

TASMANIAN SEAFOOD INDUSTRY COUNCIL

ABN 61 009 555 604

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Ms Marie Waschka
National Climate Change Adaptation Research Facility
Griffith University
QLD

SEAFOOD INDUSTRY SUBMISSION TO THE NATIONAL CLIMATE CHANGE ADAPTATION RESEARCH PROGRAM – MARINE BIODIVERSITY & RESOURCES

The Tasmanian Seafood Industry Council (TSIC) is the peak industry body representing approximately 900 commercial fishers and marine farmers. In 2005-2006 the Tasmanian seafood industry generated \$417.058 million in income (landed value, Source: DPIW) and provided employment for over 7,000 Tasmanians. Tasmania's wild capture fisheries and aquaculture industries are an integral part of the social and economic fabric of our island state. TSIC welcomes the opportunity to make a written submission to the research priority setting process for the National Climate Change Adaptation Research Program – Marine Biodiversity & Resources.

In response to the Issues Workshop of 17th June 2008, TSIC noted the low level of representation by the seafood industries who, as significant 'end-user' stakeholders, were outnumbered by research providers. In the context of research priority setting, TSIC is concerned that research providers should not determine such priorities. TSIC submits that further efforts should have been made to consult with and engage seafood industry representatives in this important stage. It is seafood industry sectors, operators and managers who are to be taking up adaptive strategies in response to climate change impacts on marine biodiversity and resources.

Given this position, TSIC has collated input from various seafood industry sectors within the State and presented them below in the table format provided at the workshop. In addition submissions from Wildcatch Fisheries SA have been incorporated.

TSIC welcomes any further opportunities to participate in these processes.

Yours sincerely,



Emily Ogier
PROJECT OFFICER

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MARINE BIODIVERSITY AND RESOURCES: NATIONAL ADAPTATION RESEARCH PROGRAM

SUBMISSION:

Tasmanian Seafood Industry Council & Wildcatch SA

Climate Change Impact	Adaptation Issue	Information Need	Research Activities
Changed climatic and weather conditions damaging aquaculture farm gear	Cage technologies & other infrastructure and equipment need to be developed to sustain increased severity of climatic/weather conditions and events	<p>Predicted changes in local/regional climatic and weather conditions</p> <p>Durability of existing gear</p> <p>Availability of alternative cage technologies & other infrastructure and equipment which can sustain increased severity of climatic/weather conditions and events</p>	
Warming water renders locations unsuitable for culture of cold water species.	Culture industries need to relocate or cease.	<p>Suitable sites for re-location of cold water species</p> <p>Potential warm water species for culture under changed climatic conditions</p>	
	Marine Farm Planning agencies/regulations need to rapidly permit access to new lease sites or changed culture species to ensure business survival.	<p>Models of regulatory mechanisms to facilitate rapid shift in marine farm planning & management (lease sites & species)</p> <p>Improved measures for assessing potential lease sites, and new farmed species</p> <p>Management responses to short term changes</p>	
	Option of fin fish aquaculture to switch to land-based operations	<p>Operating conditions for land-based fin fish aquaculture</p> <p>Economic data to inform business case for switch to land-based operations</p>	
Influences on inverse estuaries	Water chemistry affects on larval survival	Chemical composition that affect larval efficiency	Laboratory based assessment of survival characteristics

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Climate Change Impact	Adaptation Issue	Information Need	Research Activities
Changes in abundance, spatial distribution or species composition	Need to recognise and respond to changes in biomass or species mix	Improved measures for assessing fishery performance over short periods Management responses to short term changes Capacity for management to rapidly assess, permit and manage new or currently un-used fishing methods	Identify and evaluate alternative management performance indicators.
	Economic and social capacity of fishers to adapt operations to maintain productivity	Social & economic cost to wild capture fishers of a regional spatial shift in effort Social & economic cost to wild capture fishers of a shift in target species Social & economic cost to wild capture fishers of 'business-as-usual' (ie. not deploying either of the above adaptive strategies)	
Implementation of a carbon credit scheme/emissions trading scheme	Capacity of shellfish aquaculture industries to investigate and claim benefits from carbon-sequestering properties of bivalve-molluscs	Carbon-sequestering capacities, rates and properties of farmed shellfish	
	Changing fuels and power sources to reduce risks in fishing operations and to maintain economic productivity	Risks and benefits of alternate sources onboard a fishing boat	Assessment of power needs, fuel capacity and onboard needs to store and used alternative sources of energy.
	Uptake of energy efficient technologies and alternative fuels on fishing vessels, and issue of response of maritime safety regulatory authorities to new designs	Improved measures for assessing safety performance of new vessel designs and technologies over short periods Management responses to short term changes	

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Climate Change Impact	Adaptation Issue	Information Need	Research Activities
Warming waters leads to increase in species range extensions and transportation and introduction of marine pests into previously uninhabitable waters	Capacity of fisheries managers and industry to respond to marine pest incursions	Impact of increased incursions of marine pests on target species Commercial opportunities presented by range extensions of new species Improved measures for responding to marine pest incursions Management responses to short term changes	
Encroachment of shoreline and estuarine areas by rising ocean levels, and subsequent loss of/impact upon shellfish farming environments	Shellfish farming industry capacity to interpret coastline impact studies and to plan for re-location of leases and/or develop new technologies to maintain existing sites	Coastal impact data and projections which are user friendly and can be used by industry to plan for impacts to lease sites Availability or development of alternative growing/rack technologies & other infrastructure and equipment which can sustain encroachment of shoreline and estuarine areas	
Warmer climatic conditions resulting in higher rates of seafood product spoilage at all stages of the supply chain	Improvements in cooling systems/technologies at all stages of the supply chain	Alternative, energy-efficient (low cost) cooling systems for fishing vessels; refrigerated storage and transport	
Uncertainty over viability of seafood industry operations in the face of complex impact prediction models & data-deficiencies	Seafood industry operators needing capacity to utilise available data and predictions to plan for and adapt to future climate change impact scenarios	User-friendly climate change impact data interpretation tools Local and regional-level climate change impact predictions which are accurate Tools to plan for future scenarios in cases when accurate predictions are not available	