

# **The Big Questions: Given climate change, how can Queensland's planning system be rendered fit for purpose?**

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## **Introduction**

We face changes to how, and even where, we live driven by climate change, biodiversity loss, the consequences of a shift to renewable energy sources and demographic changes. A continuing decline of population and services in the bush is likely. There is a seemingly ever increasing population in the south east corner with its tremendous pressure on supporting infrastructure and the natural world.

The national Planning Institute tells us that there are limits to planning responses in balancing natural and cultural values in response to climate change threats. The Institute highlights the role of other incentives, investment and regulation.

This background paper illustrates the many issues and questions requiring consideration before we can be confident that our planning systems help rather than hinder positive results from the now inevitable transition to a different future.

The RSQ sees today's proceedings as a first step in assembling ideas about what needs to change, to be complemented by our call for papers on any topic related to the broader questions. We will continue working on this agenda into next year and seek more feedback when we get the contributions together.

We welcome your contributions to our continuing efforts to develop a framework for transition to a different, sustainable future. We cannot explore everything today. Here are a few broad general questions to begin with.

We already have programs and strategies that recognise the climate change issue? How can the planning systems be modified to realise the goals in them?

Are there existing examples and processes we can build on?

There are contradictions and confusions among our many laws affecting planning. How can we deal with this problem?

The still common ESD objective has internal contradictions. How can we overcome the problems caused by this?

A future that maintains and increases human wellbeing while safeguarding the natural environment supporting it will not happen automatically. What do we see as elements of a framework to make that future possible?

## Discussion Paper

Climate change is the background to our consideration of Queensland's planning systems. 'Systems' plural because we have laws in addition to the *Planning Act 2016* that also affect land, water and sea use and so relate to climate change, for example the *Regional Planning Interests Act 2014* relating to mining, and other Acts relating to land and maritime activities, the coast, the Great Barrier Reef, electricity transmission and operation, forestry, biosecurity, nature conservation and environmental protection.

There is the inevitability of impacts from the environmental issues and responses to them and from demographic changes. Hence the need to adapt regardless of political persuasion or personal philosophies - 'business as usual' will not cut it and will not be possible anyway. Changes are underway whether we like it or not:

Climate change and the net zero transformation will have a significant impact on the structure of the economy and the choices Australian consumers and businesses make over the coming decades. While the global net zero transformation is expected to drive changes in the structure of Australia's economy that will be challenging, it will also create growth opportunities in some occupations and existing and new industries. (*Intergenerational Report 2023*).

People commonly advise 'Follow the money:' 'House prices to fall because of climate change: Reserve Bank boss Michele Bullock warns Gold Coast, Tweed Heads and Byron Bay in firing line.' (Daily Mail headline, August 2023) CoreLogic research suggests Queensland has the highest concentration of coastal properties at very high risk from climate changes, particularly in the Sunshine Coast and Gold Coast areas.

Question: Thank you so much for your lecture. You had a chart there with housing prices and the physical risk and how that will affect them across Australia (chart attached). It was interesting that they were mainly concentrated in areas that are highly dependent on commodity exports, like WA and Queensland. Together with the lower demand for those commodities, given the transition to zero emissions and so forth, will that amplify the overall effect; and what is the associated risk from that for economic growth and price stability?

Michele Bullock (Deputy Governor, Reserve Bank): If I interpret your question correctly, I think what you're talking about is the potential impact of structural change and the impact that's going to have on workforces that work in particular areas. And it's true that, if you have climate change and it's impacting different regions in different ways, then, as I said earlier, some local communities are going to be affected much more than others. And the flexibility of the labour market to move to where the jobs are and get the skills that they need: that's going to be really important in that context. (Question &

Answer session following speech *Climate Change and Central Banks*, Sir Leslie Melville Lecture, 29 August 2023)

The challenge is how to adapt to a changing world while most of the population is seeking stability in their daily lives and hope for the future. Is Queensland's planning system up to the challenge? If not, what changes do we need to make?

The following background concentrates on the impact on the environment from planning policies, law and decisions, noting that the natural environment is the foundation for all human wellbeing – resources, health, amenity, quality of life.

### **The planning policy framework**

The climate change risks are set out in the Queensland government's *Pathways to a climate resilient Queensland*: higher temperatures, hotter and more frequent hot days, warmer and more acidic ocean, rising sea level, more frequent sea level extremes, harsher fire weather, more drought, more intense rainfall events, fewer frosts. The consequences identified by the government are:

Degradation of the natural environment and biodiversity loss are threats to Indigenous cultural values and practices. Sea-level rise will pose a challenge for low-lying coastal communities.

Extreme events may damage workplaces, equipment and facilities. Increased frequency of flooding and inundation, bushfires and heatwaves may disrupt supply chains, presenting difficulties for businesses, staff and customers.

Increases in temperature may alter the tourist season in some regions. Increased bushfire and flooding risk may threaten tourism infrastructure and damage popular tourist sites.

More frequent sea level extremes may increase the risk of coastal hazards such as storm tide inundation and erosion events, resulting in increased clean-up and maintenance costs. Flooding events could affect critical infrastructure such as water, sewerage, storm water, transport and communications, and some inland areas are likely to face increased bushfire risk. These changes may increase the cost of insurance to business and the community.

Projected increases in tropical cyclone and storm intensity and sea-level rise will see a higher risk of flooding and inundation, particularly for coastal communities. Higher temperatures and longer dry seasons will increase bushfire risk in some regions.

Higher temperatures and more hot days could result in heat exhaustion and increased heat-related mortality, particularly among outdoor workers and vulnerable people, including the very young and old. The current ranges of vector-borne diseases such as malaria and dengue fever may change in

response to changing temperatures, humidity and rainfall. Similarly, some dangerous animal species may expand their ranges as air and sea temperatures rise. Rural, regional and remote communities are particularly sensitive to a changing climate.

Even a small rise in temperature can have serious implications for biodiversity and natural systems. Increased sea surface temperatures are likely to cause more regular coral bleaching in the Great Barrier Reef. Warming seas and increased storm tide inundation may harm coastal ecosystems.

More climate extremes and changes in rainfall variability in some regions could lead to decreased crop production, forage production, surface cover, livestock carrying capacity and animal production. Livestock may be exposed to a greater risk of heat stress in some regions. Plant diseases, weeds and pests may spread as conditions change.

The planning issue is recognised in the *Pathways* document:

Land use planning is widely recognised as one of the most cost-effective ways to reduce the exposure of people and the built environment to climate exacerbated risks both now and in the future. From July 2017, the Queensland Planning Act 2016 will be supported by a range of new state planning instruments, development assessment requirements and guidelines which work together to facilitate the achievement of ecological sustainability – including addressing the impacts of climate change. For example, the State Planning Policy has been amended to specifically require that the projected impacts of climate change be avoided and mitigated in strategic land use planning and development assessment. In addition, statewide coastal hazards mapping has been updated to include the internationally accepted climate change projection of 0.8 metre sea level rise to 2100, so these projections can be used in the land use planning and development assessment process.

The *State Planning Policy* (2017):

recognises that mitigating and adapting to climate change is also an important consideration for planning at all levels. All state interests should be applied and considered in the context of a changing climate to support Queensland's people, economy and the environment.

and

The risks associated with natural hazards, including the projected impacts of climate change, are avoided or mitigated to protect people and property and enhance the community's resilience to natural hazards.

There are, however, several 'State interests' and the *Policy* accepts that they may be competing:

The SPP does not prioritise one state interest over another at a statewide level. It acknowledges the way state interests need to be applied will vary between, and within, regions and local government areas, and depend on environmental, economic, cultural and social factors. State interests will not always be applied in the same way throughout a state as large and diverse as Queensland, and there may even be differences in how state interests are integrated within a local government area.

### Questions:

- Are the 'good intentions' in these documents evident from observed outcomes?
- If not, why not?
- Do the planning framework and associated laws and their administration provide a framework for the transition to an inevitably different sustainable future for people and the environment that supports them?
- Does the planning framework undermine effective action on environmental issues, including climate change, as it does in New South Wales (*Independent Review of the Biodiversity Conservation Act 2016*, August 2023)?

### What do we want?

They paved paradise to put up a parking lot

They took all the trees and put 'em in a tree museum  
And charged the people a dollar and a half just to see 'em  
(Joni Mitchell, 1970)

Surely a first question is what do we current Queensland citizens want for our state? What are our preferred futures? Is blind acceptance of outcomes dictated by Australian government policies and commercially driven decisions good enough, or do we need a well-developed scenario based on human wellbeing and ecological sustainability that takes account of many inputs?

The *draft Shaping SEQ: South East Queensland Regional Plan 2023 Update* accepts without question that the south east Queensland population will be six million by 2046, an increase of 63% in the next 24 years.

Has this acceptance been based on rigorous research or open public debate? An inevitable outcome will be compromises with aesthetic standards and levels of amenity.

### Questions:

- Should a planning process begin by framing questions for people to respond to, for example, what is satisfying for us now, and potentially for the future?
- How can we accommodate national and state needs without compromising local wellbeing?

- How can we ensure that the needs, aspirations and life style choices of existing populations are known and understood before committing to acceptance of the wishes of potential newcomers?
- Is an 'anthill' housing scenario really the only viable answer for population increase, or just a lazy copout?
- What tests should be used to judge whether planning scenarios will deliver cost effective, environmentally sensitive and socially equitable outcomes within the constraints of climate change?

### *Planning Act 2016*

The stated purpose of the Act is to facilitate the achievement of ecological sustainability (section 3), but the definition of ecological sustainability includes economic development, environment protection and maintenance of human wellbeing. There is nothing in the system for achieving this purpose (section 4) that resolves the potential conflicts or competition among them recognised in the *State Planning Policy*.

Ecologically sustainable development has not succeeded as a working guide for decisionmakers in Australia seeking long term environmental gains for many reasons, for example: reliance by governments on economic growth as the only test of societal success, waiting for court cases to give meaning to the idea, enough denialism about advances in knowledge to frighten policy makers into inaction and to support business as usual approaches by the general community, the active encouragement (or passive acceptance) of extraordinarily high population growth without regard to the pressure this brings on natural resources.

Similarly, there is nothing in the Act or policy documents importing the universal duty to prevent and minimise environmental harm in the *Environmental Protection Act 1994*:

A person must not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practicable measures to prevent or minimise the harm (the general environmental duty). (section 319)

The ecologically sustainable development test in the *Environmental Protection Act 1994* is more friendly to resolving conflicts in favour of the environment, and consequentially human wellbeing:

The object of this Act is to protect Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends (*ecologically sustainable development*) (section 3)

The Independent Review of the New South Wales *Biodiversity Conservation Act* concluded that the principles of sustainable development 'are no longer fit for

purpose,' preferring instead a nature positive vision with primacy for environmental repair.

### **Questions:**

- Is the ecologically sustainable development test too ambiguous as a test?
- How to resolve the tension between the *Planning* and *Environment Protection Acts*?
- How should the inconsistencies and confusion in Queensland law affecting planning outcomes be overcome?
- Should a new overall test be developed, based, for example, on developing and maintaining satisfied communities with optimum quality of life embedded in environmentally sustainable settings?
- Should public and private investor decisions be required to establish that the outcomes of the decisions would be increases in some or all of natural capital, better health, better amenity, that is, an increased wellbeing test for existing people as well as newcomers?

### **National Planning Reform Blueprint**

The National Cabinet has endorsed a *National Planning Reform Blueprint* (16 August 2023). It takes for granted that we will have population increases exceeding known housing availability. It has contradictory elements, for example, 'streamlining' approval processes but also improved community consultation processes and better quality housing. It does not mention the well proven approach of direct public investment in housing or building with adaptation to climate change in mind, or the need to locate housing to minimise risks from extreme natural events or sea level rise.

There is no mention of the introduction of effective environmental assessment systems, or freeing up vacant dwellings (in practice, nowhere near the more than 1 million mentioned in the last Census), or regulating short term rentals or freeing up Council rates caps to enable action on vacant dwellings.

### **Question:**

- What needs to be added to the Blueprint to make it climate change responsive?

### **Biodiversity issues**

The *State Planning Policy* recognises that biodiversity is a climate change issue:

Queensland's biodiversity is unique and irreplaceable with a diverse range of ecosystems reflecting the state's complex physical environment. These ecosystems include the Great Barrier Reef, desert landscapes, Gondwana rainforests, and wetlands that are all home to threatened animals such as the koala, cassowary, and bullock jewel butterfly. In Queensland, the natural environment provides food,

recreation, materials and energy. It contributes to the character and identity of the places we live, and to the social, environmental and economic wellbeing of our communities.

Safeguarding biodiversity at the national, state, regional and local levels is essential. Promoting ecological resilience to manage the impacts on ecosystems from climate change is also essential. Planning and development decisions can maintain and enhance biodiversity by protecting ecosystems, their ecological processes, and the ecosystem services on which we rely.

(Professor Hugh Possingham) said (responses to the continuing deterioration of Australia's environment) would have major consequences for the economy, human health, agriculture and clean air and water if the country continued to run down its natural capital. 'Underfunding the care of the environment is an existential threat far greater than inflation,' he said.

Possingham said the environment was important for people's health and wellbeing and about half of Australia's gross domestic product relied on natural systems. An assessment of 40,000 datasets had found Australia's threatened species had been declining at a rate of about 2% a year since the turn of the millennium.

If everybody's superannuation had been declining at 2% a year, every year since 2000, what would we think? If the Sydney Opera House had been disappearing at 2% a year, what would we think?" he said. "There seems to be this disconnect between what we tolerate for economic and social outcomes and what we tolerate for nature. (Guardian, 13 May 2023)

### Questions:

- Are changes needed in planning law and practice to meet our needs for improved protection and restoration of biodiversity?
- How can a significantly increased population in south east Queensland be reconciled with the need to reverse the decline in biodiversity, in the accepted knowledge that the size and growth of human population are primary causes of biodiversity decline?
- How do we assess the impact that climate change will have on biodiversity and accommodate that knowledge in planning decisions?
- Should we consider a new environmental law that would bind all, including planning decision makers, with objectives of reversal of the continuing decline in Australia's natural resources and capital and ensuring the conservation, sustainable use in perpetuity and sharing of benefits of biodiversity?



## Sea level rise, coastal hazards and floods

New buildings must be out of harm's way. (M Fuller and M O'Kane, Flood Inquiry Co-leaders' 2022 *Flood Inquiry*)

Those who, notwithstanding, shall perversely neglect the present Admonition and Exhortation to their own Benefit, must be considered wilfully and obstinately blind to their true Interests. (Lachlan Macquarie, on folly of decisions ignoring well established flood risks, 1817)

The Queensland government has adopted a projected sea level rise of 0.8 metres by 2100. Sea level rise projections by Climate Central indicate severe consequences for much of Queensland's coastline. Current knowledge suggests that the Gold Coast, Sunshine Coast, Cairns and Port Douglas are particularly vulnerable.

The Gold Coast Council recognises the issues: 'Current risks such as sea level rise, storm tide inundation and coastal erosion are compounded by the predicted impacts of climate change.' But its adaptation plans reflect engineering solutions and its planning advice accepts that there will be development on flood risk land. Gold Coast mapping suggests that half of Gold Coast properties are already at flood risk. As early as 2013 a 970 dwelling development approval stipulated the inclusion of lifeboats and a flood free helipad. The Council apparently believed that it had no option because of legal precedent.

The Council has persisted with the engineering approach to the coast in place since the 1990s, even though it has to be eternal to be effective, and obviously pointless in the face of sea level rise and more extreme natural events. Where is King Canute when we need him?

### Questions:

- How should planning and development decisions be constrained by flooding and sea level rise knowledge and likely increased risk?
- Should private insurability be a test in decision making?
- Should policy making and law reform be based on:
  - making space for waters, including at flood times
  - avoiding risks to people, their enterprises and their possessions from extreme natural events, including heat waves, floods, bushfires and projected sea level rise?
- When should nature base solutions start replacing engineering solutions?
- When should planning for a retreat from affected areas begin?
- Who should be responsible?
- Who should pay?

## Climate change mitigation

Analysis of official information shows that Saudi Arabia is the only country with per capita greenhouse gas emissions higher than Australia. Australia's exports of fossil fuels lead to six times more emissions than does our local consumption. These contribute to climate change that will affect us, even though they are not counted nationally.

Our emissions excluding land use have continued to increase since the benchmark year of 2005. State government decisions on land clearing and forestry account for almost all of the 24% reduction in emissions since 2005.

Fossil fuel enterprises are increasingly described as becoming stranded assets, with potential losses of up to 400 billion dollars. (Semieniuk et al, 2022). There have already been announced mine closures in Australia, but production has remained steady as approvals are given for new mines. Queensland still relies on fossil fuels for 90% of its energy needs.

It makes no sense to sacrifice some of our most precious and productive land to a dying industry that will harm our climate and fail to provide sustainable economic development. Fossil fuels are a dying energy source. People will always need food and fibre to survive. We should prioritise what matters. (Senator David Pocock, 23 August 2023)

It would be wise to plan on a severe fall in coal and gas extraction over the next forty or so years, with dramatic social and financial impacts for many parts of Queensland.

### Questions:

- Do our planning arrangements help or hinder the transition away from fossil fuel use and to associated reduced energy intensity?
- Do our planning arrangements facilitate social and economic transitions in the places and industries affected by the inevitable decline of fossil fuel industries?
- How can we use planning systems as part of incentive arrangements to continue responsible vegetation and land management practices that contribute reduction in greenhouse gas emissions?

### Regional Queensland

The energy, resources and land sectors are at the forefront of decarbonisation and as such, the associated impacts of transitions will most in Queensland's regions. ... more than half (51%) of its population live outside the capital city. ... decarbonisation in the face of climate change can be thought of as a threat multiplier - exacerbating existing stresses on rural industries and communities as well as adding new ones. (*Decarbonising Queensland: Four pillars toward a resilient and inclusive low-carbon economy*, Policy Brief for

Minister for the Environment and Science from the Queensland Vice Chancellors Forum July 2022)

The four pillars in *Decarbonising Queensland* are Mission-oriented Leadership, which includes support for bottom-up community led programs, building our Regions, including using Regional Drought Resilience Plans as a template, Energy and Industry Transformations and Valuing Carbon Ecosystems, including the need to tighten the *Vegetation Management Act* to reduce land clearing.

A pioneering *Burnett Region Resilience Strategy* (2022) has been developed by the Wide Bay Burnett Regional Organisation of Councils in partnership with the Queensland Reconstruction Authority. It emphasises co-design with locals, place based strategies and integrated multi-objective responses, including for climate change adaptation. It advocates prevention and preparedness over reconstruction and recovery. The *Strategy* also advocates attention to risk, including development of a strategic environmental management approach:

To reduce overall exposure of people and property to potential impact and disaster over time, development across the region should be contemplated with existing and future hazards and risk at front of mind.

The *Strategy* supports the incorporation of Aboriginal knowledge in land, water and sea management:

We understand and respect the natural processes of land, waters and the sea. We combine traditional knowledge and western science to care for and sustain healthy Country.

The Royal Societies of Australia have advocated a custodial approach to recover from past degradation and prosper in the future:

We can succeed if we adopt a custodial approach to land and sea – ‘caring for country’ – as our highest priority, so we safeguard the effective functioning of our ecosystems. We will need changes to our laws and institutions, and active intervention in our land and seascapes with public support, as we transform our society to reflect this new model of stewardship. There are many things we can do now as part of this transition, as individuals, governments, businesses, educators and land and sea managers. (Quinn, 2021)

A *Declaration for the future of our Rangelands* developed by The Royal Society of Queensland, AgForce and NRM Regions Queensland in 2019 advocated:

Reviewing and revitalising institutional arrangements to deliver strengthened regional participation in land use planning, regulation, and conflict resolution.

This *Intergenerational Report 2023* proposition could be acted upon to benefit regional Queensland:

Well-planned and well-managed population growth, including through targeted migration, will help to deliver better outcomes on infrastructure, housing, service delivery, and the environment and can support rising living standards over time.

There is also a *Queensland resources industry development plan* (2022) with its contradictory support for coal and gas exploitation but also for decarbonisation and improved environmental and social outcomes.

### **Questions:**

- How can our planning policies and law adequately accommodate community led and place based initiatives?
- How can our planning arrangements contribute to environmentally and socially sustainable regional progress?
- Do our planning arrangements and land use laws and practices meet the need to limit hazards such as bushfires and limit the impacts of extreme events?
- Do our planning and related arrangements need change to deliver the aspirations in the Rangelands Declaration?
- Do our planning arrangements and their administration adequately incorporate Aboriginal knowledge?
- How can the current contradiction in resources policies be overcome to achieve fair and reasonable outcomes and facilitate a transition to a successful decarbonised future?

### **Human population**

The *draft Shaping SEQ: South East Queensland Regional Plan 2023 Update* accepts without question that the south east Queensland population will be six million by 2046, an increase of 63% in the next 24 years.

The draft recognises the relevance of natural systems and climate change:

Since 2017, SEQ has experienced several flooding events, bushfires, and severe storms that have impacted homes and the economy. The draft *ShapingSEQ 2023 Update* acknowledges the substantial disaster resilience and climate adaptation policy and practice advancement that has been occurring in Queensland. There is a clear need to create futures that are disaster-resilient and adaptive to change. Adapting and building resilience will increase the collective 'capacity to cope' and will help SEQ, and its communities and economies, to deal with the inevitable natural hazard events and other disruptions that will occur in the future.

The draft claims that:

the draft Shaping SEQ 2023 Update continues to protect, restore and promote biodiversity, balancing growth needs with achieving better biodiversity outcomes.

It also asserts that:

Ultimately, bioregional planning aims to achieve better biodiversity outcomes and greater development certainty in Queensland through providing clear guidance on areas to be protected from development, areas that may be prioritised for development, and areas where development can proceed subject to agreed rules.

It postulates a positive future in 50 years time:

SEQ's catchments will be the best managed in the world, resilient to climatic events and able to minimise economic and social costs to the community. SEQ's rivers, beaches and waterways will continue to support growth and prosperity and maintain the quality of life for which the region is renowned. Moreton Bay (Quandamooka) will be a World Heritage listed healthy Ramsar wetland of international importance, and the cultural, environmental, economic and recreational value of the bay and islands will be an important component of SEQ's way of life.

The biodiversity and quality of our regional landscapes, national parks, open spaces, waterways and beaches will continue to positively differentiate our region and support sustainability and community health.

The reality is that any increase in population without significant changes to our patterns of production and consumption will lead to added pressure on biodiversity, reduced resilience to extreme natural events and reduced adaptation options to accommodate impacts of climate change.

### **Questions:**

- Does the current planning system deal effectively with the environmental, social, amenity and economic consequences of increased human population?
- Is there a population distribution policy for the State (just telling Councils they have to have more people is not a policy, more a lazy copout).
- Does the current planning system create confidence that the wishing and hoping in the *draft Shaping SEQ* can be realised?
- How does the planning system need to change to foster changes in our patterns of production and consumption that will increase our capacity to restore and protect our natural capital, maintain or increase amenity and overall wellbeing and adapt to the impacts of climate change.

## Other issues

There are many other issues that are related to planning, such as mining, transport and infrastructure on land, on waterways and at sea, Aboriginal heritage, local, State, national and world heritage values, international obligations, avoidance or responsible management of waste and pollution, changing impacts of pests and diseases, building codes, tax systems, responses to extreme events, education and training.

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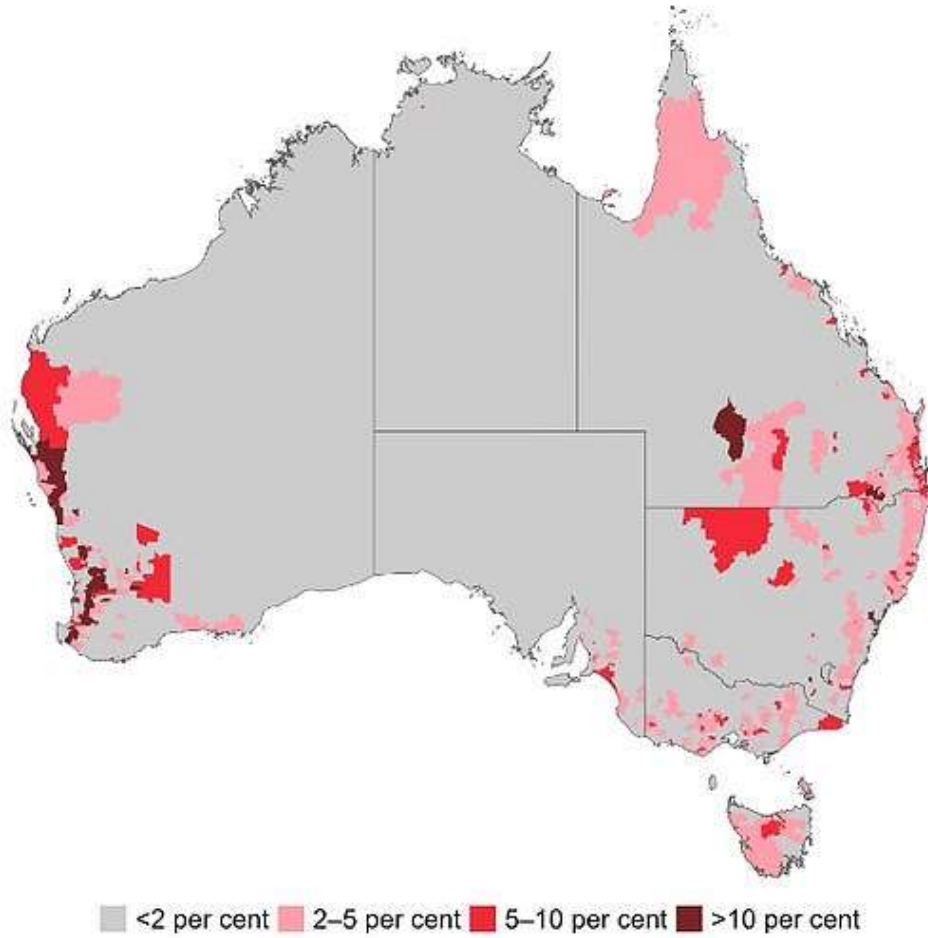
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Figure 1: Housing Price Effects of Physical Risk



\* Estimated effect of increased climate hazard risk on housing values in 2050, by postcode, relative to current climate hazard risk.

Sources: ABS; RBA; XDI-Climate Valuation