



Draft Coastal Adaptation Plan

Gold Coast is one of Australia's most iconic coastal cities, with golden beaches, endless waterways and a beautiful natural landscape.

Our precious coastal environment is dynamic and always changing. State Government projections currently indicate by 2100 a mean sea level rise of 0.8 metres and more cyclone activity tracking south which could mean an increase in coastal hazards like erosion, storm tides and flooding.

To protect and safeguard our city's low lying and vulnerable areas, we're developing the Coastal Adaptation Plan. This plan builds on our existing coastal management strategies and best available science and economic studies, together with feedback received from the community during the first round of public consultation, to recommend cost-effective adaptation options, now and into the future.

Have your say on the draft Coastal Adaptation Plan by visiting gchaveyoursay.com.au/ourresilientcity reading the draft plan and completing the survey between 19 January and 19 February 2021.

Our current coastal management actions

The City has a long history of successful coastal management actions. The following are examples of recent coastal management projects.

Palm Beach shoreline project

After careful consideration, an artificial reef combined with sand nourishment work was carried out to protect one of the city's most vulnerable beaches to coastal erosion.

Rock groynes

Following an investigation of coastal protection options, as well as expressed community desires, the City invested \$800,000 in lengthening the Kirra rock groyne to 180 metres.

Buried sea walls

Engineered sea walls are used as a component of the city's defence mechanisms against coastal erosion. We have an ongoing sea wall construction and certification program that prioritises public sea walls.

Broadwater Parklands mangrove wetland

As part of the construction of the Gold Coast's Broadwater Parklands, the City rehabilitated a mangrove wetland. The mangroves capture fine sediments, nutrients and rubbish, improving the quality of water entering the Broadwater and stabilising the beach using vegetated solutions.

Surfers Paradise sand backpass pipeline

A 7.8 kilometre pipeline is being constructed to return natural sand from The Spit back to the iconic Surfers Paradise Beach, increasing the resilience of our northern beaches.

Dune management and beach nourishment

The Gold Coast Beach Nourishment Project delivered more than three million cubic metres of sand across our beaches in 2017. An ongoing program is supported with our efforts to protect our dunes and promote healthy vegetation.

Waterways and canals

To maintain a healthy canal system, the City undertakes periodic dredging, removal of fallen vegetation that may obstruct waterways, maintains the profile of canals and stabilises the banks.

Narrowneck artificial reef

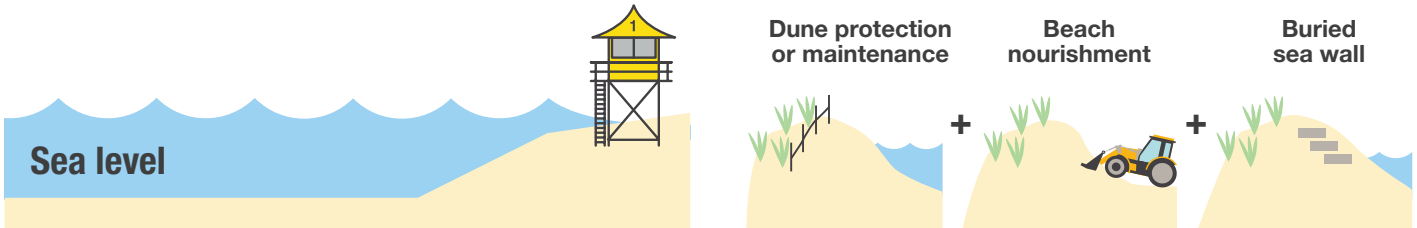
In 1999, the City constructed an artificial reef offshore from Narrowneck. The reef promotes an ecological response that also allows build-up of sand near the structure and reduces the erosion impact of large waves.

Adaptation options – so what else can we do?

An adaptation option is a solution to mitigate the impacts from coastal hazards and can be grouped under three main approaches.

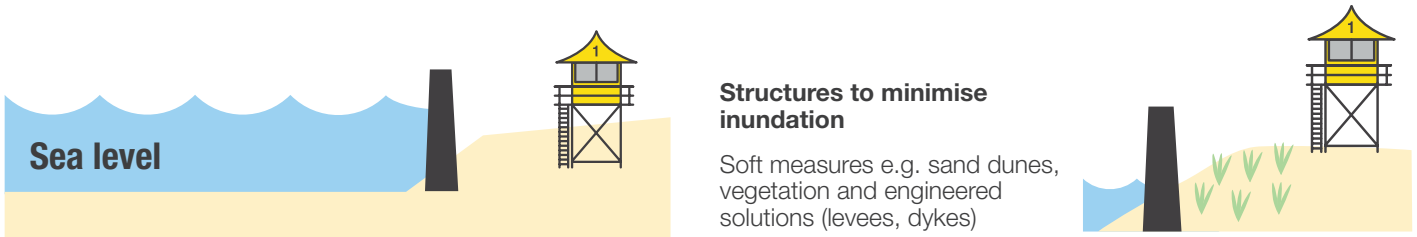
Maintain

A **maintain adaptation** approach involves the continued use of an asset at the current risk level. Examples of current activities include beach nourishment, specific asset management and community awareness-raising.



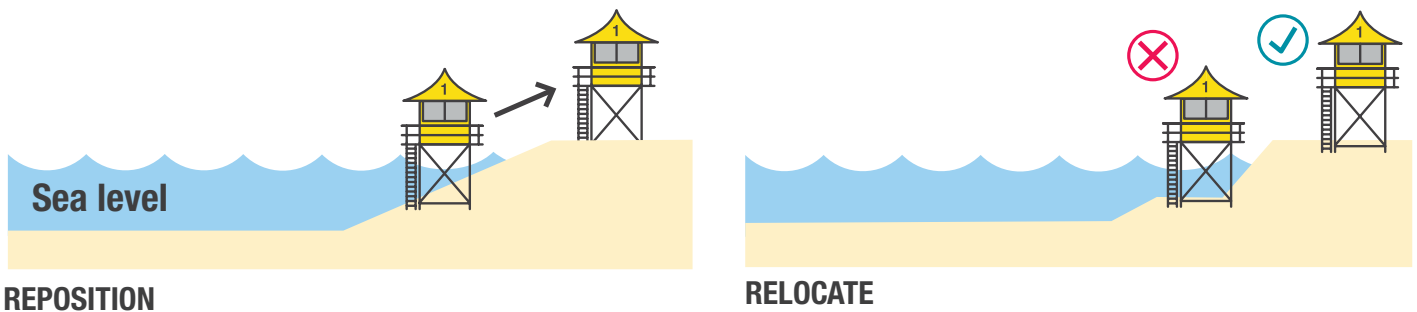
Modify

A **modify adaptation** approach uses physical measures to mitigate against coastal hazard risks. Examples include installing sea walls, tide barriers and beach nourishment.



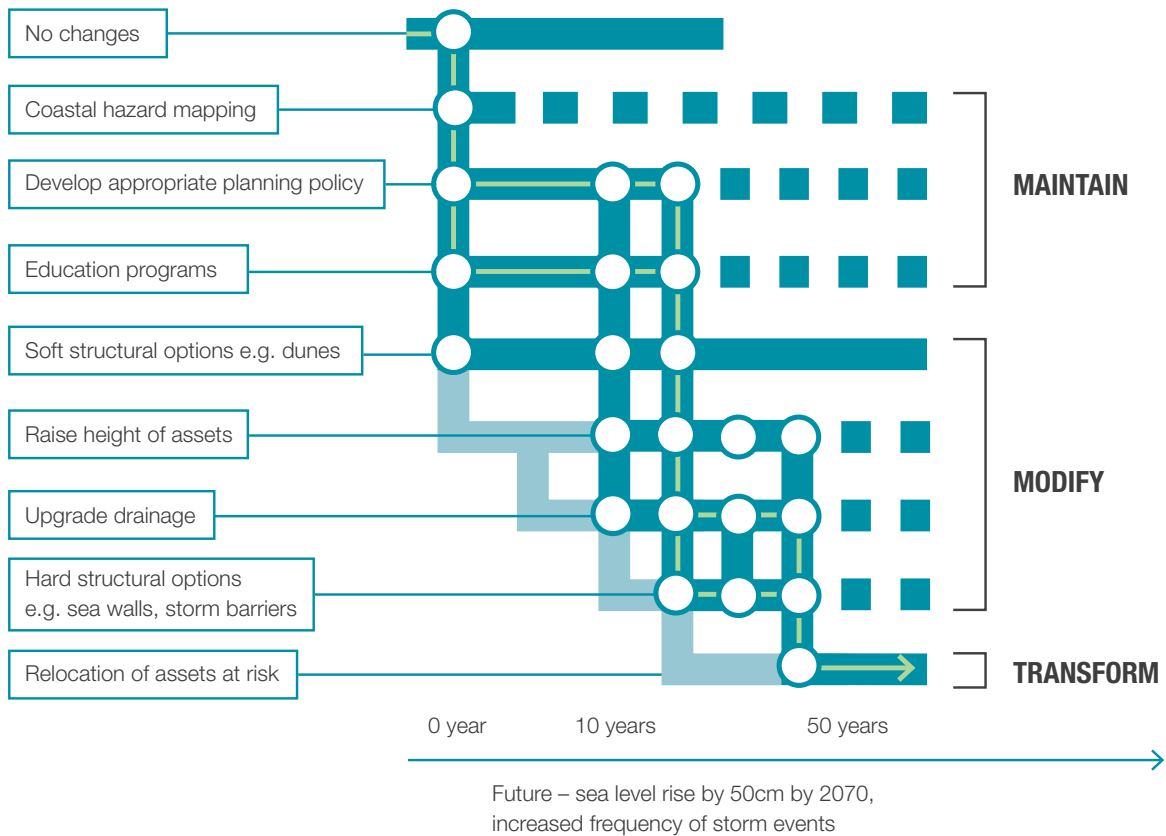
Transform

A **transform adaptation** approach is the relocation or repositioning of assets that have an intolerable exposure to risk. Examples include raising potable water pipes and relocating beach infrastructure such as beach towers.



Our adaptation planning uses a flexible pathways approach to allow adaptation options to be adapted as circumstances change over time.

Adaptation pathways comprise a sequence of steps that are triggered by a change in the hazard or associated risk. Once an adaptation option is implemented, it is used until it no longer delivers its intended outcome and a trigger point is reached, at which time another option is initiated.



Our resilient future – so what’s next?

Short term

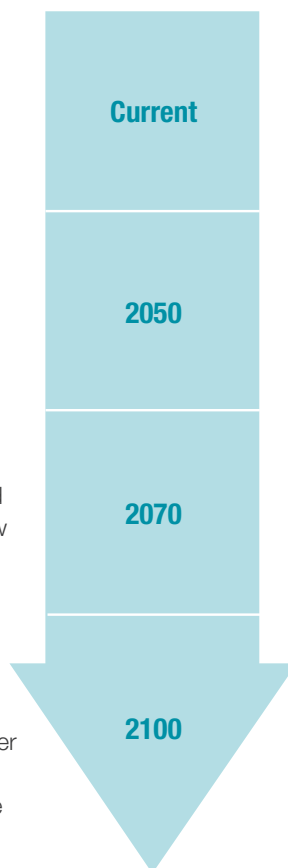
- Our current coastal management activities will continue and grow to meet the needs of our community.
- Continual improvement of our understanding of coastal hazards along with community education and engagement.
- Corporate plans and strategies, and emergency response planning, will be reviewed and amended in response to identified risks.

Medium term

- Adaptation pathways will be followed to support decision making and allow for actions to be prioritised and staggered for flexible management of our coastal environment into the future.

Long term

- Plans are being developed to consider the projected long-term impacts of coastal hazards. This will enable time to implement actions that respond in a timely manner.



HAVE YOUR SAY

Our community are instrumental in helping us to plan for coastal adaptation options.

In September 2020 we asked the community to tell us their values, priorities and concerns to assist us in preparing the draft Coastal Adaptation Plan.

We are encouraging you to now provide your feedback on the draft Coastal Adaptation Plan to make sure it meets your expectations and identify any new ideas for how we plan for the future.

You can have your say by:

1. Visiting gchaveyoursay.com.au/ourresilientcity
2. Downloading the draft Coastal Adaptation Plan from the resources section of the page
3. Completing the survey

If you have any further questions, you can also reach us via the online forum, telephone or email.

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