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## Industry funds research into health of Pilbara coral reefs

A new study of World Heritage-listed reef ecosystems in the Pilbara region of Western Australia will provide a critical baseline of marine conditions to government, industry and researchers.



Credit: CSIRO

The 300km swathe of coastline to be surveyed during the five-year, \$12 million Pilbara Marine Conservation Partnership includes two major marine parks and also areas under development for ports, and oil and gas extraction and processing.

The partnership, a joint venture between CSIRO's Wealth from Oceans Flagship and The University of Western Australia, will be the first whole-of-ecosystem study for the region's unique marine environment.

'Our research will help government and industry balance the environmental sustainability of the Pilbara with its increasing broad sector use,' CSIRO lead scientist Dr Russ Babcock said.

'Over the next five years we want to find out everything we can about the health and makeup of the region, as well as observe and evaluate any localised changes, so we can give the best possible advice to future use managers on how they can act sustainably.'

Dr Babcock and his team have recently returned from their first exploratory tour of the region, where they were scouting survey sites.

Some unwelcome discoveries were made, including the bleaching and decimation of a pocket of ancient coral heads – many up to 400 years old – that have provided an important record of reef health.

'We suspect this bleaching event was due to marine heatwaves that occurred in the region over the past few summers, and to see it up close was sobering,' said Dr Babcock.

'But to offset this loss, some reefs only a short distance north showed much less damage and will continue to contribute to a healthy ecosystem.

'By studying these sorts of variations and finding out why they occur, we can improve our overall understanding of the marine environment in the region, and how we can best preserve it'.

The University of Western Australia's Professor Shaun Collin said the study would set a precedent for future development in the Pilbara.

'This study will develop a greater understanding of the dynamics of coral and fish communities in the region, which in turn will provide us with the ecological indicators of potential human impacts,' Professor Collin said.

'With it, we can provide a research baseline for decision making in the region that will strike the right balance between environmental conservation and industry development.'

The study is funded by the Gorgon Project's Net Conservation Benefit Fund, which is administered by the WA Department of Parks and Wildlife. The Gorgon Project is operated by an Australian subsidiary of Chevron and is a joint venture of the Australian subsidiaries of Chevron (47.3 per cent), ExxonMobil (25 per cent), Shell (25 per cent), Osaka Gas (1.25 per cent), Tokyo Gas (1 per cent) and Chubu Electric Power (0.417 per cent).

Source: CSIRO

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