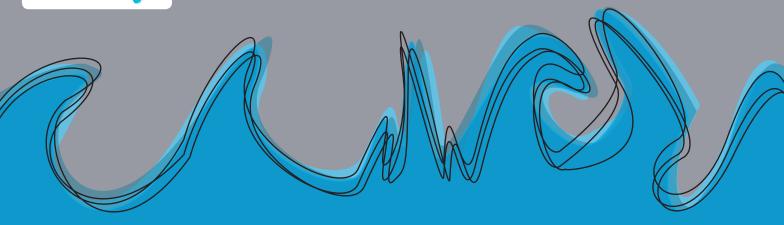
Current and future impacts of climate change on marine fisheries and biodiversity



Change in coastal fishing communities: Geraldton, Western Australia



What's unique about Geraldton and small coastal communities

Although a relatively large regional town at a just over 30,000 people, in some aspects Geraldton is typical of Australian coastal towns that are beyond commuting distances. For instance, the health services and retail sectors assume a larger

they provide services to the surrounding areas.

role in these communities as

However, large coastal communities in Western Australia, like Geraldton are different to other States in that the construction sector associated with the mining industry is particularly important. Even though Geraldton has traditionally been characterised as a fishing town, commercial fishing also has a much greater role in smaller coastal communities in Western Australia when compared with other Australian communities.



The marine sector in a small coastal community

Australian coastal communities traditionally have major industry sectors that harvest resources from the sea. Recreational fishing and charter fishing are often locally very important with increasing participation rates fuelled by higher

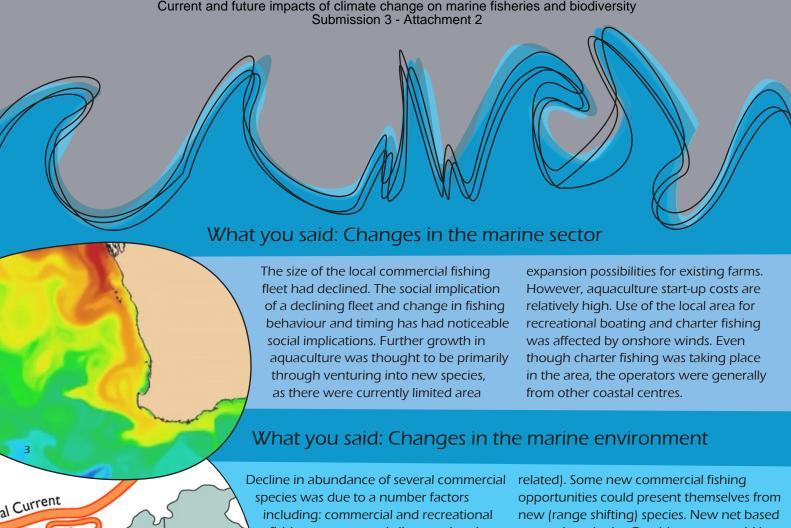
disposable incomes. Generally, tourism related activities (like restaurants and accommodation), some of which can be linked to marine activities, are of greater relative economic importance in small coastal communities compared to the larger centres.

The flow-on effects of the marine sector

The link between the marine sector and other economic sectors in the community are constantly changing. For instance, there is a noticeable impact of a decline in active local fishing boats over the last 4 years on associated marine industries such as slipway operators, vessel maintenance and marine chandlery as well as fish outlets, restaurants, and processing facilities. Even though employment in fisheries has been impacted, many have found alternative employment

in the mining and oil and gas sector. Although there have been negative flow on effects from the smaller commercial fishing sector, the recreational fishing sector provides some economic benefits to associated industries such as fishing and tackle shops. The aquaculture sector has many flow-on benefits including local employment and direct pearl sales to tourists help promote Geraldton as a tourism destination.





fishing pressure and climate related factors (temperature and ocean current

aquaculture in the Geraldton area could be based on warmer water species.

What the Scientists Say

The sea surface temperature on the west coast is increasing. The currents are bringing warmer waters further south into different areas. Marine species respond differently to the

warmer waters and current changes are likely to affect larval movement in some species. Some species may move to more suitable places further south and become less abundant in Geraldton.

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Disclaimer: The information presented is from a range of sources including Census data, published reports, and interviews held for the Blueprint project. The aim of the flyer is to present some preliminary and highly simplified information. Further details will be provided after the full project finishes at the end of 2013.

Census and other existing research information were combined with information collected from 3 coastal towns in Australia, St Helens TAS, Bowen QLD and Geraldton WA. The information presented here is preliminary and should not be considered final for the 'blueprint for coastal community adaptation planning' project. The 'blueprint for coastal community adaptation planning' project will be finalised by the end of 2013.



western australian marine science institution





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