I am writing as Coordinator of the Climate Change Australia – Hastings Branch. Climate Change Australia – Hastings Branch is a community organisation concerned about the effects of climate change, particularly in the Mid North Coast area.

In the last two years it has become clear that we are experiencing extreme weather locally that has the potential to impact both on urban and rural areas. This submission cannot cover in detail all the expected adverse effects. However, we intend to highlight the most important ones in this submission and would be happy to speak to the enquiry if further information is required.

The Mid North Coast has experienced extremes of flooding and drought. Last year, excessive rain led to flooding in many areas of the Mid North Coast, particularly the Kempsey region.

This year, lack of rain is affecting primary producers, market gardeners and those who rely on rain water for their household supplies and drinking water. Anecdotally, we have been informed of many households who have been forced to buy water this year in unprecedented quantities.

Port Macquarie Hastings Council has been forced to suspend pumping from the Hastings River due to low river flows and poor rainfall in the catchment area. Level 1 water conservation measures are now in force in our area. Our dam levels are the lowest they have been in many years and the area only has a water supply left for 216 days. The problem is compounded by increased demand for water due to much hotter days. Water security for its residents will be a real issue facing the Port Macquarie- Hastings Council in the immediate future.

In the last two weeks, we have experienced an unprecedented series of hot days, with average temperatures exceeding 40 degrees. This heat adversely affects both people and stock in the area.

Port Macquarie has had a large expansion in its population (around 16% in the last few years). The paper "Major Issues for Coastal Environments" (http://www.environment.gov.au/soe/2011/report/coasts/pubs/soe2011-report-coasts-2-majorissues.pdf

accessed 1/17/13) makes it clear that this extra population will put increased stress on existing resources such as provision of water to households, especially as climate change will impact on the amount of water in storage and river flows. It is predicted that inflows to water storages may decrease by 10–20% during drier periods. This will have most impact on towns with small storages. Low-lying sewerage systems near many coastal lakes are likely to be affected by sea level rise, with consequent water-quality risks.

(http://www.environment.nsw.gov.au/resources/climatechange/10171Ch5RegionNorthCoast.pdf accessed 17/1/13).

The decrease in water flows will also limit the ability of farmers to irrigate fields and crops, thus reducing food production and income. Salinity in coastal plain subsoils, due to changing weather patterns, is expected to affect agricultural productivity as well.

Predicted sea level rises are expected to erode coastline and effect community assets, residential property and infrastructure, particularly in the Lake Cathie area. Already the Council has been forced to put measures into place to protect homes here. The Mid North Coast is an area of large biodiversity. It is expected that changing temperatures, rainfall patterns, erosion and rising sea level will affect habitats and therefore the biodiversity of the area, including fish stocks.

In the SMH (9 January 2013 accessed 17/1/13)

http://www.smh.com.au/environment/climate-change/records-will-keep-tumbling-with-blistering-heatwaves-here-to-stay-20130108-2cetq.html

the following quote appeared: "The current heatwave - in terms of its duration, its intensity and its extent - is unprecedented in our records," said the Bureau of Meteorology's manager of climate monitoring and prediction, David Jones.

"Clearly, the climate system is responding to the background warming trend. Everything that happens in the climate system now is taking place on a planet which is a degree hotter than it used to be." As the warming trend increased over coming years and decades, record-breaking heat would become more common, Dr Jones said.

Australia has always been a land of heatwaves, droughts and flooding rains. Natural systems like La Nina and El Nino bring these weather events, but global warming is bringing more extremes and breaking records. Droughts are becoming longer, hotter and drier, and the big wets more extensive, intense and stormier. While natural forces make the cycles, human induced global warming makes the cycles more extreme.

Much more needs to be done to both reduce our carbon emissions to combat climate change and to make necessary adaptations to cope with it effects. There is still a large level of misunderstanding about climate change in our area.

Both the local council and the population generally would benefit from further education and positive messages as to how each person and entity can help combat the effects. People need to understand the changing weather patterns and prepare for them. Local Councils need to build this into their planning and their infrastructure development.

The Mid North Coast has a healthy alternative energy industry that could be further fostered and promoted and supported by both State and Federal Governments.

State and Federal Governments need to much more publically acknowledge the need to reduce our carbon emissions and to develop renewable energy sources and technologies. As well as the carbon pricing scheme, reliance on coal fired power stations needs to be phased out and the government needs to invest in clean energy, including incentive schemes for wind and solar farms. Money should be put into research into renewable technologies, as Australia is ideally placed to develop cutting edge renewable technology.

We are dismayed that this has become such a political issue in both the major parties, to the point little is actually being done to combat the expected, very negative effects of climate change. Procrastination and political point scoring are particularly unhelpful. This should be a bipartisan issue where all work together for the best solution.

Elizabeth Raine Coordinator, on behalf of Climate Change Australia Hastings Branch