

15. Climate Change and Rising Sea Levels

There is consensus among scientists that there will be major changes in our physical environment over the coming years because of changes in our climate caused by human activities.

In our municipality we confront the possibility of rising sea levels causing flooding. CSIRO oceanographer Dr John Church in his book *Understanding Sea-level in Rise and Variability* has brought together the work of over 90 researchers. He explains that there may be major changes in sea level brought about by the melting of the ice caps, thermal expansion and run off from aquifers. The Bruun rule says that for every centimeter the sea level rises, there is a good chance of the shoreline retreating by up to a meter. Scientists say it is possible that over this century the sea level could rise by a meter. This would mean that the ocean could swallow 50 to 100 metres of coastline.

During the lifetimes of children now going to primary school, large areas of Elwood, St Kilda, Middle Park and Port Melbourne and Fishermans Bend could be affected. No one can be sure what the rise in sea level will be, or how quickly it might happen, as it depends on what action mankind takes to mitigate global warming. Change will not necessarily happen gradually and slowly, it is possible that there could be sudden changes. The precautionary principle must apply.

What actions can the state government take in general regarding climate change and rising sea levels, and what can be done specifically for areas of Port Phillip that may be under threat?