




Local Government Association Tasmania

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Ms Janet Holmes
Committee Secretary
Standing Committee on Climate Change, Water, Environment and the Arts
House of Representatives
Parliament House
PO Box 6021
CANBERRA ACT 2600

Dear Ms Holmes

Climate Change and Environmental Impacts on Coastal Communities

The Local Government Association of Tasmania (LGAT) is the representative body of Local Government in Tasmania, with membership comprising all 29 Tasmanian councils.

Tasmania has more coastlines per unit land area than any other State in Australia and no place in Tasmania is more than 115 km from the sea. The potential impact on coastal communities of climate change is of great interest to Tasmanian councils.

Local Government has a pivotal role to play in addressing climate change issues. Councils in Tasmania understand the potential implications of projected sea level rise on their core areas of responsibility and are progressing a climate change agenda in partnership with the Tasmanian Climate Change Office and the Premier's Local Government Council.

The effective management of anticipated climate change impacts in the coastal zone will require significant additional capability and resources. Local government, as the key planning and management agency over much of the coastal zone, must be adequately equipped to ensure effective responses to these difficult challenges.

LGAT provides this submission on behalf of Local Government in Tasmania.

Yours sincerely

Allan Garcia
CHIEF EXECUTIVE OFFICER



Local Government Association Tasmania

**Tasmanian Local
Government Response to
Inquiry into Climate Change
and Environmental Impacts
on Coastal Communities**

June 2008

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Introduction

The Local Government Association of Tasmania (LGAT) is the representative body of Local Government in Tasmania. Established in 1911, the LGAT is incorporated under the *Local Government Act 1993* with membership comprising all 29 Tasmanian councils.

Tasmania has more coastlines per unit land area than any other State in Australia - about 4900 km (not including Macquarie Island). No place in Tasmania is more than 115 km from the sea and most population centres and major industries are on, or near, the coast. The main landmass is surrounded by islands, and is indented by a myriad of bays and estuaries. As such the potential impact on coastal communities of climate change are substantial.

In March 2008, the Local Government Association of Tasmania (LGAT), Municipal Association of Victoria (MAV), Local Government Association of Western Australia (WALGA), Local Government and Shires Associations of New South Wales (LGSANSW), Local Government Association of South Australia (LGASA) and Queensland Local Government Association (QLGA) released a compilation paper on responses to a survey to identify climate change adaptation and mitigation needs for local government.

The needs analysis survey aimed to assess Local Government's current knowledge of climate change and the extent of their adaptation and mitigation actions to address it. Furthermore the survey sought to identify what types of resources and information would assist councils to better manage climate change in a sustainable manner.

Councils recognise that effective mitigation, adaptation and management strategies will require a multi-disciplinary and multi-faceted approach across council's core business areas including:

- corporate and strategic planning;
- land use planning;
- asset management planning;
- disaster management planning;
- waste management;
- community health services;
- by-laws development; and
- building community awareness, and initiating behavioural change.

Local Government has a pivotal role to play in addressing climate change issues. Councils in Tasmania are beginning to understand the implications of projected sea level rise on their core areas of responsibility and are progressing a climate change agenda in partnership with the Tasmanian Climate Change Office.

This Submission

This response draws on input provided by council representatives at a Climate Change Forum held in early May 2008 as well as from written comments provided by councils to the LGAT.

This submission seeks to highlight some of the unique issues faced by Local Government in addressing the impact of climate change on Tasmanian coastal communities.

This submission will address each of the terms of reference of the inquiry particularly in the context of coastal population growth.

1. Existing policies and programs related to coastal zone management, taking in the catchment-coast-ocean continuum

Management of the Australian coastline rests with the three levels of government, with the majority under state and local jurisdiction. States hold the legislative base for coastal planning and management with routine decision making the responsibility of Local Government.

Traditional land use and planning controls at the local level have provided the most common instruments for coastal management but are often limited to a sectoral approach and don't necessarily take account of the entire coastal zone. In reality the coastal zone extends beyond the political, legislative and administrative responsibilities of various levels of government and the assortment of agencies charged with the management of particular elements of the coastal zone.

The important role of Local Government in the process cannot be overstated and significant effort is required by the other levels of government to improve the capacity, commitment and resources of councils to ensure that they are equipped to address the increasing complexity of coastal management. The failure of councils to appreciate broad policy objectives can significantly undermine the effectiveness of strategic policy implementation. Policy and legislation at the state and federal level must therefore provide guidance and leadership to ensure that impediments at the local level are addressed.

The community plays a large part in this process and there must be a confidence and commitment at the local level to ensure that local plans are supported and accepted.

Underpinning planning decisions in Tasmania is the Resource Management and Planning System (RMPS). RMPS resulted from comprehensive reforms to the resource management and land use planning legislation in the 1990s with integrated and strategic approaches to planning and management promoted and sustainable development in the use and management of resources emphasised.

RMPS is underpinned by a swathe of legislation and policy. The most pertinent with regard to the catchment coast continuum are the:

- *Land Use Planning and Approvals Act 1993,*
- *State Policies and Projects Act 1993,*
- *Major Infrastructure Development Approvals Act 1999,*
- *Living Marine Resources Act 1995,*
- *Marine Farm Planning Act 1995,* and the
- *Water Management Act 1995*

The suite of legislation underpinning RMPS provides for high level strategies to be dictated through State Policies and implemented through planning schemes at the local level. Unfortunately, there is a lack of State Policies and absence of guidance and implementation tools for councils to effect those policies that have been developed.

The Tasmanian State Coastal Policy is most relevant to this inquiry. This Policy is presently under review with a consultation draft on the policy touching on matters related to climate change in circulation. However, the State Policy does not address the broad range of climate change issues and leaves high levels of interpretation and choice to land use managers in dealing with these matters. With regard to coastal management the consultation draft of the policy provides significant guidance to councils in an attempt to effect consistency of decision-making and application.

A review of Tasmanian planning system was announced on 5 March 2008. The review is intended to identify where improvements can be made to the approval process for State Policies, Projects of State Significance, and planning schemes and amendments. The primary goal of the review is to consider the overarching governance of the planning component of the RMPS and the relative roles and functions of the various bodies that operate within it to ensure that the planning system operates efficiently.

In order for all three tiers of government to responsibly undertake their roles, clarity is required in relation to areas of overlap and goals or benchmarks and planning needs to be underpinned by accurate current data (current, trends and projections).

LGAT recommends that the Federal government set the benchmark for development in the coastal zone. Statutory requirements need to be set and integrated through all three levels of government around Australia.

2.The environmental impacts of coastal population growth and mechanisms to promote sustainable use of coastal resources

The coastal zone represents a complex interface between land and sea and is extremely vulnerable in terms of changes in climatic and ecosystem processes. Climate change and sea level impacts are further implicated by the economic, social and cultural importance of the coastal zone to many communities.

Over 70 per cent of Tasmania's population lives in coastal local government areas. This population mass relies on tourism, aquaculture, fishing and industrial activity dependent on the coast and its resources. The necessary infrastructure and development required to support these industries add greater pressures to coastal systems and increase human vulnerability to major changes climate trends and sea levels.

Tasmanian coastal resources are increasingly under pressure from population growth. All Tasmanian regions have experienced a per annum growth in population from 2005 – 2007; Southern Tasmania (0.8%), Northern Tasmania (0.7%) and the North West region (0.5%). Coastal populations are projected to continue along the current trend placing increased pressure on coastal resources.

Many coastal councils in Tasmania face enormous challenges because of transient and fluctuating populations. For example the Break O'Day Council has a resident population of around 6,000 people which more than doubles during the summer holiday season.

Councils facing these fluctuations in population need to address changing loads on services such as water supply and sewage, and on infrastructure such as traffic control and parking.

Local Government will need to respond to the increased pressures resulting from population growth through the provision of infrastructure and amenities. The improvement in and development of new infrastructure and amenities must be underpinned by relevant and reliable data acquisition on the trends and projection of population growth.

The acquisition of data upon which these needs are based must be undertaken in a coordinated manner to ensure consistency of data collection type, format and storage. For example, councils will require wind wave data and storm surge data, as well as detailed contour data of foreshores.

There is great potential in Light Detection and Ranging (LIDAR) mapping which is being currently undertaken, through the Antarctic Climate & Ecosystems Cooperative Research Centre, for some parts of Tasmania. However, to really benefit it needs to be extended to cover the whole Tasmanian Coastline accompanied (importantly) by the tools so that Local Government can interpret and apply the data. Modeling of storm surge, coastal inundation and coastal erosion hotspots will greatly assist councils in their planning for coastal development. This will enable the identification of trigger points leading to a requirement for more thorough investigation before planning approval is given.

The centralising of data collection and storage will assist those smaller councils, with fewer resources and a lesser capacity, in dealing with the increased pressure of coastal population growth on coastal resources. This data will provide the basis for good decision-making within councils - potentially mitigating costs.

Local Government makes long-term investments in infrastructure that are required to last for many decades. Infrastructure design has generally been based on current climatic conditions. However given the climate changes expected over the next century, current conditions may not be accurate indicators for planning, maintenance and upgrades. Local Government infrastructure provision and maintenance must factor in climate change to ensure appropriate investment decisions and the reduction of long-term costs. The

maintenance of, and long-term investment in, coastal infrastructure and amenities will be impacted on by the levels of Federal funding.

LGAT recommends that the Federal Government provide assistance to Local Government with the collection and interpretation of data.

LGAT recommends that the Federal Government ensure the appropriate investment in coast infrastructure.

3. The impact of climate change on coastal areas and strategies to deal with climate change adaptation, particularly in response to projected sea level rise.

Underpinning the development of strategies to deal with the impact on climate change on coastal areas is the need for accurate estimates of projected sea level rise and projected impacts, frequency and severity of storm surge events and the extent of coastal inundation and coastal erosion.

A nationally consistent approach to the collection, storage and accessible retrieval of data will serve to provide Local Government with consistent base line data to undertake risk assessment and project the impact of storm surge, coastal inundation and sea level rise on coastal communities. Once obtained, this data can be scaled down to address climate change issues at the regional and local level.

Tasmania has benefited from the completion of a study conducted by Chris Sharples entitled *Indicative Mapping of Tasmania Coastal Vulnerability to Climate Change and Sea Level Rise*. The report provides indicative mapping of Tasmanian shorelines vulnerable to projected sea-level rise, namely storm surge flooding and the erosion of sandy shorelines.

Approximately 84 per cent of the state's coastline length has been indicatively mapped with the remaining 16 per cent remaining unclassified. A range of areas were identified as being particularly vulnerable allowing councils and other levels of government to consider strategies to manage potential impacts. The mapping is as the title suggests – indicative – with a number of councils now commissioning further work to better understand the implications of sea-level rise, particularly in the context of infrastructure provision.

A number of local and regional projects are underway in Tasmania which will build upon the picture presented in the Sharples report. For example, Clarence City Council is nearing completion of the *Scientific Assessment and Response to Climate Change Impacts on Clarence Foreshores* Project which aims to determine how sea-level rises, storm surge flooding and coastal erosion will impact on the coastal communities in the municipality. The project, funded by the Australian Greenhouse Office, is considering environmental, social and economic impacts.

The *Climate Change and Coastal Risk Management* Project, funded by the Tasmanian risk Mitigation Program, will further identify coastal inundation and erosion risks from climate change as well as significant infrastructure, assets, resources and development in relevant hazard/probability zones. Through the project, there will be identification of good risk management principles for assets at different levels of risk and the development of broad principles and practical tools for planning and management treatment of those risks in the Tasmanian context.

The Central Coast Council has included policy provisions for the limitation of the development of structures with habitable rooms in the vicinity of areas with a low Australian Height Datum (AHD) (AHD = mean sea level of zero). There are current limitations in working with these provisions due to the limited data available to determine whether a proposed development complies with the provisions (e.g. accurate AHD data across the area). Secondly, where an area is identified as at risk due to its location, the costs and difficulties associated with finding a qualified consultant to undertake a site-specific study is prohibitive for many development applicants.

In addition to the environmental impacts of climate change on coastal communities consideration must be given to the socio-economic impacts. Many small coastal communities in Tasmania rely on small-scale industries such as fishing and tourism. Both of these industries are vulnerable to impacts of climate change and require detailed assessments of the potential risk associated with altered storm regimes, changes in water flows within catchments, sea level rise and temperature rise. For example, aquaculture industries will not

only be impacted by rising sea temperatures, but are also highly vulnerable to the impacts of changing rainfall condition.

LIDAR mapping will greatly enhance Local Governments' decision-making with regard to coastal planning.

LGAT recommends a nationally consistent approach to planning policy and management, including set back provisions in coastal areas. The set back provisions must be based on high level methodologies and expert knowledge, which are used to generate projected impacts at the local level. Only then can councils identify vulnerable areas/assets and develop appropriate responses.

4. Mechanisms to promote sustainable coastal communities

Coastal communities require support and guidance to manage the challenges of climate change and the environmental impacts it will have on coastal communities. Specifically support is required in the area of land use planning (both strategic and statutory), strategic development, insurance, infrastructure management, natural environment (habitat, erosion, beaches etc) and research and investment (including into professional services to develop management plans).

Legislative decision-making must reflect the best available science and data on climate change impacts. Local Government requires the legislative power to take climate change impacts into account when assessing development applications, as the risk of future litigation is real.

Local government also requires detailed planning for social and physical infrastructure, based on the most accurate available projections of coastal population growth and demographic change.

Local government requires a consistent approach to the communication of climate change scenarios and impacts to local communities to enable suitable adaptation and mitigation responses to be made.

Local communities should be involved in the development of programs (education, incentives, subsidy, rebate) to assist community adaptation and mitigation response to climate change.

The mechanisms identified to support ongoing community sustainability require adequate resourcing and support. Local government in Tasmania is facing a critical skill shortage in areas of urban and regional planning, surveying and engineering. The mainland mining industry boom is draining skilled professionals from smaller regional councils. These councils have a limited rate base and limited opportunities to expand the revenue source ¹and cannot provide for the salary expectations of these professionals.

LGAT recommends Federal Government funding, to Local Government Authorities with responsibility for coastal communities, to support the development and implementation of programs to sustain those communities.

¹ Productivity Commission found that Assessing Local Government Revenue Capacity April 2008

5. Governance and institutional arrangements for the coastal zone.

The increasing and diverse activities within the coastal zone, coupled with the consideration of natural, cultural and indigenous values; creates a number of issues and challenges for coastal managers.

No single jurisdiction has priority or control. Conflicting interests, varied stakeholders and multiple jurisdictions across all levels of government highlight the complexity and difficulty of coastal zone management. Climate change and sea level rise compound these challenges increasing pressure on policy and management systems to address the plethora of coastal issues.

Understanding accelerated global warming and the possible effects it may have on global and regional climatic systems has prompted research and policy action across all levels of government. While this is admirable, and arguably, essential, there are potential problems.

Governance and institutional arrangements for coastal zone management must focus on improving current regional planning through standardisation and consistency at the regional level. Information must be provided in a clear and consistent way

Governance arrangements must take in the catchment coast ocean continuum as the impacts of climate change are far reaching.

There are clearly long term economic benefits in taking early action. Griffiths University has recently released an Issues Paper examining Local Governments' legal responsibility to deal with climate change considerations when exercising their functions and powers. This paper highlights the need for sound governance and institutional arrangement supported by legislation and policy at the Federal and State Government levels.

LGAT recommends strong cooperative partnerships between Local Government and Federal and State Governments on the provision that financial support to councils is provided and no further cost shifting to local government occurs.

Concluding Remarks

It is vital that work is shared and communication channels are clear between Federal, State and Local Government. This will be an ongoing challenge as the impacts of climate change on coastal communities will be broad based and will not fit into departmental boundaries.

There is clearly a strong need for a concerted and coordinated approach to infrastructure management for local governments and coastal communities. This will relate to upgrading, maintenance and new infrastructure- everything from waste treatment plants to sewer pipes and storm water discharge to coastal erosion and its' impact on infrastructure.

Local Government as the closest sphere of government to the community works on the front line for delivery of local, state and federal climate change agendas. They have a major leadership role to play in the delivery of programs and as such need to work closely on cooperative and collaborative programs with the Federal and State Government.

The Tasmanian Premier's Local Government Council (PLGC) has recently endorsed, in principle, the *Framework for Action for Reducing the Tasmanian Governments Greenhouse Gas Emissions* produced by Dr Kate Crowley for the Tasmanian Government. The framework's components comprise:

- i. An audit of Tasmanian Government greenhouse gas emissions;
- ii. Setting targets for reducing greenhouse gas emissions;
- iii. Monitoring and reporting greenhouse gas emissions;
- iv. Reducing greenhouse gas emissions;

- v. A culture change process for the public sector; and
- vi. Evaluation and review processes to learn from and legitimise the project.

This endorsement reflects Local Governments' commitment to addressing the impacts on climate change on both coastal and inland communities throughout Tasmania. Local Government in Tasmania requires clear direction from the Australian Government and supports the determination of national provisions. Professional support and training for Local Government to build capacity to address as well as financial assistance is required. Such assistance across all of Local Government would enable a consistent approach to the delivery of Federal and State climate change agendas.

LGAT is committed to assisting Tasmanian Councils with a consistent and strategic approach to addressing climate change and working towards a consistent and coordinated delivery approach across all spheres of government.