

Scientific research

What does the Outlook Report say about scientific research on the Great Barrier Reef?

The Great Barrier Reef provides research opportunities for scientists from Australia and around the world and is an international hub of tropical marine ecosystem research.

There is a long history of scientific investigation with the first formal investigations in the late nineteenth century. Now, the Great Barrier Reef is probably the best-studied tropical marine ecosystem in the world.

Scientific research is provided for in the *Great Barrier Reef Marine Park Zoning Plan 2003*. Scientific Research Zones provide opportunities for scientific research in relatively undisturbed areas.

A network of island research stations is integral to research activities and Scientific Research Zones are generally located adjacent to these stations. The six island research stations are at Lizard Island, Low Isles, Green Island, Orpheus Island, Herron Island and One Tree Island.

Much of the research activity on the Great Barrier Reef is confined to areas surrounding the six island research stations, with approximately 80 per cent of scientific research being conducted around Lizard, Heron and Orpheus Islands.

Scientific research is essential to understanding the functioning, health and resilience of the Great Barrier Reef ecosystem and to improving its protection and management.

Most research has focused on the biophysical environment. Today, social and economic research is recognised as an increasing need as the intensity and economic values of human uses increase.

The findings of scientific research are often the foundation of information about the Great Barrier Reef ecosystem and its use, and are provided to both stakeholders and the wider community.

How effective is the management of scientific research activities?

Research activities in the Great Barrier Reef Region are generally considered to be environmentally sustainable and, through the maintenance of effective partnerships with research institutions, are demonstrably enhancing community understanding and enjoyment of the Great Barrier Reef.

Robust management processes and governance arrangements are in place to manage research on the Great Barrier Reef with the Great Barrier Reef Marine Park Authority, Queensland Department of Environment and Resource Management and Queensland Department of Employment, Economic Development and Innovation as the lead agencies.

Statutory regulations, the zoning plans and specific policies guide the management of research. Individual research activities are managed through permits or accreditation of research institutions and strict conditions apply.

There are co-accreditation arrangements to ensure consistency between jurisdictions and permits require stakeholder and local community engagement as necessary.