

NERP Tropical Ecosystems Hub Project Factsheet

Hazard assessment for water quality threats to Torres Strait marine waters, ecosystems and public health

Project leader: Jon Brodie (JCU)

Project summary

The project team will assess and describe all existing and potential sources of pollution to the Torres Strait marine environment. This will be combined with information on water movement patterns to assess the hazard (and to some degree risk) of these pollutant sources to marine ecosystems and public health. The project will use the results to make recommendations to managers on priority pollutant management in the region, and to design a basic monitoring program for reporting on the status of water quality in the Torres Strait.

Why this research is needed

An understanding of the status of water quality in Torres Strait and its influence on marine food, human health, marine ecosystems and ecological processes is important for managing the health of people and the environment. Regional water quality issues include the potential discharge of pollution from the Fly River due to mining, and future projects involving oil palm plantations, the port at Daru, other mines in Papua New Guinea or West Papua and land clearing. Local sources of pollution potentially include sewage and stormwater discharge and shipping issues, such as oil spills and groundings.

Research-user focus

The project will provide information to the community and government organisations responsible for water quality management in the Torres Strait. These include the Torres Strait Regional Authority, Torres Strait Island Regional Council, Torres Shire Council, Torres Strait rangers, the Department of Sustainability, Environment, Water, Population and Communities, other researchers and the Torres Strait community.

Project Partners:



Find this project at www.nerptropical.edu.au

Theme 2: Understanding Ecosystem Function and Cumulative Pressures

Program 4: Water quality of the GBR and Torres Strait

Project: 4.4



Good water quality is important to the health of the Torres Strait community and the environment.



Saibai Island sewage treatment plant.

Outcomes

- Collated information regarding Torres Strait water quality pollutant sources at a range of scales (regional to local).
- Better knowledge of water circulation patterns in the Torres Strait region through the development of a fine-scale model.
- A hazard assessment of the sources of pollutants that affect marine ecosystems and public health in the Torres Strait region. This will form the basis of recommendations to management authorities to prioritise investment and political action to minimise pollution and public health/marine ecosystem damage.
- Recommendations for a water quality monitoring program for the Torres Strait region, designed to assess the status of water quality and measure the effectiveness of pollution management actions.

For more information about this project, contact:

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Photos (from top): Suzanne Long; RRRRC image library