Marine Water Quality Dashboard

Timely access to water quality information is essential to maintain a vibrant and healthy reef ecosystem. The Marine Water Quality Dashboard provides this information to reef stakeholders.

What is the Dashboard?

The Marine Water Quality Dashboard is a tool to access and visualise a range of water quality indicators for the Great Barrier Reef.

What does it include?

The Dashboard enables access to near real-time data on sea surface temperatures, chlorophyll levels, sediments and light for the entire Great Barrier Reef and supplements existing data measurements.

Data from the Dashboard can be displayed in different formats or downloaded from the web for further analysis and interpretation.

Who can use the Dashboard?

Anyone can use the Marine Water Quality Dashboard – government agencies, reef managers, policy makers, researchers, industry and local communities.

The Dashboard provides access to over ten years of water quality information to identify changes over time, as well as up-to-date assessments of the likelihood of coral bleaching events or the impact of sediment plumes from large rainfall events.

How does it work?

The Bureau of Meteorology receives daily satellite information about the frequency of light which enables the water colour and the sea surface temperature to be determined for the Great Barrier Reef.

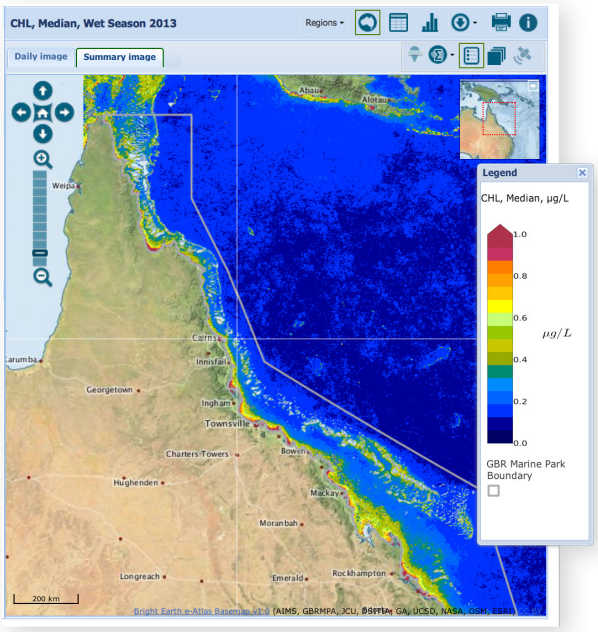
By comparing the colour of the water to measurements of sediments, chlorophyll and dissolved organic matter, relationships are made between satellite imagery and the actual water in the reef.

Why is this important?

The temperature of the sea surface is an important environmental indicator. It can be used to assist decision-making where water temperature is a major factor influencing operations on or near the ocean's surface, or where it can be used to infer properties of the ocean environment just below the surface.

A specific example is in helping to predict and respond to coral bleaching events.

Information about the amount of light in the water and the concentrations of chlorophyll and sediments are important for managing sea grass beds and the production of large algae that may compete with coral for space on the reef.



An example image from the Dashboard showing chlorophyll concentration values for the 2013 wet season.

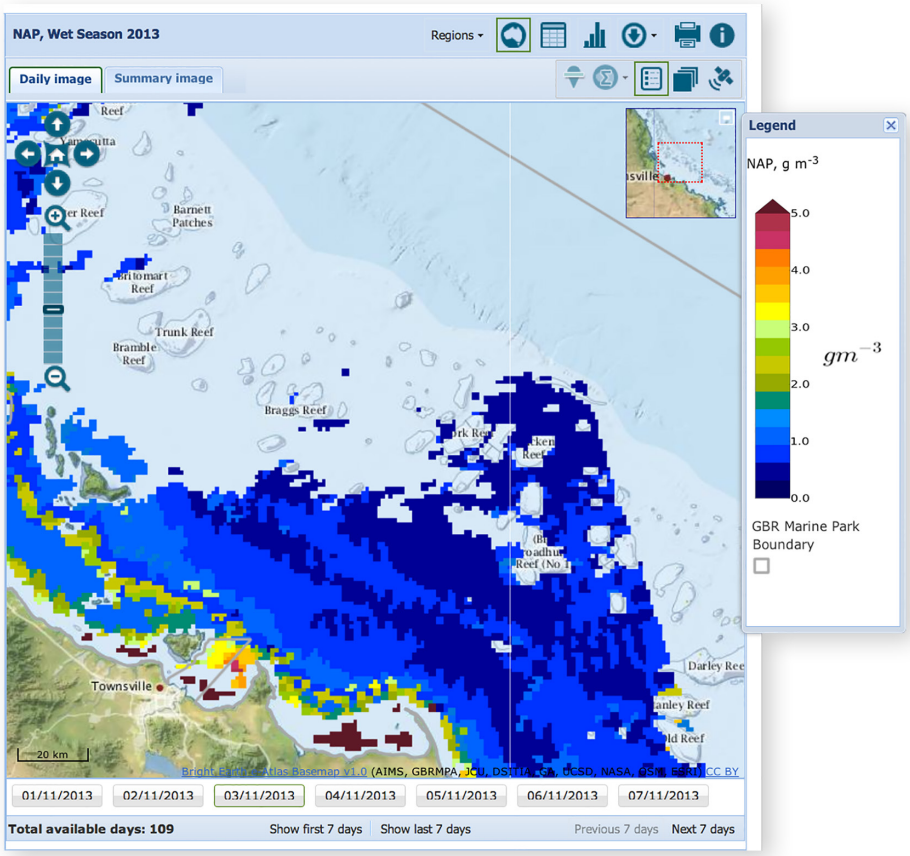
A collaborative project

The Dashboard has been developed through collaboration between the Australian Institute of Marine Science, Bureau of Meteorology, CSIRO, Great Barrier Reef Foundation and the Queensland Government.

The Dashboard is delivered as part of eReefs, a project that is contributing to the sustainability of the Great Barrier Reef. eReefs commenced in January 2012 and forms a significant step in building a comprehensive coastal information system for Australia.

For more information

For further information about the Marine Water Quality Dashboard, visit:
www.bom.gov.au/marinewaterquality/
or contact **environment@bom.gov.au**



An example image showing non-algal particulate concentration values at 20 km scale.

eReefs is a collaboration between:

GREAT BARRIER REEF *foundation*

Australian Government
Bureau of Meteorology

CSIRO

Australian Government

AUSTRALIAN INSTITUTE OF MARINE SCIENCE

Queensland Government

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