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**Marine program in brief**

**Total of area**  
2,467 km<sup>2</sup> (Morotai and Kayoa Islands)

**Geographic priorities**

- Kayoa Islands
- Morotai Island

**Habitat Types**

Coral reefs and associated ecosystems including sand, seagrass and mangrove habitat

**Ecological findings**

- 41 of hard coral genus recorded
- 434 of reef fish species recorded

**WCS Involvement**  
2007

Argentina

Bangladesh

Belize

Fiji

Gabon

**Indonesia**

Kenya

Madagascar

Myanmar

Nicaragua

Papua New Guinea

**HALMAHERA SEASCAPE**

The Halmahera Seascape lies within the heart of the Coral Triangle situated between two of the most diverse seascapes of Indonesia - *Sulawesi* and the *Birds Head*. With more than 1000 km<sup>2</sup> of its coral reef marine ecosystems still unexplored, the region is truly one of the last frontiers of coral reef science. Encompassing four peninsulas and three great bays, Halmahera is the largest island of the Maluku Province, with a land area of 17,780 km<sup>2</sup>. The Halmahera seascape remains unprotected by a single functional marine protected area (MPA) yet threats to the health of its coral reefs are ever present.

**The Human Dimension**

WCS has a strong scientific approach to MPA development by blending knowledge of ecological systems with the social aspects of human needs. The program has published leading work on the social dimensions of achieving marine conservation in Indonesia and we have strong belief in conservation through adaptive management, science and social development.

**Threats**

Key threats to the marine environment include uncontrolled fishing activities, destruction of corals reefs through overfishing and destructive practices (eg. cyanide poisoning) a lack of government capacity to control damaging activities and a lack of community awareness and involvement in resource management activities. Currently there is no formal management or protected area in the Halmahera seascape.



Halmahera Seascape



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## Activities

At WCS our unique approach is to blend community based approach with quality scientific investigations to deliver conservation outcomes for Indonesia marine conservation. We specialize in the following areas:

- Ecological assessment on coral reef resources in Morotai and Kayoa Islands
- Assessment on socio-economic and fisheries resource use pattern in Kayoa Islands
- Assessment on coral reef resilience in response to climate change

## WCS Expertise and Achievements

Using lessons learnt from the diverse approach across a number of marine protected areas in Indonesia, we are embarking on an ambitious program to develop a network of MPAs at the heart the Coral Triangle in Indonesia - The Halmahera Seascape – Indonesia's Coral Reef Frontier. The Halmahera Seascape is part of WCS global mission to conserve the last wild places on Earth. We will be looking to work with local, national and international partners to develop a conservation program for the region. Initial work will involve detailed ecological assessments of 3 regions of Halmahera including Morotai Island, Teluk Buli and the Central West Islands. To date ecological assessment of Morotai and Kayoa Islands have been conducted.

## Important Next Steps

- Assess socio-economic needs and perceptions to marine resource use and conservation;
- Develop community co-management and marine protected area networks;
- Build capacity of government and local NGO's in marine resource management;
- Conduct and support marine awareness and education programs
- Assist communities in developing alternative livelihood projects.

**Key important step is to facilitate local government and stakeholder to establish MPA network**

### Partners

- Ministry of Marine Affairs and Fisheries
- North Maluku Tourism Agency
- Local Communities

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### Mission

The Wildlife Conservation Society's International Conservation program saves wildlife and wild lands by understanding and resolving critical problems that threaten key species and large, wild ecosystems around the world.

### WCS Strategies

- Site-based conservation
- Research
- Training and capacity-building
- New model development
- Informing policy
- Linking zoo-based and field-based conservation

