

## *Kawainui - Hāmākua*



## Earth's climate is changing

Temperatures are rising, oceans are warming, snow and ice are melting, and sea levels are rising faster than recorded during any previous century. Increased amounts of carbon dioxide (CO<sub>2</sub>), methane, and other greenhouse gases (GHG) in the atmosphere due to human activity are the reason.

## The global community is acting

The level of CO<sub>2</sub> in our atmosphere has increased 40% since pre-industrial times. To limit the impacts of climate change, the global community via the Paris Agreement is seeking to stabilize and reduce GHG emissions, and limit the increase in global average temperature this century to below 2°C.

## Wetlands: The key to coping with climate change

### Wetlands are a natural solution

The frequency of disasters worldwide has more than doubled in just 35 years, and 90% of these disasters are weather-related. Even more extreme weather is predicted going forward. Wetlands play a significant role in stabilizing GHG emissions and reducing the impacts of climate change.

### Wetlands buffer coastlines from extreme weather

Coastal wetlands such as marshes and coral reefs act as shock absorbers. They reduce the intensity of waves, storm surges, and tsunamis. They also help protect coastlines from flooding and reduce property loss.

### Wetlands reduce floods and relieve droughts

Inland wetlands such as flood plains, rivers, and swamps function like sponges, absorbing and storing excess rainfall and reducing flood surges. During dry seasons in arid climates, wetlands release stored water, delaying the onset of droughts and minimizing water shortages.



### Wetlands naturally absorb and store carbon

Wetlands are the most effective carbon sinks on Earth. Restoring the plants around wetlands encourages carbon storage.



### Conserve and restore our wetlands

We have already lost 35% of our wetlands since 1970. Protecting these ecosystems will help us cope with the impacts of climate change.

