

The Climate Institute

QCoast2100 forum: September 2016

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“Buyer Beware” paper – June 2014



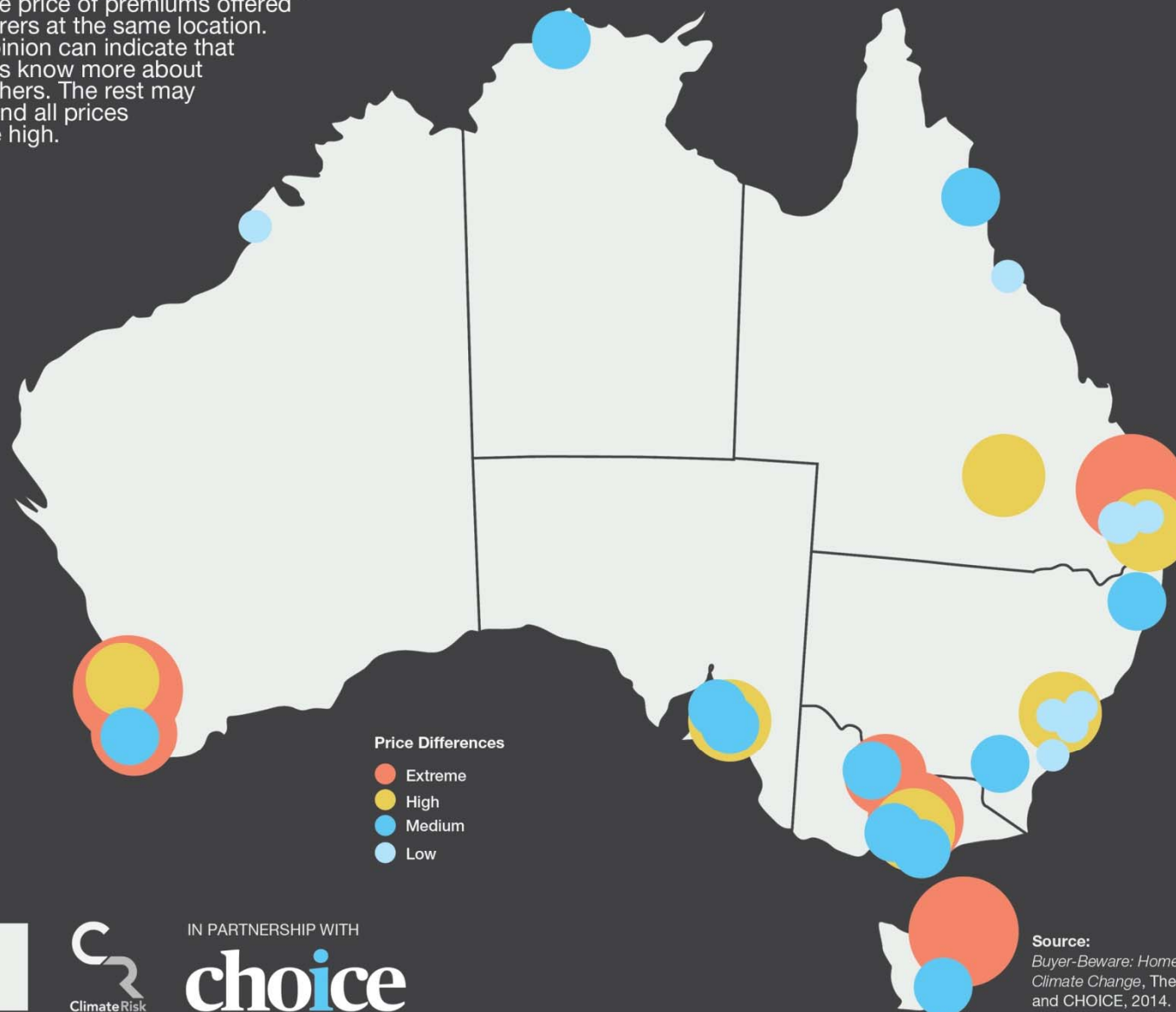
Conducted by Climate Risk Pty Ltd and published in partnership with CHOICE.

Sampled online home insurance quotes in 37 locations, using representative homes.

Differences of Opinion

Homebuyers must beware when there are big differences in the price of premiums offered by different insurers at the same location. Wide gaps in opinion can indicate that some companies know more about the risks than others. The rest may catch up soon and all prices could end up be high.

For more information, visit
www.climateinstitute.org.au



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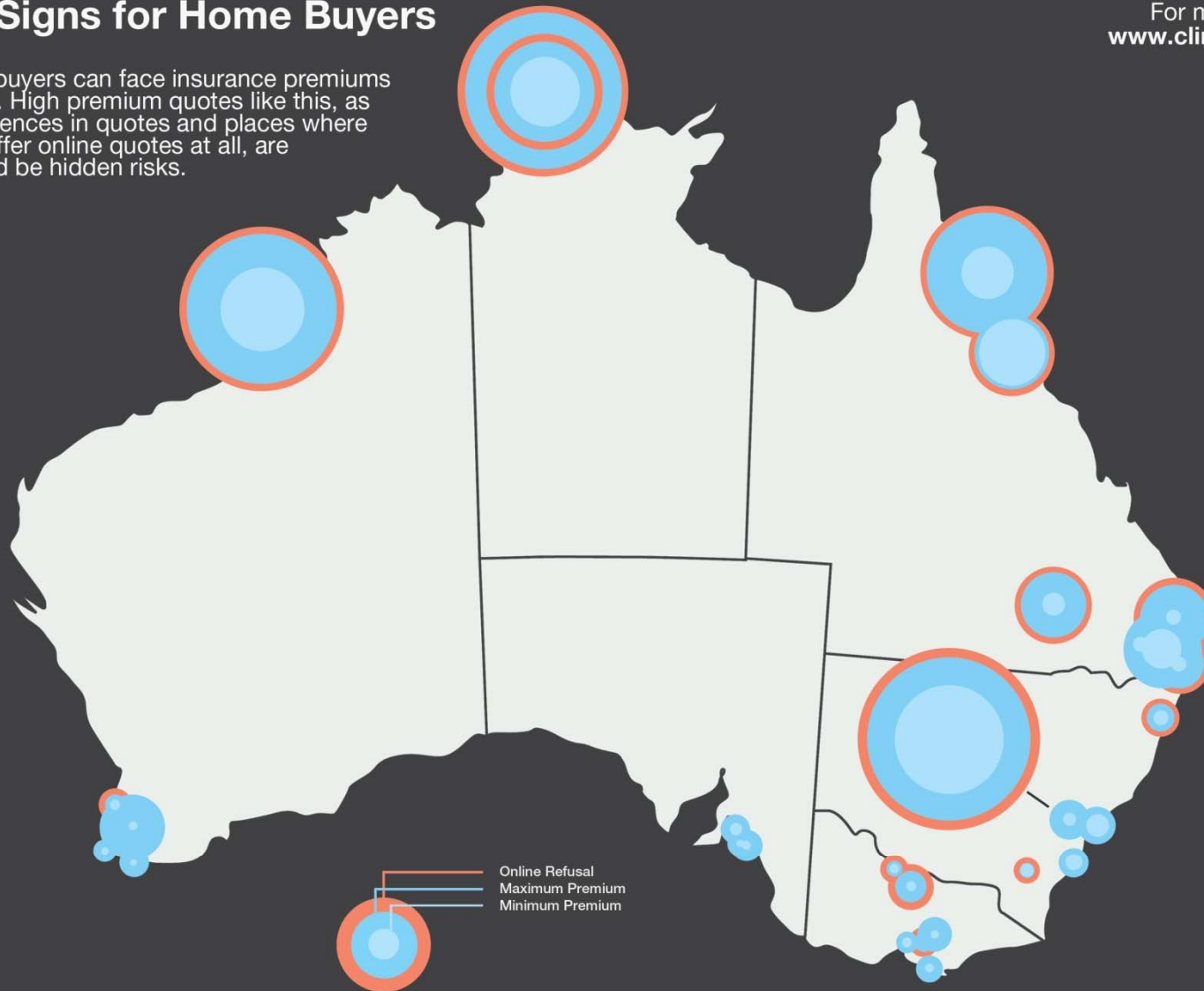
Source:

Buyer-Beware: Home Insurance, Extreme Weather and Climate Change, The Climate Institute, Climate Risk and CHOICE, 2014.

Warning Signs for Home Buyers

Unwitting homebuyers can face insurance premiums 10 times normal. High premium quotes like this, as well as big differences in quotes and places where insurers won't offer online quotes at all, are signs there could be hidden risks.

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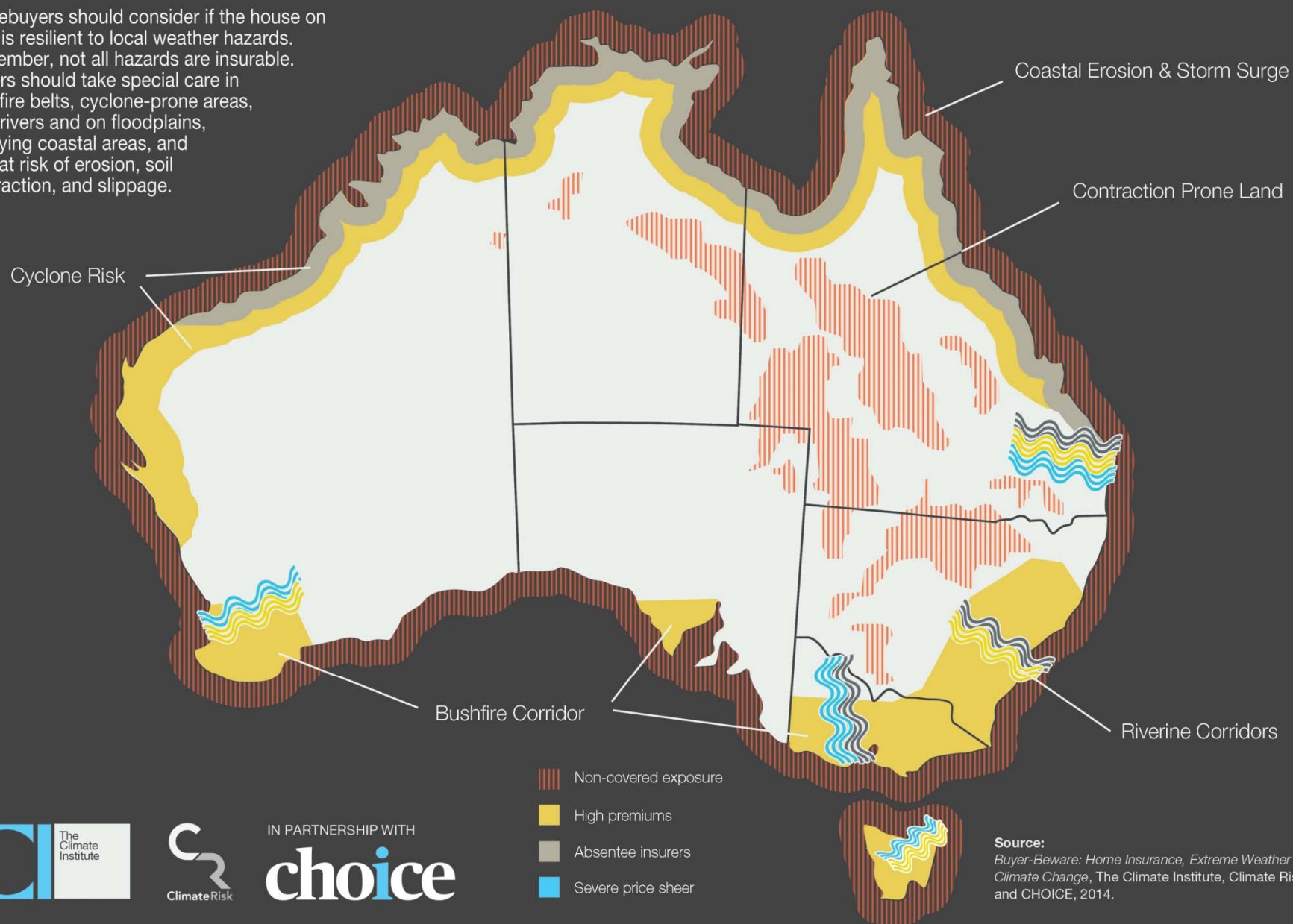


Source:
Buyer-Beware: Home Insurance, Extreme Weather and Climate Change, The Climate Institute, Climate Risk and CHOICE, 2014.

Insurability Risk Zones

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Homebuyers should consider if the house on offer is resilient to local weather hazards. Remember, not all hazards are insurable. Buyers should take special care in bushfire belts, cyclone-prone areas, near rivers and on floodplains, low-lying coastal areas, and land at risk of erosion, soil contraction, and slippage.



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Source:

Buyer-Beware: Home Insurance, Extreme Weather and Climate Change, The Climate Institute, Climate Risk and CHOICE, 2014.

“There goes the neighbourhood” paper – May 2016



What we did:

- Reviewed past public policy inquiries & industry initiatives
- Focused in particular on the financial sector (insurers, banks/mortgage lenders)
- Considered different private & public actors in terms of incentives
- Recommendations particularly aimed at Commonwealth level, also for financial sector

Actor	Awareness and information access/visibility	Disincentives (or soft barriers) to action	"Hard" barriers to action	Incentives to action
Insurers	Varied. Majority have moderate to high awareness; a few smaller insurers have very low awareness. ⁷¹	Can limit own exposure to 12 months. Protection of intellectual property.	Public perception (media/public cynicism about motives, premium hikes). Recent anxiety on climate as a political issue.	Maintain "insurable universe", i.e. the market of insurable property.
Re-Insurers	Mostly high.	Correctly priced risk exposed to undercutting from capital markets (e.g. catastrophe bonds and other means of re-insuring without traditional re-insurers).	National offices of global insurers not always autonomous or equipped to engage in local climate risk analysis.	Maintain "insurable universe"; avoid undercutting from capital markets (catastrophe bonds).
Banks	Awareness of the issue appears to exist in some parts of the banking industry; however quantifying and incorporating these risks appears mixed at best.	General short-term time horizons, even for long-term assets. Preoccupation with nearer-term risks. Fear of bad publicity from restricting credit.	Unclear if any exist.	Avoid future losses/drawdowns. Head off scrutiny from investors, regulators. Shape public perception through marketing. Much of sector (especially large banks) probably have significant levels of exposure (at least a competitive level).
Local governments	Varies between states, but local governments generally have good access to historical peril data (e.g. they are often the primary source of such data).	Property taxes are a key source of revenue; disallowing developments or placing requirements seen to be onerous could be a disincentive.	Fear of litigation from developers in the short-term. Lack of resources to properly evaluate risk.	Avoid litigation risks that may materialise sooner than expected. Avoid unexpected damage and rising costs.

	access/visibility	mitigation/insurance	disaster	disaster
State governments	Varies considerably (e.g. New South Wales has good climate projection data but historical flood mapping data is retained at local government level).	Property sales stamp duty is a large source of revenue. Insurance tax also a source of revenue, to a lesser extent. Vague framework perpetuates ability to rely on federal government bailouts. More political points in providing after the event disaster relief, than in providing pre-disaster mitigation.	Federal/state government funding issues (COAG etc.). Lack of resources to properly evaluate risk.	Budgetary limits to responding to disasters. Costs that can't be borne at local government level can become a state government problem. State government debt ratings could become an issue.
Federal government	Mixed, as most granular records are gathered at state/local level; but there is some federally-funded climate modelling at fine spatial resolution and federal government has launched coastal mapping exercise with CSIRO.	Little outside pressure. More political points in providing after the event disaster relief, than in providing pre-disaster mitigation.	Current uncertain policy environment. Marginal seats.	Fiscal position (ratings agencies, natural disaster costs, contingent liabilities); avoid expensive, unpredictable emergency payouts to states.
Home owners	Mixed, but can be very limited depending on location and type of peril.	Incur short-term costs to avoid longer-term damage.	Financing mitigation; financing retreat where necessary.	Protect home from damage (if possible). Avoid over-paying for risky property. Keep insurance premiums as low as possible.
Developers	Mixed, can be very limited	Ability to profit from	Developers who	A "level playing field" so

Why does the financial sector matter?

- They control financing; therefore what is built
- They have (some) quality data – and ability to improve it
- They have a relationship with residents
- They have influence with policymakers

- In theory, insurers “signal risk” via premiums
- Householders often learn of increased (or re-evaluated) risk levels via their insurance premium price
- Shift to “risk-based” premiums in past ~10 years means now calculated at address level
- The industry is very sensitive to criticism regarding premium pricing & responses to natural hazards

Collaroy: A watershed moment

Approximate number of general insurers in Australia that will cover acts of the sea: 0



General insurance doesn't cover the inevitable!

Role:

Purchases: Banks/lenders control who buys where; large (though indirect & opaque) influence on valuations.

Developments: Banks finance c. 80% of residential developments



News

Bank of Queensland's risk policy rules out lending to islands

TONY RAGGATT, Townsville Bulletin
November 28, 2015 12:46pm

BANK of Queensland has stopped lending for property on Magnetic Island and other banks are requiring double the deposit compared with suburbs in Townsville.

What are the banks' roles?

- Unlike insurers, banks hold risk for life of mortgage
- Home insurance is a condition of mortgage, but is not checked
- General aversion to “geographical concentration” may protect them; but not lenders
- Reluctant to disclose areas of higher credit risk (except for NAB)

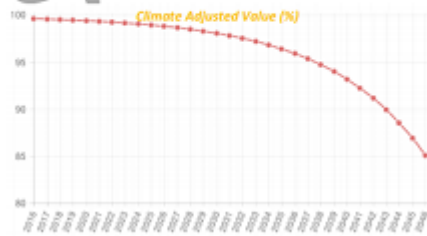
- As an industry, banks have been almost entirely absent from policy discussion
- However this is unlikely to continue much longer
- Banks have “stickier” relationship with customers than insurers – can be a better conduit for information

Other factors: Technological disruption

New information sources will provoke renewed public attention & market disruption

6.2. Value Degradation Over the Period of the Mortgage

The Climate Adjusted Value shows the estimated degradation in value of this property compared to a property of equivalent value with no extraordinary extreme weather or sea level exposure. The calculations are based on the probabilistic computation of the comparative affordability of the two properties.



2. Your Details

Name: John Smith
Email: johnsmith@gmail.com
Address: 32 Somewhere Street, Blue Waters, NSW 2000

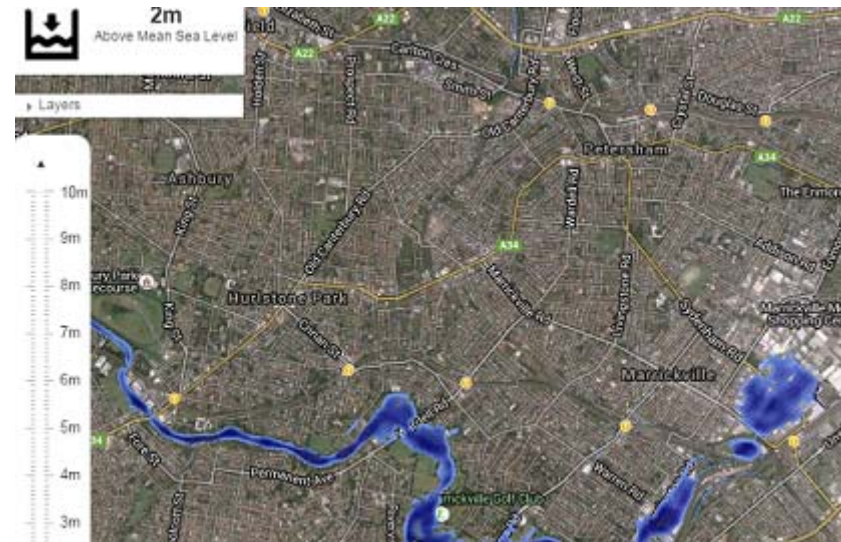


The map shows your address (red) and deep water buoy (blue) & nearest tidal buoy (green) locations – land movement gauges (yellow) may not be shown.

Remember this report is for you only, and it is part of our terms of use that it is not transferred or sold to anyone else.

3. The House

Below are the images we have found for your property. Please check these are the house you wish to analyse. If these are not correct please let us know.



What are implications for property markets, financial system, and policy?

How might QCoast2100 projects fit into this?

Table 1 Number of properties potentially affected by a 0.8 m projected HAT sea level rise

District	Number of Properties Potentially Affected by HAT Sea Level Rise of 0.8 m
Rollingstone	21
Balgol Beach	334
Toolakea	147
Saunders Beach	167
Bushland Beach	291
Townsville North	254
Townsville Inner Suburbs	2830
River South	188
Stuart	7
South Land	156

Source: Townsville CHAS, 2012

Other factors: Technological disruption

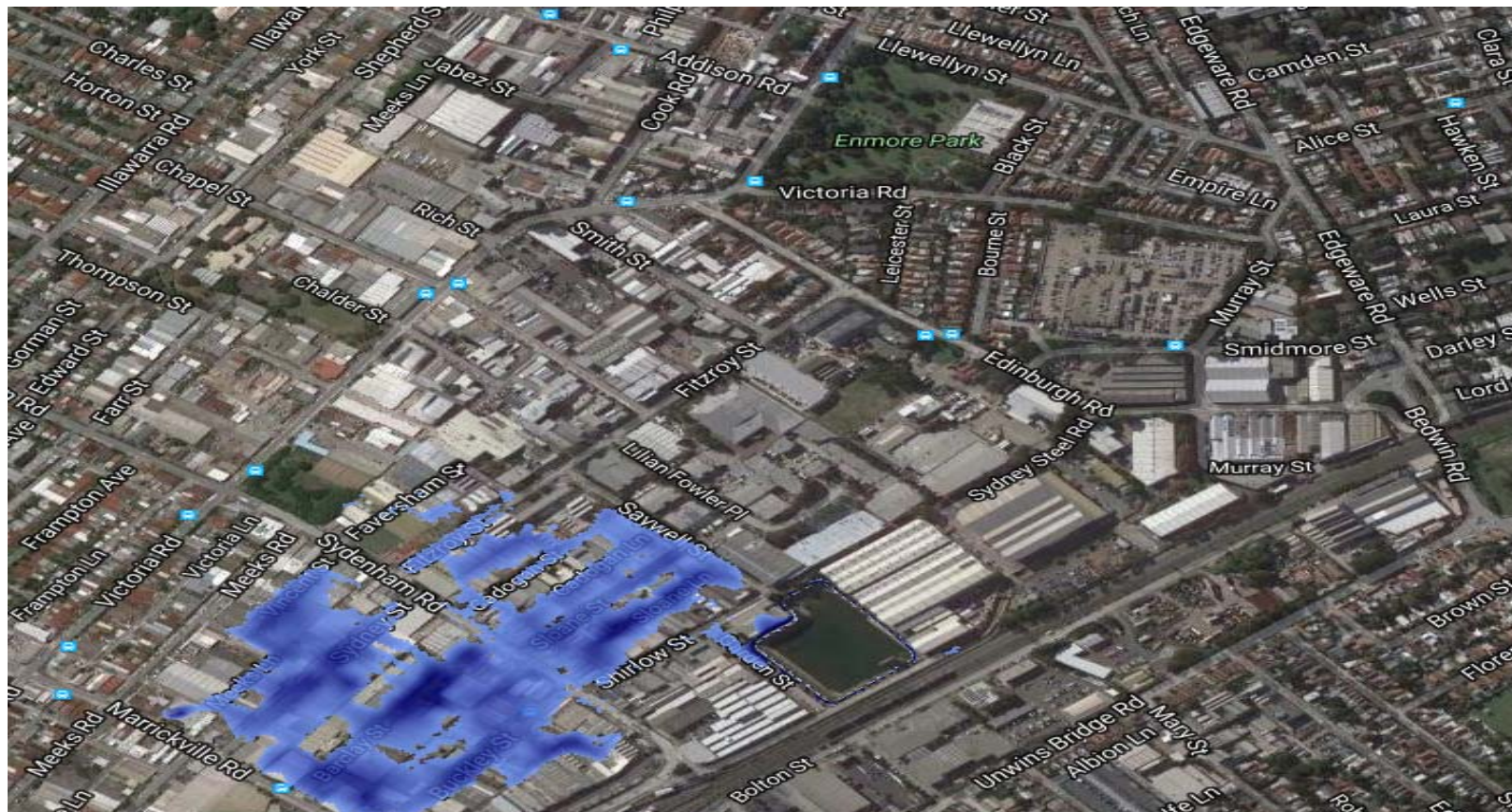
New information sources will provoke renewed public attention & market disruption: [ClimateValuation.com](https://climatevaluation.com)

Table 3: Example properties around Australia. Source: ClimateValuation.com, unpublished report

Location	Purchase price	Replacement costs	Elevation (m)	Floor height (m)	Percentage reduction in value
NSW - Botany	\$1,xxx,000	\$200,000	1.4	0.1	66.66%
NSW - Hat Head	\$5xx,000	\$300,000	1.8	0.1	41.49%
NSW - Kincumber	\$6xx,000	\$200,000	1.7	0.1	73.38%
NT- Wagait Beach	\$5xx,000	\$200,000	5	0.1	3.66%
QLD - Maroochydore	\$5xx,000	\$200,000	1.8	0.1	44.23%
SA - West Lakes	\$1,xxx,000	\$400,000	1.4	0.1	88.89%
TAS - Carnarvon Bay	\$5xx,000	\$200,000	1.4	0.1	5.20%
VIC - Venus Bay	\$5xx,000	\$200,000	2.89	0.1	5.59%
VIC - Elwood	\$1,xxx,000	\$400,000	1.6	0.1	9.37%
WA - Halls Head	\$4xx,000	\$200,000	1.1	0.1	66.66%
WA - Falcon	\$4xx,000	\$200,000	1.4	0.1	5.08%

Other factors: Technological disruption

CoastalRisk.com



Insurance:

Collaborations in Protection options?

Individual insurers: The famous Roma example.

Where does it fit into CHAS?

Relevant CHAS phases: will vary but likely to be particularly useful in phases 1, 5, and 7

- 1) Planning stakeholder engagement – get in early
- 4) Identifying assets potentially impacted
- 5) Risk assessment of key assets -> Insurers, owners
- 7) Appraisal of socio-economic adaptation options -
> Companies, industry groups, cross-industry

What can local governments do?

- Understanding incentives driving financial sector actors can create opportunities for information sharing, cost savings
- Financial sector can share burden of communications & engagement
- Seek support in policy advocacy at state/cwlth level from sector



Thankyou

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