

OUR COASTLINE ON THE FRONTLINE

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The Intergovernmental Panel on Climate Change (IPCC) recently reported that climate change has caused and will cause substantial damage, often irreversible, to coastal ecosystems (IPCC, 2022). Warming oceans result in more powerful storms, ocean acidification and rising seas.

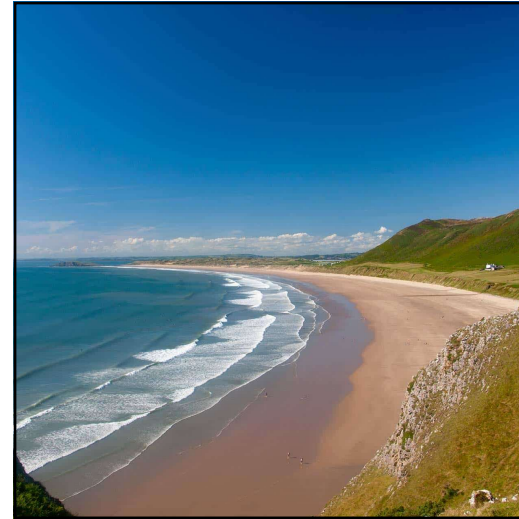
Coastal ecosystems can also play an important role in mitigating these effects, reducing the impact by safeguarding biodiversity and building coastal resilience. Yet stakeholder conflict over land-use in coastal areas can both hinder necessary development and conservation (Giordano and Ferraro, 2020).

Swansea residents are aware of environmental issues, generally valuing conservation over development (Phillips *et al.*, 2011).

This vlog aims to increase local support for working-with-nature mitigation measures, such as preserving salt marshes, encouraging residents to see their local area as being both vulnerable to climate change and also a key area for mitigating its effects.

Storyboard

(10 slides)



1 Gower beaches

Dialogue: I am lucky to call Swansea home. It is always a pleasure to visit Gower, with its golden beaches and clean waters.

Establishing ethos, or building credibility, by identifying the speaker as a Swansea local.



2 Harbour porpoises

Dialogue: Our coastline is home to special plants and animals, like the harbour porpoise.

Pathos, or evoking emotion, by use of poster species like the porpoise and balancing fear evoked by stormy waves with a hopeful image of protection through conservation.



3 Stormy weather or waves

Dialogue: But coastal communities are expected to be at the frontline of environmental changes brought on by climate change.

Centre issue on target audience.



4 Sandfields

Dialogue: Our coastal environment and habitats are at risk of violent storms, rising seas and ocean acidification (IPCC, 2022).

Raising awareness of anticipated risks.



5 Wide shot of bay

Dialogue: So is enough being done to actually protect our coastlines?

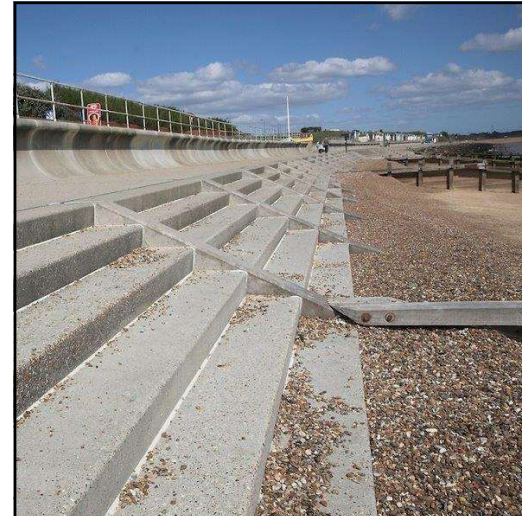
Segue into campaign ask.



6 Fishing trawlers in marina

Dialogue: Marine protected areas help build resilience to climate change and provide a refuge to wildlife under many pressures (Dunkley and Solandt, 2021) but they don't stop habitats being destroyed by trawling (Marine Conservation Institute, 2020). Porpoises are still killed by bycatch and fishing waste (Braulik et al., 2020).

Building up picture of pressures on wildlife. Presents *logos*, or using reason, by including evidence from scientific reports.



7 Sea wall on beach

Dialogue: On land, sea defences have been put in place to prevent damage to our homes from flooding and waves. Yet these can interfere with coastal processes and leave wildlife without the soft shoreline they need.



8 Salt marshes, Three Cliffs Bay

Dialogue: Can we find a better way to protect ourselves and our precious wildlife? Allowing for natural habitats like saltmarsh can actually help us mitigate the impact of climate change (Fairchild *et al.*, 2021).

Provides positive reasons for coastal conservation.



9 Loughor Estuary

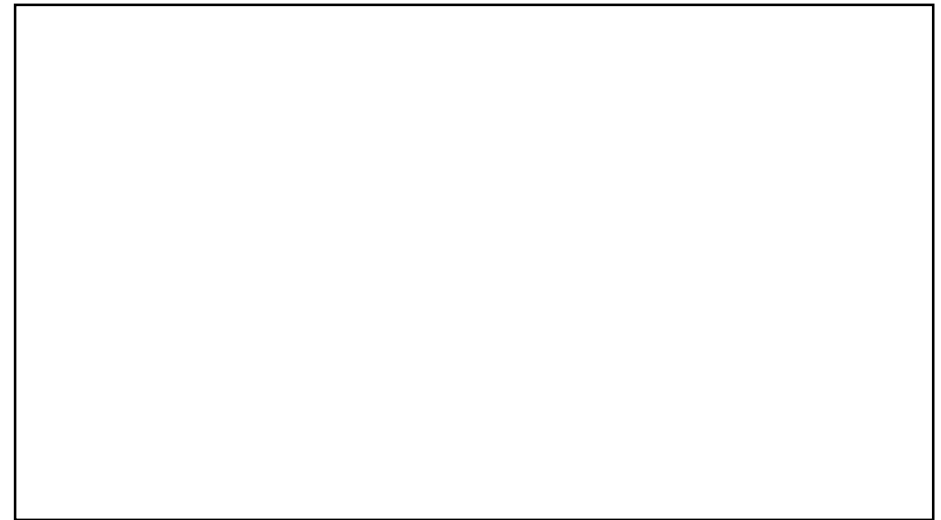
Dialogue: Protecting these wetlands helps reduce the impact of violent storms and sea level rises (Marine Conservation Institute, 2020).



10 Swansea Guildhall

Dialogue: Talk to your MP and local councillor now about preserving coastal habitats.

Ends with an ask for the audience.



To disseminate the vlog, it would be uploaded to YouTube and shared to social media. On Facebook, it would be shared to local groups, including Marine Life Swansea (2k+ members). On Twitter and Instagram it would be shared and tagged for greater exposure, including the tags: #Gower #porpoises #coastalcommunities #development #Swansea.

Links to conservation charities which run campaigns for habitat preservation and working-with-nature solutions would be included.



References

- Braulik, G., Minton, G., Amano, M. and Bjørge, A. (2020) 'Phocoena phocoena. The IUCN Red List of Threatened Species 2020: e. T17027A50369903.'
- Dunkley, F. and Solandt, J.-L. (2021) *Marine Unprotected Areas*. Marine Conservation Society. Available at: <https://www.mcsuk.org/ocean-emergency/marine-protected-areas/marine-unprotected-areas/> (Accessed: 6 April 2022).
- Fairchild, T.P., Bennett, W.G., Smith, G., Day, B., Skov, M.W., Möller, I., Beaumont, N., Karunaratna, H. and Griffin, J.N. (2021) 'Coastal wetlands mitigate storm flooding and associated costs in estuaries', *Environmental Research Letters*, 16(7), p. 074034. doi:10.1088/1748-9326/ac0c45.
- Giordano, L. and Ferraro, L. (2020) 'Conservation or development? An environmental function analysis assessment of the Volturno River coastal zone (central Tyrrhenian Sea - Italy)', *Journal of Coastal Conservation*, 24(1), p. 6. doi:10.1007/s11852-019-00717-8.
- IPCC (2022) *Climate Change 2022: Impacts, Adaptation and Vulnerability*. Available at: <https://www.ipcc.ch/report/ar6/wg2/>.
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- Phillips, M.R., Rosser, G., Jenkins, R.E. and Cullis, M.J. (2011) 'Beach Management Strategies: a Comparative Coastal Stakeholder Assessment, Gower, South Wales, UK.', *Journal of Coastal Research*, (64), p. 6.