

2017 NSW COASTAL CONFERENCE: CONCURRENT SESSION

LAND USE ZONING RESPONSE TO CLIMATE CHANGE

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Remember the word: "defensibility".

Future natural events will generally intensify with predicted climate change. Different regions will experience differing impacts, but to what extent are these transparently taken into account when **land use zoning strategies such as Local Environmental Plans** are being developed? Land use assumptions need a major rethink, coloured by those impacts.

Countries with long-term growing populations contrast strongly with southern Europe, Japan and elsewhere where population growth is neutral or negative. As a result, our land use strategy generally leads incrementally to **upzoning**, where land moves from low intensity, low value to more intensive, valuable uses. Such assumed upzoning is an incredibly strong driver of investment, of market behaviour, of public treasury budgets and by inference, of political behaviour supporting property investment.

This broad-brush approach must be replaced to reflect a more finessed settlement pattern which responds transparently in specific locations to anticipated impacts of climate change, such as

- more intense and/or frequent storms with more damaging **wind and waves**
- **coastal erosion** (sped up by higher sea levels, increased storm surges, more frequent & deeper low pressure systems),
- more intense and/or frequent storms with heavier rainfall and therefore changed **flood** patterns,
- changes in temperature and humidity which shorten bushfire **burnoff** periods in some locations, and
- changes in temperature, humidity, vegetation growth and bushfire hazard load, leading to more intense and/or frequent **bushfires** in some locations.

Those are the **natural** drivers, countered by entrenched political, financial and market blockages to a rational response to such drivers. However, the insurance industry is already factoring climate change impacts into its products.

Is this insurable? Were the beachfront houses shown earlier? If so, for what cost?

Another side of this issue is the **human drama** we see on all media when a natural event impacts on people and places. Politicians, media people and volunteers are pictured in high-vis vests and hard hats tut-tutting that the ocean, a flood or bushfire has "unexpectedly" destroyed someone's garden or house. Increasingly and worldwide, volunteer organisations such as SES, Surf Clubs, RFS and Marine Rescue struggle to find enough members. Their insurers demand less risk-taking.

Increasingly, emergency management organisations are refusing to try to defend indefensible properties, or to try to rescue those who were warned but did not evacuate in time.

What are the blockages to action?

Is there a legacy of poor land use planning decisions? There used to be less information, little human-induced climate change, much more gradual change until recently, along with assumed rescue then government hand-outs for recovery (inferring your damage was just an unforeseeable accident). Today we have better quality information including modelling of future conditions, giving confidence for decision-making about risks to highly-impacted properties. Some are already unsafe; others' **assumed development potential** needs to be explicitly reversed.

Nature will increasingly win during disruptive events. As intelligent humans with good quality information to hand, our response can be to minimise the risks by selectively changing land use intensity, location by location. Why don't we? Every State allows downzoning as one of a number of responses to changed circumstances such as climate change. But how often does it occur? Rarely. Perhaps it is politically and financially too difficult, due to public outcries, private property interests, state and local treasury impacts from reduced land values, and so on. On the contrary, most of us know of flood-prone, bushfire-prone or coastal-process-affected properties which were upzoned then disastrously developed. Even building designers are responding to increasing threats by moving infrastructure such as electricity and media hubs out of basements (which flood first) to a higher level. Without electricity, a flooded high-rise's water supply will fail, forcing evacuation – bringing us back to those overstretched emergency services.

Downzoning is now an infrequently-implemented **optional** response to natural hazards, along with planned retreat and other softer responses which all focus on the built form, not the land beneath. However I am arguing for action: we (the professionals, politicians and our industry organisations) need to take the initiative to tell the **market** consistently over time what will happen and why.

In public relations terms, how might this necessary if painful shift in thinking and messaging be achieved?

Long-term market signalling is the least painful way for current and future landowners to adjust. Message spruikers include politicians, bankers, insurers, journalists, community leaders, property professionals and emergency managers as well as scientists and town planners.

Taking a business and political approach, market signalling enables orderly transitioning away from current expectations towards safer but climate-change-related land use. Given time, the market will adjust to selectively lowered land use potential. Smart buyers are already asking climate-change-related questions.

The specific solution?

Gosford City currently has an "urban investigation" zone where long-term studies determine which areas can be upzoned to cater for a growing population. Let's add a new "non-urban investigation" zone in NSW, where modelling (eg of risk and defensibility) determines selective downzoning over time. The professional investigations are likely to take some years. Allow the market to adjust through consistent formal and informal information provision, supported by politicians through several electoral cycles.

Importantly, if land remains in private ownership, no compensation is payable in NSW, Victoria, WA or Tasmania, at least. Since 3 July 2017, Queensland Councils are exempt when they reduce property value in response to natural hazards.

These key enabling facts support us taking a long-term view, based on market adjustment to a consistently delivered public message from credible sources about climate change and land use potential.