

# Should cowden be protected? essay sample



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Although, the erosion rates have decreased at Mappleton. It is obvious that the defences made to this town has increased the erosion rates in other places without defences. The erosion rate at Cowden, which lies directly south to Mappleton, has increased. The erosion rate has gone from eroding 2.54 meters a year in the 80's to eroding at 3.78 meters a year at present.

A newspaper article that shows how the erosion rates at Cowden have affected the people who have farms on cliff tops. Mrs Earls talks about the fact that the erosion of a cliff in Mappleton caused 'Topper (her) our pregnant cow, to fall over the cliff when it collapsed.' She also mentions that when her 'uncle bought the farmhouse in the 1960's, it was more than 60 metres from the cliff top; now it is only a few paces from the edge.' This shows that erosion rates in Cowden have shot up so high, that she will soon have to lose her home to the sea. She also mentions that transport is a problem as 'the road has gone right off the cliff.' As a farmer she probably depends on transport a lot, as she has to transport goods from one place to another.

The article also states that the council's decision to build a protective wall at Mappleton has set in motion a series of events, which has made Cowden even more vulnerable to erosion. This supports data from the graph.

In order to protect Cowden from further erosion, the government will need to adopt a suitable defence mechanism, which has limited number of disadvantages. Groynes could be built on the coast, where the oncoming sand can get trapped on the North side of the groynes. This would result in a build up of a beach, which would in turn absorb energy from the oncoming

wave. Groynes would be quite effective in protecting Cowden, as they have clearly reduced the erosion rates at Mappleton, which shows that they are worth considering. However they might have a negative effect on the areas which have not been protected, and this could lead to erosion in other places, as did in Cowden, but this would probably happen with every defence mechanism. Although Groynes would be rather expensive to build as they would cost about 10, 000, it is worth taking into account that they are sited 200 meters apart, so the overall cost would not be as expensive as it seems. However, building defences like groynes are visually unattractive, expensive to maintain, and cannot guarantee success for very long. Therefore they would be very expensive as a long-term defence.

The second defence that could be set up is the artificial building of a beach. A beach is an effective way of preventing erosion as it slows down incoming waves and protects the base of the cliff from erosion. This means that the waves can only reach the cliff during higher stages of the tide. Although this solution would be expensive, it is still efficient, economic, sustainable and attractive and likely to be favoured by tourists and residents. However, a regular replacement of sand will be necessary as much of the material would be transported away by the long shore drift, and this would prove to be quite expensive, as it would cost  $\text{£}1\frac{1}{2}$  per cubic meter.

More than 20 million tonnes of gravel and sand were dredged in 1989. The removal of this gravel was said to be a good method, as no quarries would have to be open, therefore creating no protest from any local people. The problem is removing all this sand and gravel is leading to the gradual wearing away of shores and cliffs, adding to coastal erosion. The building of <https://assignbuster.com/should-cowden-be-protected-essay-sample/>

a beach would be the best long term option, although it will be expensive, it works well in keeping with the natural environment and is also very attractive.

If the council did decide to adopt one of the strategies discussed above, it would be important to consider how different groups of people would be affected. For instance, holidaymakers would be likely to favour the plan of building a beach, as this would be an attractive feature to them. Shop and restaurant owners are likely to favour defences so that business is maintained from holidaymakers; there could be some businesses who would favour less large-scale tourism. Caravan site owners, farmers and local residents would strongly support sea defences but also might accept compensation if there was likely to be a future uncertainty. Representatives of the environment agency are more likely to argue against sea defences because of the on going expense, more in favour of planned retreat. Taxpayers in the rest of Britain are likely to be less willing to pay for defences than those immediately affected.