



Hon Leanne Donaldson MP
Minister for Agriculture and Fisheries

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Senator Larissa Waters
Chair
Environment and Communications References Committee
PO Box 6100
Parliament House
CANBERRA ACT 2600

Dear Senator Waters

Larissa

I refer to your letter of 28 September 2016 about the Australian Senate's inquiry into the impacts of climate change on marine fisheries and biodiversity. The Honourable Anastacia Palaszczuk MP, Premier and Minister for the Arts, has asked me to reply to you as Fisheries and Biosecurity fall within my portfolio as the Minister for Agriculture and Fisheries.

Climate change is an important priority for the Queensland Government. The Queensland Government acknowledges that climate change is occurring and is caused by human activity. Queensland's policy response to climate change is broad-based and evolving. Already, the Queensland Government has made a number of commitments signalling a revitalisation of the state's climate change agenda, emphasising both adaptation to climate change impacts and reducing greenhouse gas emissions.

Understanding the current and future impacts of climate change on marine fisheries and biodiversity is an important issue for the Department of Agriculture and Fisheries (DAF). I welcome the Environment and Communications References Committee Inquiry into this matter.

Many commercially and recreationally important species in Queensland, such as barramundi and scallops, rely on particular environmental conditions such as rainfall and water temperature for certain parts of their lifecycle. Therefore, changes to weather patterns from climate change are likely to impact on species abundance and distribution. Increased coral bleaching events, as recently evidenced in Queensland, also impact on commercially and recreationally important reef-dependent species such as coral trout.

Although DAF has been involved in research projects to better understand impacts of climate change on fish stocks as well as associated catches and catch rates, the nature and magnitude of these impacts on harvest levels are not well quantified or synthesised by government or industry.

Furthermore, there is a need for the commercial sector to understand potential impacts of climate change on their businesses and build resilience and adaptive capabilities in their operations and planning.

The Queensland Government recently released a green paper on fisheries management reform for discussion with the community. One of the reform proposals is to set targets for key fish stocks which move towards a level equivalent to 60 per cent of the unfished population for shared stocks or maximum economic yield for predominately commercially harvested stocks. Managing stocks to achieve a higher overall biomass would provide greater resilience to possible adverse environmental conditions, including any effect due to climate change. Potential impacts from climate change on the resilience of fish stocks will need to be taken into account when setting decision rules in future harvest strategies.

Climate change may also impact upon aquaculture operations. DAF is currently implementing the Queensland Government's Aquaculture Policy Statement, which includes planning investigations for future land-based aquaculture sites. The potential for shoreline changes as a result of climate change has been incorporated into the planning model.

With regard to marine pests Queensland does not currently have any known established marine pests. Biosecurity Queensland's management focus is on prevention and preparedness as the risk of marine pest introductions continues to increase with increasing international connectivity through shipping activity. Part of the prevention and preparedness strategy is to predict the pest species most likely to arrive and establish in our marine waters primarily using climate suitability data. It is recognised that with climate change there is potential for a shift in the suite of species with the ability to establish in the changed environmental conditions. This will be factored into any future marine pest prioritisation processes.

There is clearly a need to better understand the current and future impacts of climate change on marine fisheries, biodiversity and aquaculture and the Queensland Government welcomes future initiatives and research in this area.

If you require any further information regarding this matter, please contact Ms Claire Andersen, Executive Director, Fisheries Queensland, Department of Agriculture and Fisheries,

Yours sincerely

The Honourable Leanne Donaldson MP
Minister for Agriculture and Fisheries
Member for Bundaberg