Student 1: Low Excellence

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Extract of student evidence

Marine reserves are also very important for research and restoration of our natural waterways and coastlines. Only 1% of our coastlines in New Zealand are protected marine reserves, it is therefore crucial to our country's development and future generations that we make our impacts on the biophysical environments more sustainable.

Fishing is a very critical industry for New Zealand as it brings in a great deal of income to our country. Commercial fishing boats catch our fish stocks for not only our country, but also overseas countries. Commercial tourist operators take people out to show them our unique scenery and fish. Recreational fishing is an important past time for many New Zealanders. However, New Zealand needs many more marine reserves if we want to have a fishing industry for future generations. We are currently overfishing threatening the lower limits for sustainability of the breeding stock.

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By giving more areas for certain predators like snapper or crayfish to live in protected environments where they can grow larger, this will increase reproductive fitness and ability to prey on kina.

2)

We have a rapidly increasing amount of kina barrens in New Zealand's coastal waters, the sea is losing its important layer of kelp forest. This means that an important ecosystem for filter feeders and prey organisms is being eaten away. This creates a domino effect as the loss of these creatures and their habitats will mean that the water will become more polluted as the excretion from fish and some types of waste which ends up in the sea, will now be unable to be removed from the sea by those filter feeders. Henceforth swimming and other activities will be compromised.

3)

This will also cause the water to be unhealthy for the fish around our shores as there will be nothing cleaning it up. Due to the loss of habitats, many of the smaller fish and organisms which are preyed on will have quickly depleting numbers which in turn affects the predators. As the fish lose their habitats and food sources our fishing industry will be impacted by supply and demand problems. Snapper exports alone exceed \$60 million per year and this is vital to sustain local employment and our economy.

4)

Overfishing and the destruction of marine habitats are a global issue. New Zealand has the chance to ensure more sustainable fishery and healthy coastal ecosystems by creating more marine reserves and by reducing quotas for commercial and recreational fishing – especially in critical areas such as 'SNA1' – North Cape – Cape Runaway.

(5)



Marine reserves and no take zones have proved to be the most effective way to ensure healthy ecosystems in the marine environment. More of these initiatives are needed. Commercial and recreational quotas have not worked in areas where some species are at critical levels (e.g. crayfish in the Bay of Plenty). Imposing temporary fishing bans in such areas would ensure environmental and economic sustainability.

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More needs to be done about the taking of non-restricted species because they form an important part of the marine food web. There are no limits on many species such as spotties, herring and mackerel – but these have become part of the menu for some communities. Daily limits should be imposed on all parts of the food chain.

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If we were to increase the amount of marine reserves and no-take zones in New Zealand this could expand the numbers of tourists coming. On our trip to the Poor Knights, the boat we were on had many foreigners which shows how sought after the natural beauty of the marine reserves are.