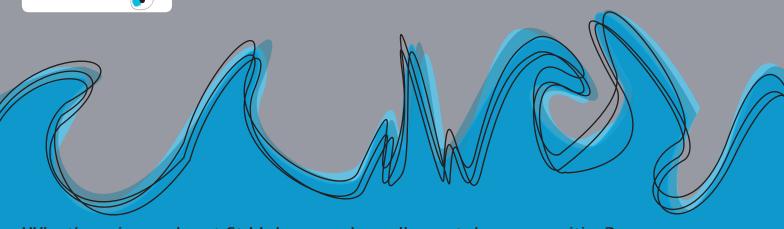
Current and future impacts of climate change on marine fisheries and biodiversity



Change in coastal fishing communities: St Helens Tasmania



What's unique about St Helens and small coastal communities?

Although a relatively small town at less than 4,000 people, St Helens is typical of the many small coastal towns in Tasmania that are beyond commuting distances, that makes up nearly 30% of the population. Secondary industries such as accommodation and food services are increasingly dominating St Helens economy

over commercial fishing. But despite a decline in the primary industries

nationally, small coastal communities like St Helens still have a higher proportion of people in the aquaculture and fishing industries. Like other small coastal communities, St Helens has a greater proportion of older people, average household incomes are lower, and work opportunities are limited. St Helens is unique in the fact that it is in a marine hotspot, meaning that climate driven changes in the marine environment are happening relatively fast.

The marine sector in a small coastal community

Coastal communities traditionally have major industry sectors that harvest resources from the sea. Recreational fishing and charter fishing have become locally very important and the charter fishing sector has built increasing presence and reputation. Moreover, Tasmania has a high participation rate in recreational fishing which is also evident in St Helens. The charter

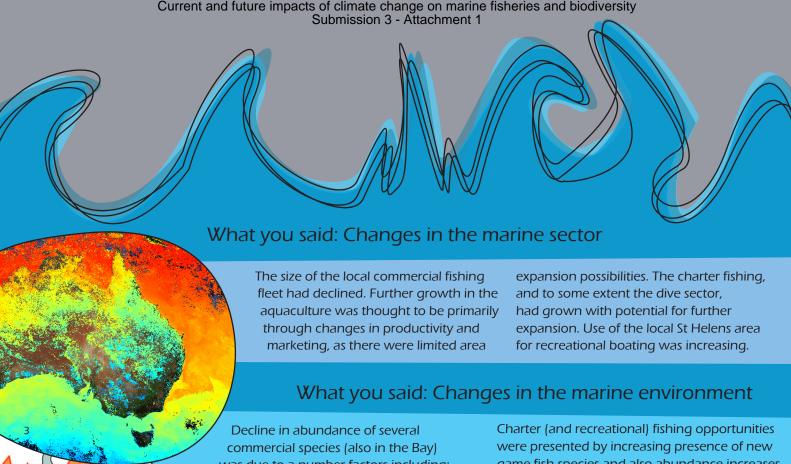
and recreational fishing sectors are predicted to remain an important tourist activity in St Helens and potentially increase as more "game fish" move adjacent to the coast with warming waters. Generally, tourism related activities (like restaurants and accommodation), some of which can be linked to marine activities, are of greater 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, the impact of a nearly 70% decline in active local fishing boats over the last 20 years on associated marine industries such as slipway operators, vessel maintenance and marine chandlery as well as fish outlets, restaurants, and processing facilities, has been great. Although there has been a negative impact from a smaller local commercial fishing sector, there is increased seasonal

activity associated with the charter fishing and recreational fishing sectors providing economic benefits to associated industries such as fishing and tackle shops and accommodation and restaurant business. The aquaculture sector has many flow-on benefits including local employment, equipment maintenance and transport operations. Direct sales to tourists and restaurants help promote St Helen's as a marine tourism destination.





Decline in abundance of several commercial species (also in the Bay) was due to a number factors including: commercial and recreational fishing pressure and climate related factors. New commercial fishing opportunities were presented by new (range shifting) species like the urchins.

Charter (and recreational) fishing opportunities were presented by increasing presence of new game fish species and also abundance increases of some species present in the Bay. Aquaculture was being affected by increased frequency of extreme rainfall events and associated terrestrial run-off in catchment regions.

What the Scientists Say

The sea surface temperature on the east coast is increasing. The currents are bringing warm water further south (especially in summer). Marine species respond differently to the warmer waters – some will move to more suitable places

further south and thus be less abundant in St Helens, while species moving from northern regions will become more abundant. Rainfall events have been more intense and frequent in the past years affecting run-off and the nutrient load of the inshore waters.

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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.



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