

Submission
No 48

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

Name: Mr Ian Carruthers

Date Received: 2 November 2023

Submission: Inquiry into the planning system and the impacts of climate change on the environment and communities

SUMMARY

This submission proposes that this findings of this Inquiry should address:

1. An Integrated Framework for Adaptation Across the Three Levels of Government
2. State investment in underpinning climate change science and climate adaptation science
3. Access for All to Information about Climate Risks Affecting Their Interests and Decisions
3. Access for All to Information about Climate Risks Affecting Their Interests and Decisions
4. An Explicit Framework Identifying Who is Responsible for Meeting the Costs of Adaptation Measure and the Climate Event Damages.
5. Embedding Climate Risk in the Planning System.

The Relationship between the Planning System and Climate Impacts – action is Needed Now

Since the beginning of non-indigenous settlement in New South Wales, there have been connections between the planning system and climate impacts. For example, Governor Lachlan Macquarie issued warnings from 1810 about settlement too close to the Nepean River and ordered settlers to move to higher ground with new towns to accommodate them. People did not respond and many paid the penalty during floods.

Today the debate struggles on about what to do about protecting the intensive and rapidly growing settlements and infrastructure from floods in the Nepean-Hawkesbury valley.

State and Local Governments have adopted planning systems designed to protect the community and infrastructure against extreme climate events. A good example is the 1 in 100 year flood level as a benchmark for restricting developments and setting building floor levels.

It could be said that the present planning system does some things quite well in providing safeguards against climate extremes, but in other respects planning is deficient. For example, it could be argued that urban design (eg mature tree shading) and aspects of building design have gone backwards in terms of protecting residents from the effects of heatwaves.

There is also a linkage between infrastructure investment, such as river levees, and the planning system. For example, home insurance in Charleville, Qld became available or affordable again a decade ago after construction of a flood levee and other mitigation measures.

That picture of the planning system sits in a historic context of climate stasis – on average a constant climate. Of course, it is climate extreme events that do the damage and which need to be managed through the planning system. Australia is a place which experiences a high degree of climate variability – as Dorothy Mackellar expressed in her famous poem as “A land ofdrought and flooding rains”.

But today, and increasingly into the future, the climate system is changing due to manmade emissions of greenhouse gases into the atmosphere. Resultant changes in extreme climate events – their intensity and their frequency - are starting to be seen. Those extremes will become much stronger over the decades and even centuries ahead – even if Australia and other countries can manage to achieve ‘net zero’ emissions in a sufficiently timely way.

So, New South Wales (and Australia) confront the twin challenges of;

- A planning system which presents a legacy of dealing reasonably well in some areas, and not well in other areas, in providing resilience against past and present climate extremes.
- A planning system needing major reshaping to address in a forward looking fashion the new degree of climate extremes that will become evident in future.

The world’s climate scientists have been providing advice, for example through successive climate assessment reports of the UN Intergovernmental Panel on Climate Change going back more than 30 years. In Australia, for a good deal of that time, there has been policy paralysis due to “the climate wars”. And what measures have been introduced have dominantly addressed the necessary task of reducing greenhouse gas emissions.

The consequence is that not nearly enough attention has been paid to how to adapt to increasing climate change impacts , including through the planning system. It is urgent that adaptation is positioned centre-stage, alongside emissions reductions.

Australians and businesses are paying higher energy prices because the low carbon energy transition is having to be pushed at an accelerated pace, after a couple of decades of frustrating arguments and half-hearted policies. Meanwhile, the atmosphere was changing driven inexorably by basic physical science principles – which are blind to whether human decision-makers believe the science or not.

The same is true in the case of adapting to present and growing climate change impacts. Strategic planning system policies and decisions made today and onwards can either lead in the direction of greater or lesser vulnerability to climate change impacts. If the wrong choices are made, the consequences generally will be wholly or partly irreversible; and to undo them is likely to be much more costly compared to any cost in applying now a soundly-based climate impacts conscious approach.

The Scope of Climate Change Adaptation

It seems useful to address this matter through two distinct prisms:

- (a) Decisions and actions on essentially new matters where there is full scope to adopt now a conscious adaptation approach to projected climate change impacts.

- (b) What to do about the legacy consequences of past planning, urban design, building design etc decisions (which inherently assumed climate stasis –see above remarks) that increasingly in future lead to vulnerability to climate change impacts.

Climate change impacts and the need for adaptation measures will have consequences for almost every sector of the economy, every jurisdiction at all levels of government, every individual and environmental systems as a whole.)The terms of reference for this Inquiry exemplify this)This will be a major challenge but it must be confronted now and on a continuing basis over the long term.

What should form the Core Elements of the Findings of this Inquiry?

1 An Integrated Framework for Adaptation Across the Three Levels of Government

As just noted, all decision makers (individuals, businesses etc) will need to incorporate climate adaptation into many of their key decisions. But they will be ill-equipped to do so unless Governments collectively provide a clear framework for shaping adaptation actions – and to avoid maladaptations.

Adaptation will play out largely at the local level – actions will need to be tailored to local circumstances. So, Local Governments have an important role – but they don't have the resources or professional depth to each figure out and apply adaptation responses in their communities – many of the issues are complex. The State Government must provide a State-wide adaptation policy framework; and guidance on how to approach some of the more difficult issues

Take for example the case of the impacts of sea level rise and storm surge. A Commonwealth vulnerability study identified between 40,000 to 60,000 existing residential buildings on the coast of NSW at risk of inundation by about 2100. (About 10,000 in the Central Coast LGA.).

(<https://www.dcceew.gov.au/climate-change/policy/adaptation/publications/climate-change-risks-australias-coasts>)

It will be beyond the capacity of, for example Central Coast Council, to deal with this legacy problem. The State-Government needs to lead the way with a comprehensive coastal adaptation framework. For example:

- When are seawalls appropriate? What design characteristics? Addressing sand nourishment – where to source sand
- Who bears the cost of adaptation measures – see below?
- Where does planned retreat fit in?

More tractable will be the planning requirements for new developments in the coastal zone, but again a State-wide framework is bound to deliver more effective and consistent approaches by Local Governments.

2. State investment in underpinning climate change science and climate adaptation science

The Commonwealth mostly funds basic climate change science, for example through CSIRO and the Bureau of Meteorology. The State Government needs to engage with the Commonwealth in expressing its needs. And in select instances, the State should identify where it needs to make supplementary investment eg in climate impact projections.

The State has a more direct interest in engaging in science activity on developing adaptation strategies and options relevant to its climate, social, economic and environmental conditions. It should proceed with a systematic, prioritized investment in this field. It needs to be sustained on a continuing basis – too often Governments run a program for several years and then drop them – this is wasteful.

3. Access for All to Information about Climate Risks Affecting Their Interests and Decisions

A comprehensive climate adaptation response effort can only happen effectively if there is ready access by decision-makers to state-of-the-art information applicable to them making an informed decision. State and Local Governments must be the key agents to provide this.

For example, a person looking to build a new home or buy an existing home should have access to mapping and spatial information applicable to their decision. This should encompass: (a) existing known climate risks – which is reasonably well covered at present, but no doubt could be improved; and (b) projected climate risks extending out over a period relevant to the consequences of the decision they seek to make.

4. An Explicit Framework Identifying Who is Responsible for Meeting the Costs of Adaptation Measure and the Climate Event Damages

The future costs in NSW from climate-driven extreme events are potentially enormous – take for example the home values associated the above reference to existing homes on the coast at risk; to which need to be added the existing homes in bushfire and flood prone areas.

It is well beyond the capacity of Government to backstop these emerging damage costs from legacy planning and investment decisions, This will need to be handled through access to information about the approaching climate exposure (Element 3 above) and embedding the forecast damage costs in decisions by buyers and investors in assets

A climate-conscious planning system can drive decisions for new developments, assets and infrastructure towards a climate resilient approach, thereby not adding to the latent in-built damage costs associated with the current legacy effect.

(a) The Role of Insurance

Insurance is a well established instrument for individuals and businesses to manage climate risks for their assets. Governments should encourage and not provide disincentives to asset owners taking out insurance.

But insurance is not a panacea. For example:

- It is well demonstrated that many decide not to take out insurance or under-insure
- the Commonwealth mandated that home insurance policies must offer flood insurance, but in flood prone areas the premiums can be prohibitive
- generally, home insurance policies have as a general exclusion category “action of the sea” – leaving coastal frontage homes uninsured against sea inundation.
- as climate risks increase in an area, insurance companies raise premiums accordingly – which can make the cost prohibitive; or they can withdraw offering insurance cover in that situation.

(b) A Market- Based Approach

When climate risk reaches unmanageable levels (eg after repeat serious flooding) the call is made at times for some level of Government to provide a buy back scheme. Or, if planned retreat is raised that Government compensation is provided.

The scale of prospective future costs is such that it is difficult to see how any individual or collective of levels of Government could afford to apply these mechanisms on anything more than a very limited basis – if at all.

Additionally, there will need to be major investment in protective infrastructure – who will meet that cost – tax-/rate-payers or private beneficiaries. For example, if a seawall is proposed to protect beachfront properties who meets the cost of construction and maintenance and of sand nourishment? In what circumstances is an investment in protection predominantly a public good, and is that where Government steps in?

This suggests that the pathway has to be that the State Government should provide a clear framework of who meets the cost of protective adaptation measures and who meets the cost when assets are damaged or where there market value declines due to known climate risk.

5. Embedding Climate Risk in the Planning System

As noted above the planning system addresses past and present climate risks.

Clearly, there is a pressing need to embed future climate risks within the applicable planning instruments – Local Environment Plans, Development Control Plans etc