



Cockburn Sound Coastal Vulnerability & Flexible Adaptation Pathways Project

FREQUENTLY ASKED QUESTIONS

Who is the Cockburn Sound Coastal Alliance (CSCA)?

The CSCA was formed in 2011 and is a collaboration between four Local Governments (Cities of Cockburn, Fremantle, Kwinana and Rockingham) and the Perth Region NRM organisation. The City of Cockburn is managing the CSCA project on behalf of the Alliance. The Department of Transport, Department of Planning, Department of Environment and Regulation, Cockburn Sound Management Council and Department of Defense are key stakeholders.

What is the Cockburn Sound Coastal Vulnerability & Flexible Adaptation Pathways Project?

The *Coastal Vulnerability & Flexible Adaptation Pathways Project* (the Project) has identified the vulnerability of Cockburn Sound to erosion and coastal inundation (flooding). The Project is developing detailed adaptation measures to address those identified vulnerabilities. The Project consists of four stages. Stage 1 – Coastal Vulnerability Study (completed in 2013). Stage 2 – Coastal Values & Risk Assessment Study (completed in 2014). Stage 3 – Adaptation Plan is currently being developed and Stage 4 – Implementation is anticipated to begin in 2015.

What kind of impacts can climate change have in coastal areas?

Climate change can lead to flooding, storm surges, raised water tables and increased coastal erosion that will potentially impact dwellings, other buildings, infrastructure and coastal ecosystems.

Will my property be at risk?

The Project does not have the capacity to estimate the level of risk for individual dwellings; however it has identified potential coastal hazard areas and coastal assets at potential risk for the present day (2013), 2070 and 2110. The maps and risks identified a range of potential future outcomes but do not replace the need for detailed local studies. Further studies will be required to acquire more detailed local information.

Being able to model various scenarios provides an important perspective of what the future may hold in respect of coastal vulnerability and climate change, and how this should inform planning. It is important to note that while the Alliance has modeled various scenarios, the State Government has adopted a position of sea level rise of +0.9m (refer State Planning Policy 2.6 *State Coastal Planning*).

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This is typically matched with a storm event of 1 in 100 years Average Recurrence Interval to understand potential impacts, and how such impacts need to inform planning processes. Importantly, while various more extreme scenarios are modeled, it is important to note the adopted position of the State Government.

Can we reduce the risks caused by climate change?

Yes, a first-pass assessment of coastal adaptation actions has already been developed and CSCA will work with the community and stakeholders to develop a detailed adaptation plan. However, extreme events will continue to occur that exceed the capacity of the actions we take.

What is climate change adaptation?

Basically, climate change adaptations are changes we make in our coastal communities, to our dwellings, infrastructure and coastal ecosystems to reduce the impacts of sea level rise, storm erosion and flood events. Adaptations can include:

- Ensuring that new development is located in areas not vulnerable to coastal hazards
- Removing assets at risk
- Restricting development in hazard areas
- Designing and modifying assets and structures to cope with the hazards
- Emergency management and evacuation planning
- Physical works to reduce hazards such as beach nourishment and replenishment, dune management, groynes, seawalls, offshore



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What are the next steps and how can I get involved?

Stage 3 (Adaptation Plan Development) commenced in 2015. Community workshops and meetings will be held with interested community members and groups to develop an Adaptation Plan.

To register your interest please visit the CSCA website at www.cockburnsoundcoastalalliance.info or contact the CSCA Coastal Project Coordinator on Ph (08) 9411 3426. Alternatively please contact your local government.

GLOSSARY

Coastal Assets: Tangible features of the built, natural and cultural environment that delivers a set of goods and services.

Coastal Erosion: refers to shoreline movement where the shoreline shifts landward, reducing the width of a coastal foreshore reserve.

Coastal Inundation: means the flow of water onto previously dry land. It may be either permanent (for example, due to sea level rise) or a temporary occurrence during a storm event.

Coastal Hazards: means the consequence of coastal processes that affect the environment and safety of people. Potential coastal hazards include erosion, accretion and inundation.

Vulnerability: predisposition to be adversely affected or unable to cope with events.