# Lady Elliot Island Climate Change Trail Signage

Thematic interpretation of a unique Commonwealth Island under threat



Lady Elliot Island, a Commonwealth Island located within the Great Barrier Reef Marine Park, is rich in natural, cultural and heritage values, and an important location for research, tourism and recreation. A series of interpretive signs has been developed to raise visitor awareness of the island's vulnerability to climate change and to showcase responsible island management through sustainable energy initiatives.

# **Background**

The Great Barrier Reef Marine Park Authority (GBRMPA) manages Lady Elliot Island on behalf of the Australian Government. Islands are identified as particularly vulnerable to the impacts of climate change due to their fragile endemic ecosystems and low-lying geomorphology (Climate Change and Great Barrier Reef: Vulnerability Assessment 2006).

The GBRMPA and Lady Elliot Island Resort, have together developed a series of interpretive signs to enhance the island's existing walking track. The Lady Elliot Climate Change Trail guides visitors through the island's varied ecosystems, including coastal, rainforest, coral reef, and wetland.

# **Objectives**

The Great Barrier Reef Marine Park Authority This project provides thematic interpretation of (GBRMPA) manages Lady Elliot Island on behalf of Lady Elliot Island's vulnerability to climate change.

The series of signs enhance visitors' understanding and appreciation of how climate change will affect the island's various ecosystems though increased sea and air temperatures, increased frequency of intense storms, changed rainfall, rising sea level, ocean acidification and changing ocean currents.

The signage is a powerful call for action, presenting an immediate, real-life case study of climate change impacts. The signage explains the potential impacts of climate change on island ecosystems, illustrates responsible island management through sustainable energy use and suggests how visitors can help mitigate climate change and protect the Great Barrier Reef.

"Through interpretation, understanding; through understanding, appreciation; through appreciation, protection". Freeman Tilden (1957)



Project name: Lady Elliott Island Climate Change Trail Project number: 4.3B.403.17.08

**Objective:** Create an interpretive climate change trail

Year: 2008-2009



## **Progress to date**

The GBRMPA has developed 11 signs for the Lady Elliot Island Climate Change Trail. These signs are placed along the island's walking track as shown below (Figure 1).

The signs interpret how the various ecosystems may be impacted by climate change (Box 1 summarises the themes of each of the eleven signs). The final sign provides a positive end to the trail story by showcasing Lady Elliot Island's hybrid solar power station, the largest off-grid system in Queensland. The solar power station provides an example of responsible island management as part of a longer term goal focused on reducing impacts and maintaining Reef resilience in the face of climate change.

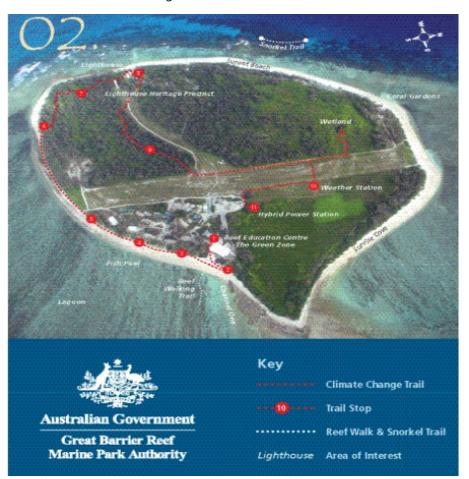


Figure 1: Location of Lady Elliot Island Climate Trail's interpretive signs

# The way forward

The Lady Elliot Climate Change Trail is the first interpretive signage about climate change on a Commonwealth Island in the Great Barrier Reef Marine Park. This project serves as an example of how interpretive signage on climate change can be used in a variety of settings to provide visitors and local communities with practical guidance on mitigation activities that help protect the Great Barrier Reef.

Box 1: Climate Trail signage themes

# Signage themes

## 1. Our changing island

Introductory sign on climate change impacts in general.

#### 2. Life's a bleach!

Presenting coral bleaching mechanisms.

## 3. The ever-rising tide

Sea level rise and its impact on low-lying coral cays.

#### 4. Gender bender

Impacts of increased sand temperature on sea turtle sex-ratio.

#### 5. A hidden menace

Ocean acidification and its effect on coral growth.

## 6. Shifting sands

Effect on changing winds on the island's geomorphology.

#### 7. Occasion for invasion

Impact of climate change on the island's introduced pest species.

## 8. Something fishy going on here

Impact of climate change on fish populations.

#### 9. Would you like salt in your water?

Impact of sea level rise on freshwater supplies.

#### 10. Seabirds go hungry

How the island's seabirds struggle to find food because of climate change.

## 11. An island powered by the sun

How the island's solar power station reduces the island's carbon emissions.

For further information contact the: Climate Change Group Great Barrier Reef Marine Park Authority PO Box 1379, Townsville Qld 4810 07 4750 0759 www.gbrmpa.gov.au