Waikato Case Study

Monitoring Coastal hazards at Waikato, New Zealand – Remote Monitoring

The Waikato region is the fourth largest region in New Zealand, covering 25,000 square kilometres and includes many kilometres of coast. Waikato Regional Council is a local government body located in New Zealand. They work with communities and industry to sustainably manage their natural resources, enabling a strong economy and a high quality of life for all their residents.

Issue

Like all coastlines those at Waikato are dynamic and forever changing. Coastal and shelf sea processes such as wind, climate, waves, currents, and tides influence the distribution of sediment, salinity and water borne particles that shape the coast, seabed, water quality and distribution of marine life. These processes also generate hazards along the coastline that pose risks to human life and property such as rip currents, erosion, flooding, and tsunamis. Waikato wanted to monitor coastal hazards to ensure the safety of its coast and beach users and monitor environmental conditions and changes such as sand bar status, tides, wave size and wind speed in some key areas.

Solution

With many residents and visitors using the coast and beaches for boating, surfing, and swimming the Waikato Regional Council has for many years monitored and offered the public access to video and camera monitored coastal footage to provide visual confirmation on conditions in remote areas where fast changing tides and rip currents are well documented. Some of this is provided by wired CCTV but some locations are remote and unsuitable for this approach due to no electricity supply.

Since August 2017 iDefigo has been supporting the Council's initiative by providing a network of three ID CAM PRO remote smart cameras placed along the coast in remote areas on behalf of the Harbourmaster. These cameras collect images on a frequent and constant basis to monitor changes at Tairua Ocean Beach and the Raglan shoreline and harbour entrance. The camera images are hosted on the Waikato Regional website https://www.waikatoregion.govt.nz/services/maritime-services/safe-bar-crossings/ for all to see which is great way for the public to check out local conditions at these beaches, including wave conditions and rip currents.

Result

The initial three cameras which have now been installed for over four years have provided to both invaluable and popular through the website showing current images of conditions. These images are updated every five or ten minutes. Such has been the success and benefits of the current network of cameras the Council is looking to roll out the iDefigo smart cameras to two other harbours and other Councils who are aware of the solution and looking at it for their own purposes.

About iDefigo

iDefigo, a UK-based specialist in hardware and software solutions for remote surveillance, has a Smart Camera solution which directly addresses the challenges that come with monitoring the most common sites for fly tipping. Unlike CCTV, the Smart Camera offers high-grade cameras that are easily installed anywhere at low cost. The Smart Cameras capture events that matter and transmit images to any device, 24/7, with no on-site power, networking, or integration required. Importantly, the cameras send alerts when a trigger event has occurred, such as an act of fly tipping.

Visual intelligence. Anywhere.

iDefigo

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