

Submission
No 175

**INQUIRY INTO PLANNING SYSTEM AND THE IMPACTS
OF CLIMATE CHANGE ON THE ENVIRONMENT AND
COMMUNITIES**

Organisation: Coastal Environment Association

Date Received: 1 November 2023

Please find submission attached in the form of positions advocated by Coastal Environment Association. The NSW Planning system needs to better integrate Coastal Management Programs under the NSW Coastal Management Framework with environmental planning powers and measures under the NSW EPA Act. As with much of the planning reforms carried out since 2013 Local Government has been given more responsibilities whilst losing environmental planning tools and statutory enforcement powers that it was able to exercise prior to 2013.

For example, the Pittwater Development Control Plan contains comprehensive controls and requirements designed to protect Pittwater's unique natural environment, scenic beauty and character. But radical 2013 changes to the EPA Act drastically reduced DCPs to non-statutory guidelines that must be applied flexibly to facilitate development. Overnight Pittwater DCP couldn't be legally enforced in the way that it was prior to 2013. DCPs should be reinstated as statutory controls that are legally enforceable not just guidelines. Also, Clause 4.6 in the standard LEP needs strengthening and specification of a minimum variation of development standards of around 10% only.

Kelvin Auld, Urban and Environmental Planner MPIA



CEA Coastal Environment Association

Northern Beaches

Goals

- Protect and enhance our unique coast, ecosystems and processes
- Support a healthy coastal environment
- Promote environmental education including the study of coastal processes and ecosystems

Advocacy:

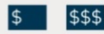
- Support Climate Action and NSW Coastal Management Framework.
- Work with Council and community groups on coastal protection, adaptation and mitigation strategies and projects.
- Advocate a whole of government/community approach to coastal protection and management including resilience planning.
- Address local climate change impacts including sea level rise and increased risk of flooding, beach erosion and coastal recession.
- Promote a total catchment planning and management approach for estuaries, harbours, wetlands and lagoons.
- Advocate a Northern Beaches marine park to improve the protection and resilience of marine biodiversity and ecology.
- Adopt National Trust's policy on off-shore sand mining (extraction)
- Support mixed coastal adaptation and mitigation strategies and projects suited to local conditions with full community involvement.
- All coastal management and adaptation measures, including beach nourishment, to undergo full environmental impact assessment including analysis of costs and longer term effectiveness.

Kelvin Auld : Chair, Coastal Environment Association

What are the options for adapting to sea-level rise?

There are five types of options for adapting to sea-level rise:

In choosing your options you will need to consider:



Low – high Potential cost to government and regulators



Short- to long-term Protection



1 Planning options

Scope objectives, strategies and policies
 \$ Taking account of risk and sensitivity to impact

Coastal hazard mapping
 \$\$ Mapping areas at risk of erosion and inundation, and mapping minimum floor height to avoid risk

Risk management
 \$ Cost-benefit analysis, vulnerability assessment, impact assessment

Emergency planning and preparedness
 \$\$ Prepare emergency plans for flooding, upgrade resources to match risk

2 Regulatory options

Regulation of land use
 \$ Zoning to regulate land use, establish minimum setback and building elevation etc.

Development permits
 \$ Requirements or regulation on specific developments to protect from hazard

Building regulation
 \$ Control design elements (e.g. materials)

3 Land use change or restriction options

Transfer of development potential
 \$ Land swap to allow development on low-risk land

Land acquisition
 \$\$\$ Purchase land at high risk and rezone

Land trusts
 \$ Manage land for conservation benefits, restrict development

Easements and covenants
 \$ Restrictions or conditions attached to land title

Foreshore tenure
 \$ Lease or license from crown so adjoining properties can develop integrated foreshore management

4 Structural options

Scour protection
 \$\$ Foundation protection for new or existing buildings

Structural elevation
 \$\$ Infill to raise land for building or habitable areas above flood risk

Sea walls, groynes etc
 \$\$\$ Hard shoreline structures to protect from flooding

Other hard protection
 \$\$\$ Storm-surge barrier, secondary protection e.g. raised roads

Flood proofing
 \$ Use building materials that can withstand short-term flooding, locate services (e.g. electricity) above flood level

5 Soft options

Dune building or rehabilitation
 \$\$ Creation or rehabilitation of dunes or offshore islands to buffer flood risk

Coastal wetland creation or restoration
 \$\$ Buffer to reduce wave energy

Beach nourishment
 \$\$\$ Addition of sediment to continually replenish loss from natural erosion

You are also likely to need to combine options

For example, zoning of at-risk areas as unsuitable for development + a sea wall to protect high-value assets already in place

Why is sea-level rise important?

Sea-levels are rising because of climate change



Thermal expansion

Warmer water expands, therefore global warming is causing the water in our oceans to expand



Melting ice

Global warming is melting our glaciers and the Greenland and Antarctic land-based ice sheets



Higher sea levels



The amount of sea-level rise depends on the amount of climate change

Sea levels are now 19 cm higher

than they were at the beginning of the 20th century

and

will continue to rise over the next centuries

half a metre or more by the end of the century; around 6 m if the Greenland ice sheet melts completely



however



if we limit our emissions,

sea-level rise could be reduced

but not for many decades, even centuries because oceans respond very slowly to change

Sea-level rise creates risks for our coasts

Higher water levels Floods



Higher wave heights Storm surges



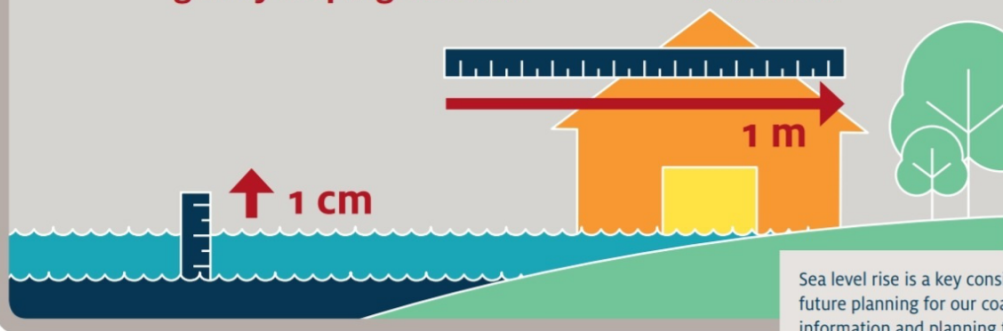
Threats

to land, roads, railways, hospitals, schools, houses


A rough rule of thumb

Approximately a 1 cm rise in sea level on a gently sloping beach...

...will bring the water 1 m further landward



Sea level rise is a key consideration for future planning for our coasts. Further information and planning tools are available at www.coastadapt.com.au



Our future on the coast

An overview of coastal
management in NSW





Climate change impacts on our coasts

Quick Links



Downloadable Resources



[Climate change adaptation guidelines in coastal management and planning](#) ↓



[Counting the costs: climate change and coastal flooding](#) ↓



[Climate change impacts on beaches and estuary sediments](#) ↓



[Resources from Sydney Coastal Councils Group](#) ↓



[Coastal erosion in New South Wales statewide exposure assessment](#) ↓



Here, we provide four documents that outline adaptation options in:

- [*Adaptation options: Planning*](#)
- [*Adaptation options: Engineering*](#)
- [*Adaptation options: Ecosystem management*](#)
- [*Adaptation options: Social, community and education measures.*](#)