



What does the future hold for coastal regions?

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Global trends

“Profound and urgent changes occurring in vulnerable coastal zones”

- Almost half of the global economic activity is generated in the coastal zone
- 270m people and US\$13 trillion of assets are exposed to sea level rise

<https://www.futureearthcoasts.org/wp-content/uploads/2015/12/LOICZ-Signpost-Web.pdf>

Global trends

Complex and cumulative drivers of change

Fenwick Island, USA



Joanna Woerner, Integration and Application Network, University of Maryland Center for Environmental Science <http://ian.umces.edu/imagelibrary/displayimage-513.html>

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Australian trends

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National environmental trends

Climate change is having impacts throughout Australia

“At no time in recent history have the effects of climate change on Australia’s coast been as apparent as they were from 2011 to 2016”

Clark GF, Johnston EL (2016). Coasts: Coasts: 2011–16 in context. In: Australia state of the environment 2016, Australian Government Department of the Environment and Energy, Canberra

National social trends

Australian population continues to expand with a projected increase to 31m people by 2033

“... the most prominent growth outside of capital cities between 2014 and 2015 occurred along the coast of Australia, particularly in Queensland”

ABS, 2016, Regional Population Growth, Australia, 2014-15

National economic trends

Australian household wealth 2nd only to Switzerland

“Australia has long been labelled the land of the middle class but ... this is less the case today”

22 of the top 25 highest earning suburbs are in coastal cities

<http://mccrindle.com.au/the-mccrindle-blog/australias-household-income-and-wealth-distribution>

<https://www.businessinsider.com.au/the-25-richest-suburbs-in-australia-2015-5#1>

Regional trends

23% of coastal organisations don't monitor and evaluate

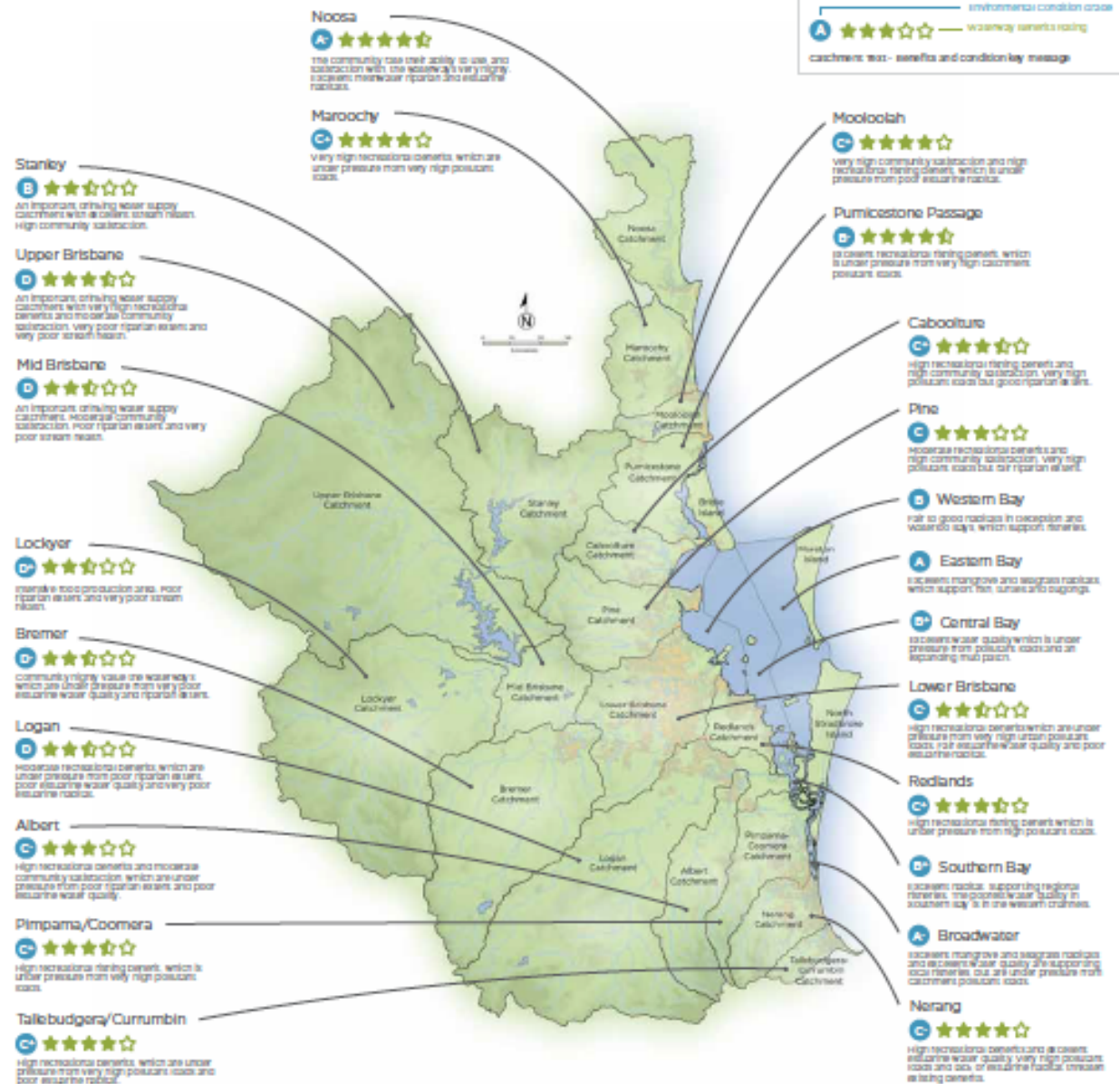
Of the 77% who do, only 46% use it to improve decision-making

Monitoring and evaluation is not integrated

Jacobson C, Carter RW, Thomsen DC & Smith TF (2014). Monitoring and evaluation for adaptive coastal management. *Ocean & Coastal Management* 89:51–57.

Regional trends

REPORT CARD 2015



<http://hlw.org.au>

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Regional trends

20 indicators based on primary & secondary data:

- Environmental
- Social
- Economic
- Governance
- Combined/summary

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Sustainability Indicators

Annual Sustainability
Trends for the Sunshine
Coast

2012



Community Plan Sustainability Indicators

Sustainability at the regional scale can be assessed by examining environmental, social, economic and governance indicators. Monitoring sustainability indicators on the Sunshine Coast annually provides valuable insights into sustainability trends at spatial and temporal scales of relevance to community, industry and government sectors. The Sustainability Research Centre of the University of the Sunshine Coast has conducted the following report for the Sunshine Coast Council in response to the Community Plan. The report includes information on 20 indicators of sustainability and is based on a range of primary and secondary data sources including a recent survey of Sunshine Coast residents.

Prepared by:

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Tim Smith
Craig Stephenson

Data sources

- Private utilities, local, state, national & international agencies.
- Telephone survey of 1000 Sunshine Coast residents
- Australian Bureau of Statistics
- Australian Department of Education, Employment and Workplace Relations
- Energex
- IPCC
- Queensland Department of Agriculture, Fisheries and Forestry
- Queensland Herbarium
- Queensland Department of Employment, Economic Development and Innovation
- Queensland Treasury, Office of Economic and Statistical Research
- Productivity Commission
- Sunshine Coast Council
- Unity Water
- IRIS Research Ltd

Indicator components

- Description
- Rationale/why is it important?
- How was it measured?
- Status
- Trends (spatial & temporal)
- Implications
- Critique of indicator

5. Health

A measure of the number of residents registered as having diabetes.

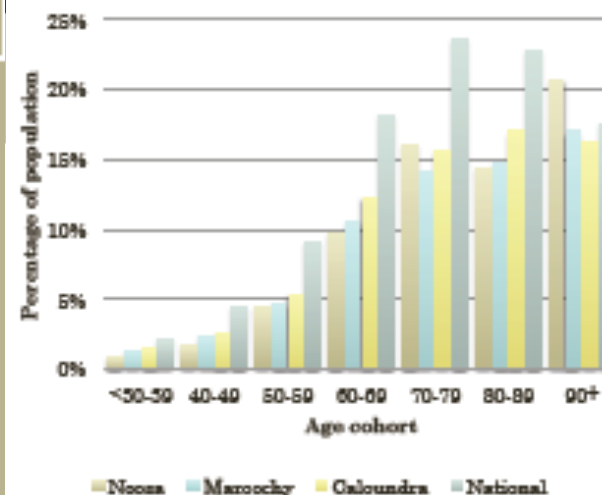


Figure 4. Distribution of registered cases of diabetes across the Sunshine Coast and Australia-wide according to age. Data sourced from the Australian Diabetes Map (NDSS).

In brief...

- Diabetes is the fastest growing chronic disease within Australia and internationally.
- There are 11,881 registered cases of diabetes currently on the Sunshine Coast.
- This represents 4.3% of the Sunshine Coast population and is below the national figure of 5.6%.
- Trends in the number of registered cases may change in future years as awareness of the disease increases.



Status: Positive

Description of indicator

A measure of the number of residents registered as having diabetes.

Why is it important?

Diabetes is the fastest growing chronic disease within Australia and globally. There are several types of diabetes including Type 1, Type 2, and Gestational. This indicator focuses on Type 2 diabetes because it is the most common form of diabetes (affecting 85-90% of all those with diabetes) and despite a strong genetic basis, the risk of developing Type 2 diabetes is substantially increased with various lifestyle factors such as obesity, limited physical activity and high blood pressure (www.diabetesaustralia.com.au). In this way, the prevalence of Type 2 diabetes can indicate a range of other health issues.

How is it measured?

The data for this indicator is sourced from the Australian Diabetes Map – a dynamic record of the number of people diagnosed with diabetes across Australia. The map is produced by the National Diabetes Services Scheme (NDSS) an initiative of the Australian Government administered by Diabetes Australia (see www.ndss.com.au). Note that NDSS population figures are based on the 2006 Census.

State of health

The total number of diabetics registered with the National Diabetes Services scheme on the Sunshine Coast at the time of this report was 11,881. NDSS figures indicate that this represents 4.3% of the Sunshine Coast population and is below the national average of 5.6%. The proportional distribution of these cases across the Sunshine Coast is fairly uniform and is indicated in Table 4. Consistent with the commonly observed prevalence of Type 2 cases, 86% (10197 individuals) of registered diabetes cases on the Sunshine Coast are classified as Type 2.

Trends in diabetes

The NDSS indicates that the overall prevalence of diabetes in the Noosa (4.2%) and Maroochy (3.9%) areas of the Sunshine Coast is considered low by national standards and the 5% level of prevalence recorded in Caloundra may be considered neutral (Table 4). The majority of registered cases in the Sunshine Coast region are people aged 60 years or above (Figure 4).

Table 4. Distribution of registered cases of diabetes across the Sunshine Coast. Source: NDSS Australian Diabetes Map.

LGA	Cases (n)	Pop. (n)	Prevalence
Noosa	1912	45850	4.20%
Maroochy	5596	142841	3.90%
Caloundra	4374	87595	5.00%
Total	11881	276286	4.30%

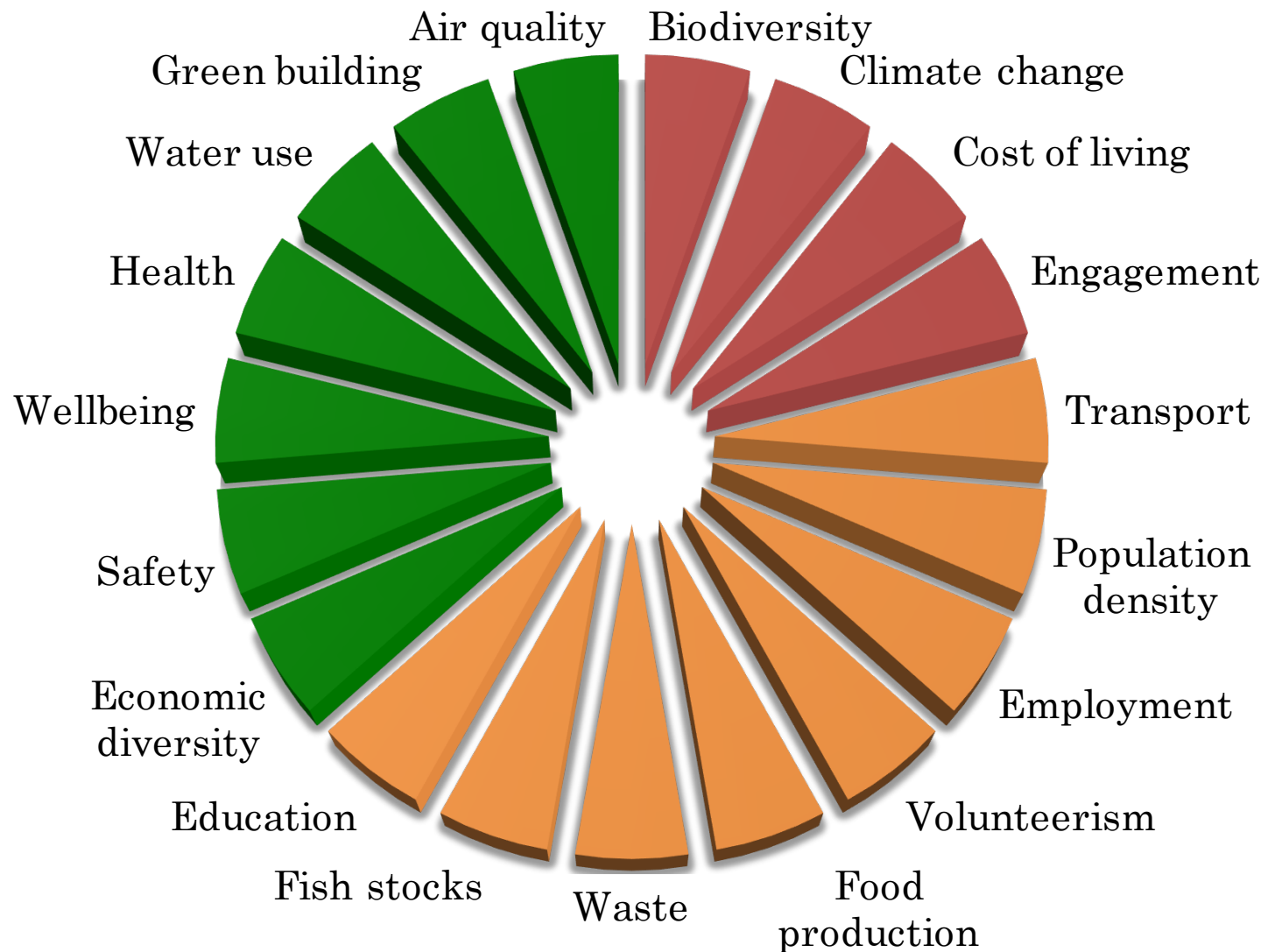
Critique of indicator

As levels of diagnosis and registration increase this indicator may indicate a more pressing issue for this region or prevalence in age cohorts not yet detected.

Implications

Awareness and registration of diabetes is increasing across Australia as the disease spreads. Nevertheless, *Diabetes Australia* estimates that approximately 275 Australians develop diabetes each day and that half of these cases may go undiagnosed. In addition, increasing numbers of young adults and even children are registering with this form of diabetes at the national scale—despite Type 2 diabetes being a disease that usually affects adults.

Increased awareness and diagnosis of diabetes is important as most cases are Type 2 and exacerbated through lifestyle choices. Up to 60% of Type 2 cases of diabetes are preventable or could be delayed through changes in diet and lifestyle (www.diabetesaustralia.com.au). The costs of diabetes to individuals and communities are significant—although initial management can be achieved with improved diet and fitness levels, the disease is chronic and eventually most will require medication.

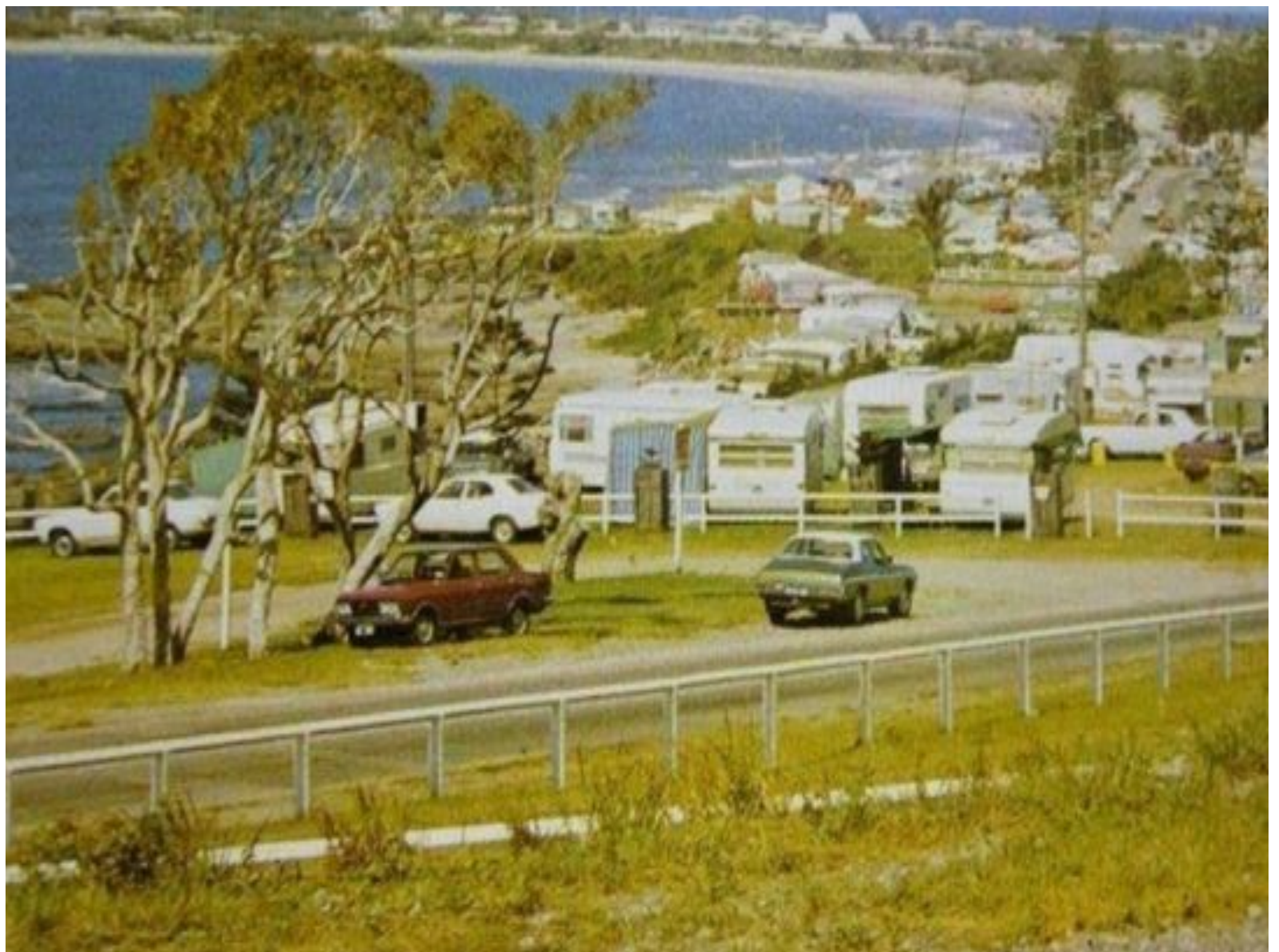


What do these trends really tell us?

The importance of understanding trends in our
values

Is the “caravan park on the coastline”
the “canary in the coal mine”?







Mooloolaba beachside caravan park

- State government land
- Local government lease
- Contested future

Heritage values

"quintessential Queensland experience"

(former Queensland Heritage Council president
David Eades, 2009)

<http://www.brisbanetimes.com.au/queensland/mooloolaba-beachside-caravan-park-loses-queensland-heritage-council-battle-20161128-gsze2u.html>

Recreational values

“What’s not to love about it? You can have a chat, you say hello, you catch up in the afternoons and you have a beer...It's a lifestyle”

(Tony Fisher, long term recreational park user)

<http://www.abc.net.au/news/2017-04-26/mooloolaba-caravan-park-faces-uncertain-future-possible-car-park/8468428>

Economic potential

"The closure of the northern caravan park sites at Mooloolaba will allow Mooloolaba to transform into a world-class beach destination"

(Sunshine Coast Council)

<http://www.abc.net.au/news/2017-04-26/mooloolaba-caravan-park-faces-uncertain-future-possible-car-park/8468428>

Diverse values



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So, what is the future of our coastal regions?



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“As for the future, your task is not to foresee it
but to enable it”

(Antoine De Saint-Exupery)

Saint-Exupery, A de 1952, The Wisdom of the Sands, Hollis & Carter, London (UK Edition).