

NERP TE Project 4.1 Tracking coastal turbidity over time and demonstrating the effects of river discharge events on regional turbidity in the GBR (AIMS)

[Metadata](#) | [Metadata \(XML\)](#)
[Visualization service URL \(WMS\) \(\)](#) |

Title	NERP TE Project 4.1 Tracking coastal turbidity over time and demonstrating the effects of river discharge events on regional turbidity in the GBR (AIMS)
Date	2012-07-01
Date type	Creation
Abstract	<p>Turbidity is a measure of water clarity that quantifies the amount of small particles suspended in the water, and is a fundamental environmental parameter influencing coastal marine ecosystems. Turbidity reduces the light needed for photosynthesis by corals and seagrasses, and suspended particles also transport nutrients, pollutants and diseases. Previous research based on 3 years of turbidity data collected from 15 inshore reefs by the Reef Rescue Marine Monitoring Program has shown that it can take several months for water clarity to improve after river floods. This project will analyse a 12-year data set to demonstrate the explicit link between variations in discharge (sediments and nutrients) from the major rivers in each Natural Resource Management (NRM) region adjacent to the Great Barrier Reef (GBR) and seasonal and annual variations in water clarity in the inshore GBR.</p> <p>This project will:</p> <ol style="list-style-type: none"> 1. Determine quantitative relationships between river discharges and seasonal and annual variation in inshore water clarity on the GBR adjacent to each NRM region. This is achieved by processing MODIS/Aqua remote sensing (since July 2002) to calculate euphotic depth (water clarity) for the whole GBR and analysing this against predicted and observed tides, observed waves, wind, rain, river flow data (BOM and DERM daily data) and tidal forcing (Slim model). 2. Strengthen scientific basis for Reef Rescue and Reef Plan and the refinement of water quality targets. 3. Provide data to assist validation and calibration of the Receiving Waters Model and a WQ Risk Analysis. <p>This project is now complete.</p>

Metadata language	eng
Character set	UTF8
Hierarchy level	Field session

OnLine resource

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Protocol	WWW:LINK-1.0-http--metadata-URL
Linkage	https://eatlas.org.au/nerp-te/gbr-aims-coastal-turbidity-river-discharge-4-1
Protocol	WWW:LINK-1.0-http--link
Linkage	https://maps.eatlas.org.au/maps/wms
Protocol	OGC:WMS-1.1.1-http-get-map

Point of contact

Individual name	Fabricius, Katharina, Dr
Organisation name	Australian Institute of Marine Science (AIMS)
Position name	Principal Research Scientist, Coral Reef Ecologist
Role	Point of contact
Topic category	Environment

Keyword

Keyword	marine
Type	Theme

Extent

Description	NERP Project extent
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Geographic bounding box

West bound	149.361
East bound	146.282
South bound	-20.082
North bound	-17.886

File identifier	bcecca08-298d-4c89-901c-97e671fa2a24
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Metadata language	eng
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Character set	UTF8
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Metadata author

Individual name	Lawrey, Eric, Dr
Organisation name	Australian Institute of Marine Science (AIMS)
Role	metadataContact
Date stamp	2015-12-09T16:23:17