

Increasing knowledge about climate change impacts on the coast.

In terms of programs, the Victorian Government is undertaking a major project, Future Coasts, to develop comprehensive vulnerability assessments for the whole Victorian coastline for use by land managers and councils and to inform government policy.

It is noted that substantial research into the probable impacts of climate change in the coastal zone is also currently being conducted by the Australian Government. It would be beneficial to all levels of government if the details and results of this research could be shared on an ongoing basis.

In particular, there needs to be more research and monitoring of marine and estuarine ecosystems to clearly identify and protect their values from increased urbanisation and the intensification of agriculture and commercial development within the coastal hinterland. Western Port provides an example of the need for such a study as a priority due to its rapid urbanisation and productive role.

Changes to the use of coastal reserves

The specific impacts of sea level rise on coastal reserves are a major concern. These reserves provide a community recreational resource, a conservation zone, and a protective buffer for adjacent infrastructure. In many cases they are under severe pressure and much effort has been expended on stabilising coastal dune and wetland systems and other reserve areas and managing access. If these areas are lost by impending sea level rise, their values can not be easily replaced particularly if most land would then be privately owned.

Much of the public environmentally-related infrastructure located in the coastal zone will also be at risk of direct or indirect damage due to sea level rise and the increased frequency of extreme weather events. Increased local government capability, tools and resources are required for the planning and design of new and more enduring public infrastructure particularly in the light of liability and duty of care.

Federal Government financial support and policy and engineering options will be required for dealing with major retreat and protect options on the coast that are envisaged for some regional areas such as settlements in Western Port and East Gippsland.

The essential starting point for effective climate change adaptation in the coastal zone is the development of detailed accurate estimates of projected sea level rise over time, extent of inundation and frequency of storm events. This information must guide future planning and development decisions regarding the coastal zone as part of a precautionary approach to planning on the coast. This position is reflected in the current draft of the Victorian Coastal Strategy which addresses climate change as a key issue in future planning and use of the coast.