

WHAT?

CoastAdapt is a new online tool that provides information, maps and resources to plan for and adapt to coastal climate impacts.

WHO & FUNDING:

CoastAdapt was developed by the team at the National Climate Change Adaptation Research Facility (NCCARF) with input from government, community, industry and business. NCCARF was established in 2008 and is currently funded by the Australian Government until the end of June 2017.

BACKGROUND:

NCCARF was commissioned by the Australian Government through the (then) Department of the Environment to build a coastal climate risk management tool that, according to the Funding Agreement, should:

- be national in scope, but recognise variations in climate, and regulatory and planning systems
- be appropriate for new developments and areas where substantial assets are already at some risk from coastal climate hazards
- provide users with access to the best available science and advice on coastal climate risks and regional sea-level rise projections
- incorporate the views of end users, regarding its design, content, delivery and dissemination
- be communicated in plain English
- be illustrated with practical case studies.

NCCARF took the approach that CoastAdapt needed to make life easier for decision makers and should provide the information that was needed. We undertook considerable stakeholder engagement and testing throughout the development to make sure the website was attractive, functional and easy to use.

WHAT WILL I FIND ON COASTADAPT?

CoastAdapt contains information, maps and data and a framework for planning to help users understand their climate risk, plan how to reduce it and even take advantage of changes.

There are also projections of how the climate might change for council regions around Australia. This includes sea-level rise, temperature and rainfall.

CoastAdapt includes information on a wide range of topics related to the coast, climate change and adaptation (e.g. what is climate changes, impacts of climate change, what is adaptation etc.). The information is delivered in a variety of formats including factsheets, case studies, technical information manuals, tools, worked examples, methodology elements and information elements.

There is a set of over 60 case studies of what councils and businesses are doing to address climate change. Most case studies are a short factsheet, but we also have a number of videos.

Central to CoastAdapt is the decision-making framework C-CADS. This can be used to step through a planning process and help councils and businesses develop and adaptation plan.

HOW WILL THIS HELP THE OYSTER INDUSTRY:

The oyster industry is exposed to climate change and in some areas may already be feeling the impact. Key risks include:

- Sea level rise
- Increases in air and water temperature
- Changes in rainfall patterns
- Changes in salinity
- Increases in wind speed, storm surges, waves
- Increases in ocean acidity
- Increased harmful algal blooms, pests, biofouling and disease.

CoastAdapt provides a number of resources that can help the industry learn more about the risks and guidance on how to start to thinking and planning.

1. Information:

CoastAdapt includes information on how the climate has already changed (<https://coastadapt.com.au/climate-change-and-sea-level-rise-based-observed-data>) and how it might change in the future (<https://coastadapt.com.au/climate-change-and-sea-level-rise-australian-region>). Impacts that are relevant to oyster farmers including information about ocean acidification (<https://coastadapt.com.au/ocean-acidification-and-its-effects>), estuaries and climate change ([https://coastadapt.com.au/sites/default/files/factsheets/T316 Estuaries and climate change 0.pdf](https://coastadapt.com.au/sites/default/files/factsheets/T316_Estuaries_and_climate_change_0.pdf)), impacts on fisheries and aquaculture ([https://coastadapt.com.au/sites/default/files/factsheets/T312 8 Fisheries%20and%20aquaculture.pdf](https://coastadapt.com.au/sites/default/files/factsheets/T312_8_Fisheries%20and%20aquaculture.pdf)). Information on adaptation (<https://coastadapt.com.au/overview-of-adaptation>) and ways of planning and thinking about the future (<https://coastadapt.com.au/pathways-approach>).

2. Maps and data:

You can look at how much the seas may rise in your region and look at maps that show the areas at risk of inundation in the future using the Sea Level Rise and You tool (<https://coastadapt.com.au/tools/coastadapt-datasets#future-datasets>). This also includes information about how much temperatures may rise and how rainfall may change.

3. Ask an expert:

CoastAdapt includes an online forum for posing and asking questions of other practitioners, but also from a panel of experts. Visit CoastExchange to pose your question (<https://connect.coastadapt.com.au/>).

FURTHER INFORMATION:

Visit the CoastAdapt website at www.coastadapt.com.au or email s.boulter@griffith.edu.au