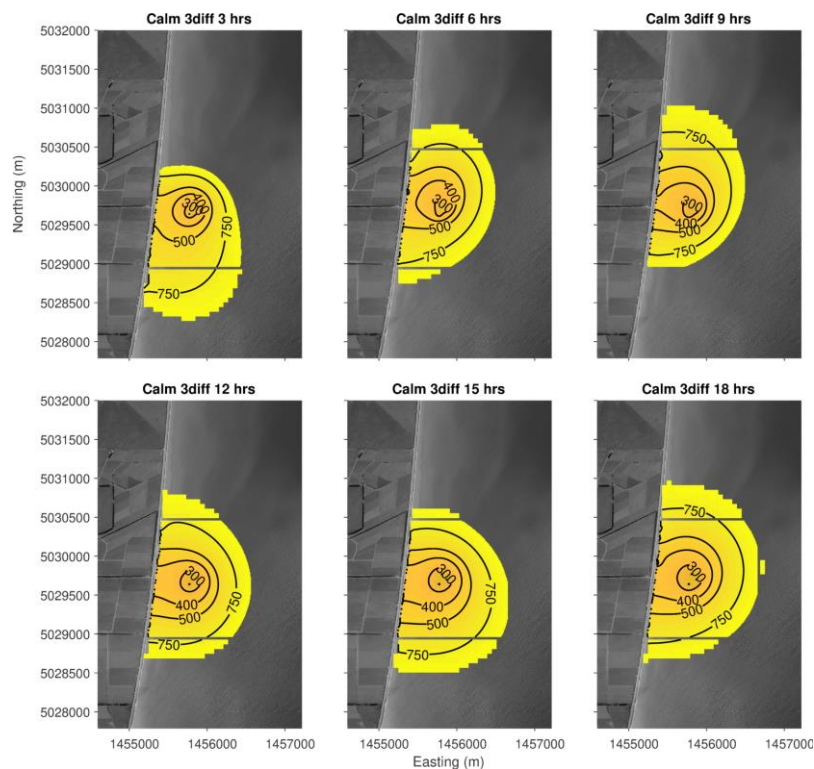
**Project Date:** 2019

### SCOPE OF SERVICES:

- Desktop Analysis
- Instrument Deployment
- Data Analysis
- Dispersal Modelling
- Expert Recommendations for AEE
- Part of Resource Consent Application

### PROJECT DESCRIPTION:

Oceania Dairy proposed to dispose of treated wastewater at an oceanic outfall just north of the Waitaki River in South Canterbury, New Zealand. We were commissioned by Oceania Dairy Ltd to provide information on the physical oceanography of the site and produce a calibrated numerical model to help determine the offshore location and arrangements of outfall/s to achieve satisfactory dilution and dispersion of the wastewater at the site. This information was used as a component in an Assessment of Environmental Effects (AEE) for a resource consent application.



Modelled dilution maps for a single outfall after 3, 6, 9, 12, 15 and 18 hour periods. Images show the plume in the absence of wind.