

NIWA WEATHER FORECASTING AND HEB - A NZ FIRST IN THE CONSTRUCTION INDUSTRY

IECA Innovation Award Entry - 2023



Entry Overview

Everything we do in the erosion and sediment control space is driven by the weather. Is it going to rain today, will that cyclone really end up hitting our site, do we need to install additional measures to help prepare? We focus on continually improving erosion and sediment control device design, investing in the latest water quality technology, applying chemical flocculants and many more. When the weather governs so much of our world, why are most contractors not going above and beyond to invest in quality weather forecasting software?

This award entry will compare the accuracy of publicly available weather forecasting sites when compared with a top tier weather forecasting provider and how investing in quality forecasting software can help your site save time and money and help you prepare more accurately for weather events.

Construction sites generally rely on weather forecasting information made readily available to the public online. This weather information can be highly unreliable resulting in false alarm preparedness situations, or the opposite scenario where a large weather event occurs with little to no warning. This cycle of being over prepared and under prepared costs projects valuable time and money, whilst slowly eroding the trust in forecasts and the site's ability to take forecasting seriously. Is it ok to sit back and say "oh well we tried our best with the information given" or should we be looking in to better forecasting alternatives?

At HEB Construction we believed there must be better alternatives out there to help us understand and prepare for weather events on our projects big and small. HEB have engaged New Zealand's specialist meteorological provider NIWA to provide a catered, detailed forecasting tool to the project to take weather preparedness to the next level, along with the performance of the erosion and sediment control measures. Developing this tailored forecast model and supporting a construction infrastructure based organisation such as HEB has been a first for NIWA. Working together we believe we are on an innovative path to remove some of the "unknown" about the weather, achieving better environmental outcomes as a result.