






## Practitioner perspectives of wellbeing in rapidly changing Australian coastal communities

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### ABSTRACT

Coastal communities are situated in dynamic socio-ecological contexts at risk from the impacts of climate change and other hazards. Meaningful strategies to maintain and/or improve community wellbeing are more important than ever; and so too is understanding the impact of chosen strategies. Past research has highlighted divergence in the how problems impacting the coast are framed in policies that direct management action; hampering the ability to holistically improve wellbeing (across social, economic and environmental grounds). Yet calls to better understand whether perceptions of those responding to change also diverge, and implications for improving wellbeing in coastal areas, remain unanswered. To address this gap, we interviewed key stakeholders that respond to change (coastal managers) and seek to improve wellbeing (community service providers) in Australia's fastest growing coastal areas and used Maslow's Hierarchy of Needs theory to examine divergence and convergence in perceptions of needs attainment as indicative of progress towards improved wellbeing. All stakeholders identified inequity in the ability of community members to meet their needs, but the impact of coastal hazards on community needs were perceived differently. Coastal managers perceived greater impacts on higher order needs (self-esteem and self-actualisation) while community service providers perceived greater impacts on lower order needs (physiological). These differences shape the prioritisation of responses and highlight the need for improved multisectoral understanding and collaborative strategies to improve wellbeing in coastal areas.

### 1. Introduction

Coastal communities are exposed to a range of threats, are a locus of human development, and on frontline of climate change impacts (Glavovic, 2013; Robert et al., 2023). Amidst these threats, social and ecological wellbeing is increasingly difficult to attain. The ongoing pursuit of economic growth has left environmental damage, heightened inequity, and increased social and physical vulnerability (Clark et al., 2018). Consequently, academic and practitioner interest in strategies that maintain and improve social and environmental wellbeing are gaining prominence (Abubakar, 2022).

The focus on wellbeing and its improvement is a departure from the vulnerability and risk reduction framing that has historically informed coastal management response. Wellbeing has been defined as a state

where the needs of people and the environment are met, and where individuals and groups can pursue their goals, and are satisfied with their way of life (Armitage et al., 2012); and is determined by the interplay of multiple needs at individual and community scales (Abubakar, 2022). How needs are met (i.e., without harm to broader social and ecological contexts) is of increasing concern in the context of global population growth and climate change (Heyen, 2022). Thus, as coastal managers seek to ensure adaptation and planning decisions maintain or improve community wellbeing, a perspective that expands beyond risk and/or vulnerability reduction is required.

Thus, we examine practitioner perceptions of community needs in rapidly growing Australian coastal communities. We focus on the perspectives of practitioners who shape wellbeing through their vocational roles, addressing physical (coastal managers) or social (community

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service providers) threats to wellbeing. We ask whether there are differences in perceived community wellbeing across sectors based on vocational responsibility. In asking this question we seek to uncover convergence and divergence in perceptions that may influence the ability of practitioners to improve social and environmental wellbeing in coastal communities.

### 1.1. Understanding wellbeing in coastal communities

Given its application across multiple fields of research and practice (Huppert and So, 2013), wellbeing is an ambiguous, contested term for which there is no agreed definition (Wallace, 2021; McNaught, 2011). Despite this, its assessment and measurement remain of particular interest to environmental managers, who seek to implement strategies to improve wellbeing (Wallace et al., 2021).

Wellbeing is a subjective and objective construct (McNaught, 2011; McCrear et al., 2016). Subjectively, wellbeing relates to an individual's perceptions of their happiness, while objectively can be described as the circumstances of an individual or community (its 'state') exclusive of the individuals/communities' response to it (McNaught, 2011). In a marine/coastal context, the social wellbeing framework has been widely applied to inform management action and incorporates subjective and material (objectively measurable) aspects (Johnson, 2018; Weeratunge et al., 2014), while from a broader environmental management perspective, Wallace et al. (2020) critiqued seven values and wellbeing typologies applied to inform management response (refer to Wallace et al., 2020 for further details). Thus, just as definitions of wellbeing are multiple and contested, so too are frameworks to measure or assess wellbeing.

In this research, our aim was not to measure wellbeing to inform management action, but rather understand perceptions of wellbeing. In this context, Maslow's (1970) theory of human motivation, which depicts five fundamental human needs (physiologic, safety, belonging, esteem, and self-actualisation), provided a useful scaffold to consider the extent to which communities are meeting their needs. Needs are not always synonymous with wellbeing, yet fulfilling needs can contribute to a person's overall sense of fulfillment and potential for well-being (Maslow, 1970; Doyal and Gough, 1991; Max-Neef, 1992). We note that the sequential nature of Maslow's framework has been criticised, including by Maslow himself who lamented the widely adopted 'triangular' view of needs, which implies higher order needs (esteem and self-actualisation) are not able to be met without first satisfying lower order needs (e.g. physiological and safety) (Elias, 2019; Koltko-Rivera, 2006). However, Maslow's framework remains a widely applied theory in sociology, management, psychology, and education (Dye et al., 2005; Hale et al., 2019) to understand individual and community needs (e.g., Shultz, 2017; Ryan et al., 2020) and provides a clear and (in some cases) recognisable framing device to discuss community needs with practitioners.

### 1.2. Factors shaping wellbeing in coastal Australia

Australia can be considered an affluent nation with the capacity to address threats to wellbeing. Nevertheless, affluence can mask vulnerabilities (Eriksen et al., 2020) and assessments based on averages can miss significant disparities.

Approximately 22 million Australians (85 % of the population) call the coast home (Clark et al., 2021) and some of the most rapidly growing communities are peri-urban and regional coastal townships (Asbridge et al., 2021; Morteja and Yigitcanlar, 2021). Population migration to peri-urban coastal areas, referred sometimes to as 'sea-change', has long raised concerns regarding the ability of towns to provide adequate services to meet the needs of their rapidly growing communities (Gurran et al., 2008). Traditionally dominated by the migration of elderly or retired residents, there was a shift towards young families seeking more affordable housing (Smith and Doherty, 2006; Gurran et al., 2005).

Migration drivers include amenity, housing affordability and accessibility to labour markets, where cheaper housing within commutable distance to employment has established a unique set of demographic conditions in peri-urban communities (Asbridge et al., 2021; Butt and Fish, 2016). Peri-urbanization is not uniform, yet characteristics of place, such as accessibility to major urban centres and environmental (landscape) features, are core drivers of rapid outer-metropolitan urban growth (Butt and Fish, 2016).

COVID-19 increased pressure on outer-metropolitan coastal areas as the capacity to work remotely facilitated movement away from urban centres in search for the coastal living ideal (Asbridge et al., 2021; Argent and Plummer, 2022). Migration also delivered the added benefit of avoiding city lockdowns as authorities sought to stop the spread of COVID-19 (Terzon, 2021a). Population influx led to a rapid rise in the cost of housing and rental accommodation, forcing many individuals and households further to the periphery of their communities or into homelessness (Terzon, 2021a, 2021b).

Concurrently, the Australian coast faces multiple and cumulative threats to environment, economy, and community, from climate change, resource use and development, and policy gaps and failures (Elrick-Barr and Smith, 2021; Laubenstein et al., 2022; Harvey and Smith, 2023). In the last three years alone, coastal Australia experienced severe cyclones, devastating floods, and severe coastal erosion resulting in widespread impacts to people, property, and environment (Fryirs et al., 2023; Taylor et al., 2023). A decade ago, it was anticipated that future sea-level rise could put \$226 billion dollars' worth of infrastructure at risk, including \$72 billion dollars of residential properties (Steffen et al., 2014). More recent estimates indicate that by 2030 one in every 25 Australian homes will be uninsurable due to bushfire, extreme wind, or flooding (Hutley et al., 2022). The combination of pressures on social and ecological wellbeing make rapidly growing Australian coastal communities a useful context to explore divergence and convergence in practitioners' perceptions of community needs attainment.

## 2. Methods

This research was part of a larger study exploring coastal vulnerability and governance in rapidly growing Australian coastal communities, entitled [removed for review]. A mixed method, concurrent, case-study approach was applied to understand perceptions of community needs. One case study local government area in each coastal Australian State (New South Wales, Queensland, South Australia, Tasmania, Victoria and Western Australia) and the Northern Territory, was selected based on the suburb with the greatest rate of population growth between 2011 and 2016 (Fig. 1). Whilst all rapidly growing, the case study communities have different social and ecological conditions and associated vulnerabilities (see Supplementary material for short profiles on each case-study area). Six of the coastal communities are peri-urban, situated on the outer margins of a major urban area, and one (Darwin, Northern Territory) is a capital city centre which, through its isolation and harsh climatic conditions has a unique character that aligns more closely to the periphery (Kavaarpuo et al., 2022).

To understand perspectives on community needs we engaged with two sectors that play a pivotal role in managing and responding to physical and social threats to wellbeing in coastal areas — coastal managers and community service providers. While coastal managers respond primarily to the biophysical dimensions of coastal change, and community service providers the social dimensions, we acknowledge the potential for overlap and interests beyond professional job descriptions. Coastal managers and community service providers work within local communities and are well-placed to offer nuanced and comprehensive perspectives on the nature and dynamics of community need in these contexts.

In each case-study area, approximately ten key informant semi-structured interviews were conducted with practitioners: five coastal managers and five community service providers and incorporated a

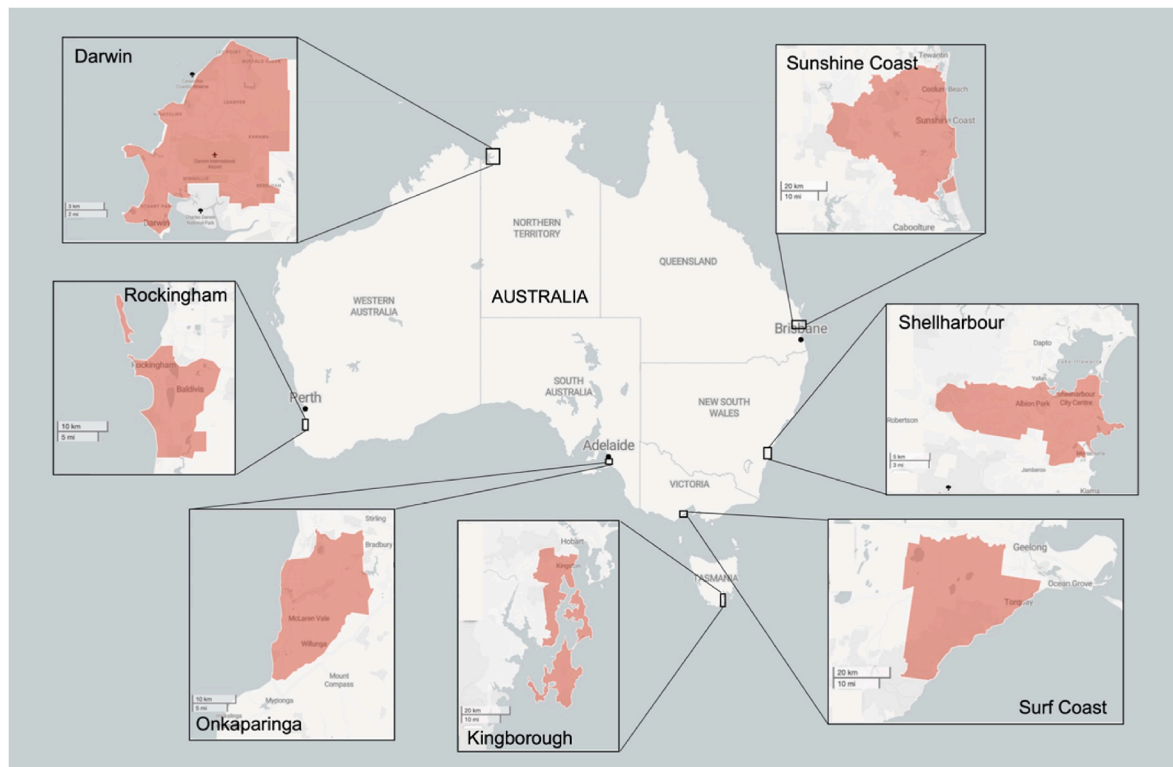


Fig. 1. Rapidly growing coastal case study communities.

cross section of viewpoints from organisations working at different spatial scales (local, regional, and State). The number of interviewees sought to capture those active in their profession across scales. Coastal managers included, for example, State government and local government staff leading the development and implementation of coastal plans and strategies (see Elrick-Barr and Smith, 2021; Harvey and Clarke, 2019 for key authorities and responses to climate risk in Australia). Community service providers included, for example, representatives from non-government organisations (e.g., Salvation Army and local neighbourhood centres) that deliver social services to community members in need (e.g., social housing, domestic violence, financial support and planning). Key informants were nominated by the local government authority, followed by snowballing and, in some cases, identified via web-based review. Ethics approval for this research was provided by the Human Ethics Research Committee, University of the Sunshine Coast (approval number A191284).

Interviews addressed themes relating to context, vulnerability, coastal governance, innovation, and community needs and took place between May 2021 and June 2022 (see Supplementary Materials for interview protocol). Interviews were conducted face-to face (57), and online (11) (via Skype) (i.e., when COVID-19 travel restrictions impeded travel to case locations). Each interview lasted between 40 min and 1.25 h, was recorded, and transcribed verbatim by a member of the project team.

To uncover perspectives on community wellbeing and needs attainment, we applied Maslow's theory of human motivation at the community scale and asked respondents to rate how well their coastal community was able to meet each of their needs (physiologic, safety, belonging, esteem, self-actualisation) on a 5-point Likert scale (extremely inadequately – extremely adequately). To capture recent social, political, and environmental impacts on needs attainment, interviewees then rated how the ability of the community to meet those needs had changed in the last five years (much decreased – much increased). Finally, interviewees rated the vulnerability of each of the five needs to coastal hazards (not at all vulnerable – extremely

vulnerable). While assigning a rating, respondents discussed the rationale for the ratings allocated, providing qualitative data to complement quantitative ratings.

Significant differences in the rankings assigned to: (i) the perceived ability of the community to meet their needs; (ii) perceived change in ability to meet needs; and (iii) perceived vulnerability of community needs to environmental hazards, were explored in Qualtrics Stats iQ using ranked data, by (i) sector (i.e., coastal managers versus community service providers): (T-test) (ii) scale of focus of respondents vocation (i.e., local, regional, or State based organisation); (ANOVA); and (iii) jurisdiction (Ranked ANOVA). Reported results are significant at  $p < 0.05$ .

Qualitative data was analysed in NVivo via applied thematic analysis (Guest et al., 2011) to identify themes emerging from interviewees comments regarding the rationale for the rating provided in response to questions exploring perceptions of needs (e.g., 'how adequately are needs are being met'; 'how the ability to meet needs has changed in last 5 years'; 'how vulnerable needs are to climate hazards'). Themes (and codes) were identified deductively (e.g., by hierarchy of need; such as esteem, self-actualisation) and inductively across each of the three questions to identify any additional or cross-cutting themes in responses. For example, for the question relating to the ability of the community to fulfill their needs, an inductive code included 'community divergence'.

Initial quantitative and qualitative findings were used to direct further exploration and analysis. For example, where significant differences in ratings were identified by sector or scale, the accompanying qualitative responses were explored for select elements of the framework to identify divergence or similarities and to begin to understand causal or systemic factors.

### 3. Results

#### 3.1. Coastal practitioner perspectives on community needs

In the context of rapid socio-ecological change that typifies the case

study sites; interviewed coastal practitioners, on average, perceived community needs are either not adequately (safety and esteem) or only somewhat adequately (physiological needs, belonging and self-actualisation) met across the case-study communities (Fig. 2). Furthermore, the ability of community members to meet their needs was considered, on average, to have little changed in the last 5 years (Fig. 3).

Safety needs (e.g., health, employment) and self-actualisation (i.e., creativity, inner meaning and purpose) were considered most vulnerable to coastal impacts (Fig. 4). For those residing on the coast, it was argued, its beauty and accessibility are integral to their wellbeing. As one coastal manager explained, “I think [the higher order needs] are more vulnerable [to coastal hazards] because they are more about ‘do people have the capacity or ability to do what they want to do’ ... pleasure or exercise, relaxation, unwinding, social activities. I think they are probably more vulnerable than the basic [needs]” (South Australia, Coastal Sector 05); while another agreed, “I think ... a lot of identity comes from the area that people live in ... if they lost that then they certainly wouldn’t feel as good about the area ... I also think [the coast is] a very important part of people’s connection. They meet at the foreshore areas, recreate together ...” (Western Australia, Coastal Sector 01). Conversely, physiological needs (i.e., food, water, shelter) were considered least vulnerable to coastal impacts.

The view that higher-order needs (in particular, identity and self-actualisation) were more vulnerable to climate hazards was expressed on the basis that risk projections indicate limited impacts to private property; or that via impact on nature, pride of place associated with living and recreating on the coast would be lost.

While coastal managers, on average, reported little change in the ability of community members to meet their needs over the last five years, within community disparity in needs attainment was a common theme. This was true of both lifestyle coastal communities, which have seen rapid growth (see Section 3.2), and of communities of lower socioeconomic standing, where growth has traditionally been driven by affordable housing and proximity to labour markets more so than amenity (e.g., Rockingham Western Australia, Onkaparinga South Australia, and Shellharbour New South Wales). As one coastal manager explained: “[Needs attainment] varies so much [in] the community. I’m seeing pockets of this and pockets of that” (Western Australia, Coastal Sector, 06).

Perceptions of the ability of the community to meet their needs were not always consistent within each community. For example, while coastal managers in Queensland had a fairly consistent view on the ability of the Sunshine Coast community to meet higher order needs, there were divergent perspectives on the ability of the community to meet their physiological (basic) needs (Tables S1 and S2 Supplementary

Materials). Drivers of variation in perspectives within sector and case-study communities were not quantitatively assessed, however, may be a function of the differences in scale of vocation (e.g., State versus local coastal manager), situational awareness of community, personal values or lived experience.

### 3.2. Community service provider perspectives on community needs

Community service providers reported safety, esteem and self-actualisation as the needs most difficult to meet in the rapidly growing coastal communities. Belonging was the need perceived best met (Fig. 2). As a sector, community service providers consistently reported that in the last five years the ability of the communities to meet their needs had, on average, declined across each category of need, with the largest decrease in the ability to meet safety needs (Fig. 3). While COVID-19 was reported to have impacted the ability of communities to meet their needs during this time, most issues were believed pre-existing. For example, when describing the lack of affordable housing and employment opportunities a community service provider explained: “COVID has played out and exposed [social] vulnerabilities that were already there and made them very clear” (New South Wales, Community Sector 05); while another commented:

*Vulnerabilities have changed in all communities, especially over the last 12 months ... people they’ve lost their jobs ... now in casual positions which aren’t as stable, relying heavily on emergency assistance. Stresses because families break down, ...DV [domestic violence] ... uncertain futures regarding housing and employment* (South Australia, Community Sector 04)

Despite reports of extensive and growing difficulties in the ability of community members to meet their needs, this was not considered universal *within* communities. In each case-study area, community service providers (and coastal managers) reported that some individuals and households can fulfil all their needs. Well-off residents are situated alongside those less fortunate, as explained by a community service provider: “I think for some people ... it would be one [extremely inadequately]. And for other ... community members, it’s going to be number five [extremely adequately]” (Victoria, Community Sector, 03).

Disparity was considered particularly stark in case study communities such as the Surf Coast (Victoria) and the Sunshine Coast (Queensland), where COVID-19 drove rapid population growth as financially capable individuals and households from urban centres migrated for desired social and environmental amenities (e.g., scenic coastal beauty, social connectedness, and a creative, ‘care-free’

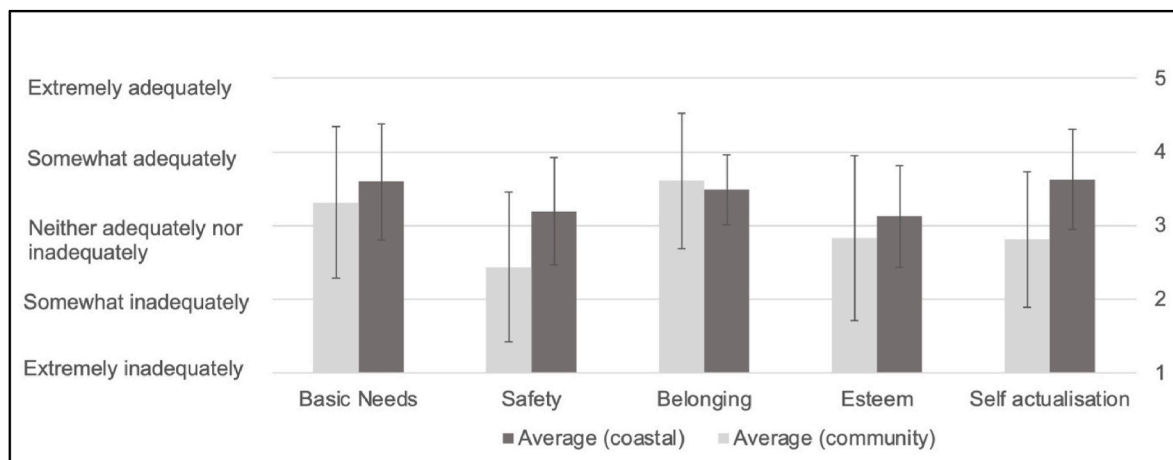


Fig. 2. Ability of communities to meet their needs: average rating assigned by coastal managers and community service providers. Note: columns show average rating per sector and lines indicate standard deviation in rating within sectors.

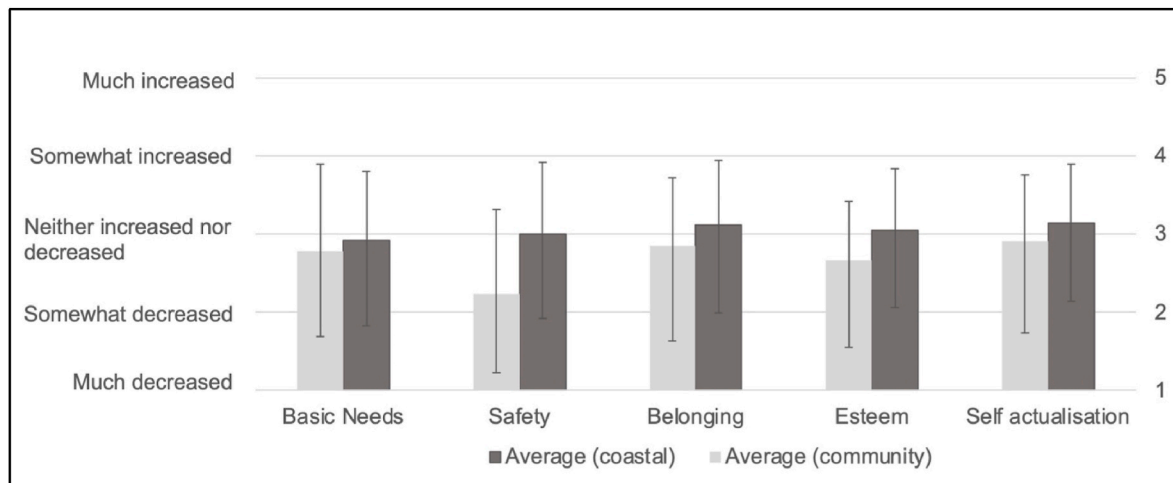


Fig. 3. Change in the ability of communities to meet their needs in the last 5 years: average rating assigned by coastal managers and community service providers. Note: columns show average rating per sector and lines indicate standard deviation in rating within sectors.

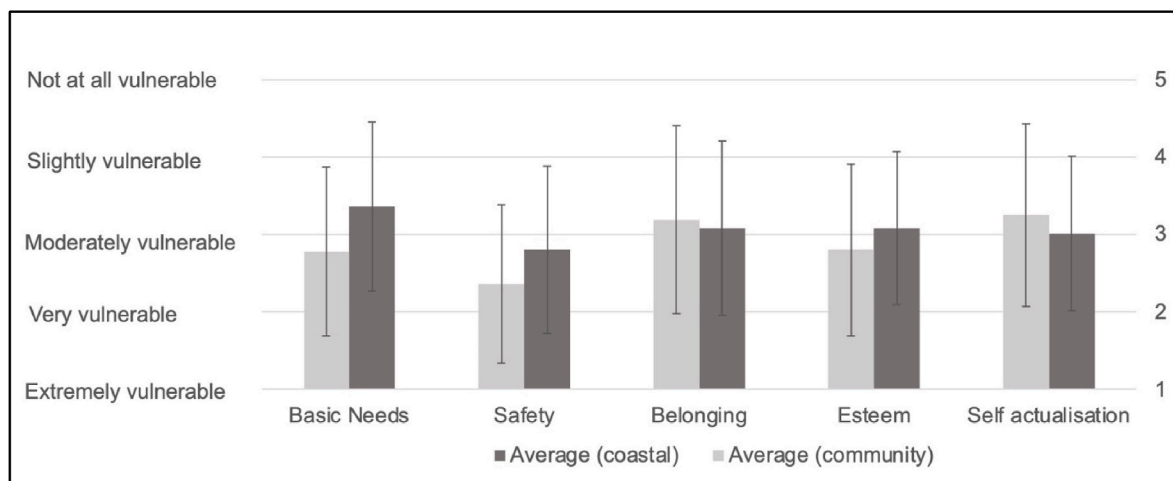


Fig. 4. Vulnerability of needs to coastal hazards: average rating assigned by coastal managers and community service providers.

lifestyle). In response, property prices increased, and these areas become inaccessible for many who called these communities home. For example, the proportion of residents experiencing rental stress significantly increased (from ~10 % to ~40 %) in each case-study community between 2016 and 2021 (Tables S3 and S4 Supplementary Materials), including in communities considered affluent based on National census data. As explained by a community service provider:

*... shops in Noosa [are] only opening certain times because ... their staff can't afford to live in the area ... So, the migration of people coming for the things the Sunshine Coast offers, the hospitality, the tourism, sitting having a latte, looking out over the beach, there won't be anyone to make the latte. That's the reality ... [At the same time] We're seeing families that don't know how to access our services because ... they've never needed to ... But rents have gone up, property prices have gone up ... they can't afford to stay ... and they're having to make decisions, 'Do I pay the rent, or do I feed my children?' ... So we're seeing a significant increase in the homelessness population on the Sunshine Coast and visible, rough sleeping, which we haven't really seen before. (Queensland, Community Sector 04).*

Disparity within communities to meet their needs also extended to lower socio-economic communities, where the release of new greenfield developments has supported local government investment in coastal infrastructure (e.g., Shell Cove Marina, Shellharbour; Rockingham

foreshore development/upgrade) and gentrification along the coastal margin, which has impacted housing affordability in these traditionally accessible communities. As explained by a community service provider:

*[There is] a workforce shortage, nowhere for the underpaid because to get any accommodation [is difficult], it's all locked up as an investment ... If I walked down my street this time of the year, only about 30 % of the houses are permanently occupied (New South Wales, Community Sector 05)*

The perceived presence of need may not be unexpected in communities with lower levels of socio-economic advantage (e.g., those with a higher proportion of low income households). Yet there was no significant difference in the perceived ability of each community to meet their needs (Table S7, Supplementary information). This is despite marked differences in wellbeing as measured via National census data (Table 1). For example, the Surf Coast, Victoria, ranks in the top 10 % of advantaged communities in Australia, while Onkaparinga, South Australia, ranks within the top 50 % of disadvantaged communities (ABS, 2021, Table 1). There are also significant differences in the communities with respect to levels of unemployment and the proportion of high- and low-income households (Table 1). Yet even in communities considered affluent based on objective socio-economic measures (e.g., Surf Coast, Victoria; Sunshine Coast, Queensland; Table S4 Supplementary information), conditions that belie the image of prosperity were reported. For

**Table 1**  
Economic and population profile of case-study communities, 2021 census data.

2021	Rockingham WA	Darwin NT	Onkaparinga SA	Sunshine Coast QLD	Shellharbour NSW	Surf Coast VIC	Kingborough TAS	Australian Average
SEIFA Decile Rank (and score) <sup>a</sup>	6 (962)	9 (1036)	5 (951)	8 (1001)	6 (962)	10 (1076)	9 (1020)	NA
Rental Stress (%) <sup>b</sup>	32.8	18.4	35.5	39.1	39.0	28.9	36.3	32.2
Mortgage Stress (%) <sup>c</sup>	11.5	11.3	11.8	13.8	15.2	12.5	10.5	14.5
Low-income households (%) <sup>d</sup>	16.5	10.9	18.7	16.7	17.2	12.8	15.7	16.5
High income households (%) <sup>e</sup>	21.9	31.8	14.1	19.8	21.0	31.8	20.9	24.3
Rental housing (%)	24.9	49.0	22.6	27.3	26.7	18.1	20.4	30.6
Unemployment (%)	6.4	4.1	5.6	4.4	4.3	2.8	5.2	5.8
Single parent families (%)	17.8	15.5	18.9	15.3	18.7	10.5	14.8	15.9
Lone person households (%)	23.3	25.4	26.0	25.3	21.6	21.3	23.9	25.6
Aboriginal or TSI (%)	2.7	8.7	1.9	2.4	5	0.6	4	3.2
Birthplace not Australia (%)	36.1	42	25.2	25.7	20.6	26.9	24.5	33.1

Grey cells indicate key deviations from national average.

<sup>a</sup> SEIFA Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) summarises information about the economic and social conditions of people and households within an area and ranges from 1 to 10 (highest rating). This index includes both relative advantage and disadvantage measures. A low score indicates relatively greater disadvantage and a lack of advantage in general. For example, an area could have a low score if there are: many households with low incomes, or many people in unskilled occupations, and a few households with high incomes, or few people in skilled occupations. A high score indicates a relative lack of disadvantage and greater advantage in general. For all Australian LGAs, in 2021 scores ranged between 660 and 1176, median value of 952.

<sup>b</sup> Rental payments greater than 30 % of household income.

<sup>c</sup> Mortgage payments greater than 30 % of household income.

<sup>d</sup> <\$650 household income/week.

<sup>e</sup> >\$3000 household income/week.

example, a community service provider commented:

*Even though on the surface, the socioeconomic data for Kingborough looks quite good, it doesn't track levels of family and domestic violence or mental wellbeing. We know that those are two key things that COVID has inflamed [with] massive impacts in households and across communities. (Tasmania, Community Sector 01)*

Despite consistent reports by interviewees of the challenges facing rapidly growing communities in meeting their needs (see Table 2), there were also within sector differences in perspectives. Variation was highest in the Sunshine Coast (Queensland), Darwin (Northern Territory) and Kingsborough (Tasmania) with respect to the ability of the community to meet their lower order needs (safety and physiological). Varied perspectives once again may be due to differences in scale of vocation (e.g., State versus local community service provider) and/or situational awareness of community.

Putting needs attainment in context, both coastal managers and community service providers identified issues impacting wellbeing in the rapidly growing coastal communities. Across all communities, there were reports of increasing rates of mental ill health, mortgage stress, low levels of literacy, homelessness, loneliness and social isolation, and youth crime, alongside more established issues shaping wellbeing such as unemployment, limited health care, and high transport costs (Table 2). Such issues can be driven by well-recognised, antecedent, and systemic issues linked to poor community health outcomes (e.g., JHM, 2021), including lack of affordable housing and job opportunities, and inadequate access to care and support (including education).

## Discussion

We commenced by highlighting the importance of a holistic framing of wellbeing in coastal areas, extending beyond the lens of risk and physical vulnerability. By exploring wellbeing through the lens of needs attainment, we sought to better understand if practitioners perspectives on wellbeing are consistent based on vocational responsibility (e.g., managing physical risk or social wellbeing); whilst also gaining insight into the wellbeing of rapidly growing coastal communities. In doing so, we sought to better understand if perceptions diverge along sectoral lines, as evidenced in policy that contributes to coastal management in Australia (see for example Elrick-Barr et al., 2022); and if so, implications for the ability of practitioners to improve social and environmental wellbeing in coastal areas. We found both similarities and differences in perspectives.

Despite consistent views on the presence of inequity in each case-study site, respondents did not always agree on community needs attainment. In general, coastal managers had a more optimistic view on the capability of their communities to meet their needs than community service providers (Supplementary Table S7): an unsurprising finding given community service providers work with clients who experience need daily. Divergence in perspectives was particularly acute however regarding the impact of coastal hazards on needs attainment. For coastal managers, self-actualisation was the need second most vulnerable to coastal hazards (behind safety). In contrast, community service providers viewed lower order needs, (i.e., physiological needs) as most vulnerable to coastal hazards (Table S3, Supplementary information). Such difference can be advantageous and constraining.

Advantageously, different perspectives can lead to a more holistic approach, as coastal managers and community service providers respond to different needs. Such an approach addresses Dye and colleagues (2005) concern that focusing on lower order needs can unintendedly lead to lock-in hindering the ability to meet higher order needs. Different perspectives can however also be constraining when select sectors lead response to change and it impacts the delivery of clear and consistent messaging. In Australia, impacts on the wellbeing of coastal communities extend beyond physical environmental change (e.g., erosion, inundation) to economic, cultural and social pressures

**Table 2**  
Conditions impacting the ability of the rapidly growing coastal communities to meet their needs.

Condition	Coastal sector	Community sector	Demonstrative quotes
Unemployment (lack of employment)	19 % (7)	66 % (21)	- "I think local employment is a significant issue and a potential pressure cooker situation a lot of those towns ... depend on tourism. But tourism is so seasonal that it creates this very up and down employment opportunities, particularly for young people." VIC Community Sector 03
Housing access/affordability	22 % (8)	47 % (15)	- "Housing [availability] is at 0.5 %. So, it's basically nothing. That's extremely inadequate" QLD Community Sector 02 - "And when you're going through a housing crisis, it pushes people out. It creates pockets of people that are unemployed and marginalised and disadvantaged" SA Community Sector 05 - "I feel that Rockingham as a whole, doesn't want to admit that we've got homeless people ... WA Community Sector 03 - "Lack of social housing - that's a big killer because the government have sold off a lot of their social housing and have not rebuilt" NSW Community Sector 01.
Health (incl. mental health) concerns	8 % (3, incl.1 mental)	50 % (16, incl. 10 mental)	- "There are a lot of mental health issues, ... a lot of depression, a lot of anxiety, a lot of other mental health issues as well" WA Community Sector 04 - "If you've got kids and you can't put food on the table, the sense of failure, there's issues around mental health, that are associated with not eating creates its own series of health problems for you as well." NSW Community Sector 04
Limited access to services (e.g., health/ financial/shelter/public transport)	11 % (4)	44 % (14)	- "Our nearest resources are Brisbane or further north. We're in this no man's land where people are on wait lists and have to travel to access key [health] services" QLD Community Sector 04 - "We see it State-wide, there's lack of a whole range of services ... mental health services for young families, ...services for children requiring, for example, a cognitive assessment" Tas Community Sector 01 - "We don't take any referrals at the moment, so people who have no support, they are just on their own." SA Community Sector 02 - "And there's ... the development transition risk where we are a growth area ... we going to be planting a lot of people in areas that are not well serviced by infrastructure and services" SA Coastal Sector 02 - "We've got one hospital here that runs at about 150 % capacity, so people are very vulnerable ..." NT Community Sector 04
Access to food (basic needs)	6 % (2)	38 % (12)	- "Food's the same [we need to improve access to it]. We don't get increases in emergency assistance, but there's more call for it." SA Community Sector 04 - "Basic needs food, water, shelter. No, we're not meeting those because if people [are] coming to a food bank for food, then we're not meeting those goals." QLD Community Sector 03 - "Struggling putting food on the table because the mortgage and rates ... is so high and their wages haven't kept up" NSW Community Sector 01
Homelessness	6 % (2)	31 % (10)	- "We've got really high rates of homelessness because public housing, there's an eight year wait list on some public housing. So yeah, that makes people very vulnerable. It also women and children, obviously who get caught up in domestic violence and that sort of thing, and forced to sleep rough due to that." NT Community 04 - "We're seeing a significant increase in homelessness population on the sunshine coast and quite visible, rough sleeping, which we haven't really seen before" QLD Community 04
Social isolation	0	25 % (8)	- "They are just so isolated, alone, have nobody." NSW Community Sector 01 - "And the need to connect the need to belong, to try and lift that sense of loneliness, disconnection" NSW Community Sector 02 - "I have a lot of clients come through that are depressed and socially isolated. ... I think a lot of it's got to do with COVID" TAS Community Sector 05
Alcohol and drug abuse (AOD)	0	25 % (8)	- "It has increased; alcohol, drug issues." NT Community Sector 02 - "Lots of people coming to town at royalty payment time and sleeping rough and consuming alcohol to harmful levels" NT Community Sector 04 - "I personally think it's the disconnected nature of families. Parents these days have their own issues with alcohol and substance abuse." TAS Community Sector 03
Domestic violence	3 % (1)	22 % (7)	- "Safety for me is around safety in the home, domestic violence, and that's increased dramatically and it increased dramatically through COVID." NSW Community Sector 01 - "... we have no services in Kingborough for domestic violence, people that are experiencing domestic violence, I think we've got one shelter and it's always full" Tas Community Sector 05. - "Very vulnerable down here at the moment. So the pandemic hasn't affect us a lot directly, but there has been quite a few issues with domestic violence and financial pressure, which are only going to increase now. ... a lot of new home buyers have a hundred percent finance on their homes. ... And as interest rates rise, I see a demand. We're finding that through Vinnies at the present time, the need to support mothers and children." Vic Community Sector 01
Access to (or limited) education	5 % (2)	22 % (7)	- "There's a whole cohort of people who miss out on [services] because they don't have access ... And it's not just older people it is some young ones... really evident through COVID with education. A lot of young people didn't have access to technology in the homes" NSW Community Sector 01. - "We've got significant literacy issues in Tasmania, so forms of compounding disadvantage, low education, family background of low paid employment or no employment. Long periods of unemployment, health, literacy issues, digital literacy issues" TAS Community Sector 01
Inability to rest	3 % (1)	13 % (4)	- "I don't think anyone rests anymore. Everybody's just working to make ends meet. And I think that's a big stressor on families." SA Community Sector 04

(continued on next page)

Table 2 (continued)

Condition	Coastal sector	Community sector	Demonstrative quotes
Youth crime	3 % (1)	10 % (3)	<ul style="list-style-type: none"> <li>- "I think again, we're struggling at the moment to see, the access to food and it sounds ridiculous in this day and age, but I think that is something particularly that people are struggling with and that's causing people to not have the capacity to properly rest and recuperate and to have that level of resilience they need to survive." QLD Community Sector 04</li> <li>- "We do have some problems in Shellharbour in relation to, I guess, youth boredom and fairly high unemployment rate". NSW Coastal Sector 04</li> <li>- "But the break-ins the damage to property that there's constant damage to property in this whole area. NSWVuln03: Yeah. I just think that. There's not a lot anyone can do. And it's kids that are doing it. So for instance, we had kids smashed a window next door. We've got them on video camera. They're nine and 10." NSW Community Sector 03</li> </ul>

\*Proportion (and number) of respondents, *per* sector, citing the issue affecting community wellbeing and needs attainment.

(Laubenstein et al., 2023). Yet, coastal managers primarily seek to respond to, and limit, environmental change (e.g., erosion) through land use planning controls, the development of coastal hazard adaptation plans (Elrick-Barr and Smith, 2021, 2022) and the implementation of protective measures that maintain the coastal margin (e.g., seawalls, groynes; Robb et al., 2019). The social context in which climate hazards play out is largely neglected (Elrick-Barr et al., 2024; van der Plank, 2024; Thomsen et al., 2012).

The community service sector provides a possible antidote to the dominant focus on physical risk, via its detailed understanding of social wellbeing and concern for meeting the physiological needs of coastal communities. Yet in Australia the community service sector is severely underfunded (e.g., Mendes, 2007; Elrick-Barr and Smith, 2021; Dedekorkut-Howes et al., 2021), limiting its ability to proactively plan for occurrences outside its immediate mandate of responsibility (Alston, 2002; Looi and Kisely, 2019; Gilcrest and Feenan, 2023). Coastal hazards are one such occurrence, suggesting the impact of climate hazards on physiological needs may go unmet in the absence of improved procedural justice in coastal planning and management.

Procedural justice involves vulnerable community members taking an active role in the decisions that affect them (Celliers et al., 2023; Ruano-Chamorro, 2022; Lau et al., 2021) and can be achieved through improved engagement in decision-making (van der Plank, 2024). In the Australian coastal sector, inclusive decision-making and public engagement is a requirement of most coastal adaptation planning programs. Yet challenges in engaging the community are reported and linked to a perceived lack of public awareness of coastal risk (Cone et al., 2013; Hügel and Davies, 2020). So too there is limited evidence of quality community engagement in coastal adaptation planning in England (van der Plank, 2024; Blunkell, 2017). Furthermore, the ability of the public to influence the systems and processes that define who is engaged and how, in responding to issues that affect their wellbeing is limited in the absence of achieving higher order needs (Ensor et al., 2021).

As the need transformative adaptation increases (Huebner, 2025), and growing inequity is uncovered, improved procedural justice will be critical to strengthening wellbeing under rising climate threats. As Gill and colleagues (2023) note: 'In many coastal communities, access to resources or services (e.g., credit, health care, infrastructure, insurance), capabilities (e.g., education, language, occupational diversity, capacity to self-organize), power, institutions, and learning mechanisms is often limited and highly variable' (p. 120). Inequity is a concern 'because it tends to unravel the social fabric of society, through its adverse effects on individuals' life chances and their ability to participate as active citizens in all areas of community life' (Hetzl et al., 2004, p. 9). The need for improved procedural justice extends beyond the coastal zone, where maladaptation is argued more likely in the absence of incorporating multiple knowledges and worldviews through deliberation, negotiation and challenging exclusionary practices (Puig et al., 2025).

Innovative approaches to include the voices of the marginalised in long-term planning are now being trialled. For example, the Tomorrows

Cities initiative has sought to give voice to marginalised communities and build capacity in multi-hazard planning in low- and middle-income countries (Tomorrows Cities, 2024). Yet such approaches are yet to translate more broadly to coastal management and planning practice (van der Plank, 2024; Blunkell, 2017). By broadening engagement and participation in coastal planning and management to include both vulnerable community members *and* the sectors that support them, social wellbeing and equity can be at the forefront of planning and management decisions; with the greater likelihood of challenging the practices and norms that perpetuate systemic conditions that impact community wellbeing (for further information on systemic conditions impeding coastal governance, see Elrick-Barr et al., 2024).

This study has uncovered differences in perceptions of the attainment of needs and systemic issues, such as employment opportunities, affordable housing and access to health services that impact wellbeing in rapidly growing coastal communities. There are however some limitations to the study. First, the findings draw on perspectives of key-stakeholders whose vocation addresses community wellbeing. The perspectives are of those interviewed in each case study area, and are not representative of the views of all community members. Second, some interviewees noted a degree of uncertainty in assigning ratings to communities' needs attainment. For some, divergence within the community made assigning a single rating difficult (see Section 3.2), while for others it was a function of less knowledge of the community (e.g., did not live in area or worked with only a segment of the community). In such cases, interviewees were provided the option to assign a rating based on their perspective (albeit limited/uncertain) noting that the descriptions/rationale surrounding ratings were captured, or not assign a rating. We deemed it important to include all ratings assigned in the analysis, as regardless of certainty, coastal managers and community service providers make implicit assumptions regarding the wellbeing of communities in their vocation daily to inform response strategies and actions. Third, further research is required to explore whether similar conditions are experienced in contexts beyond rapidly growing Australian coastal communities. Finally, Maslow's theory of human motivation provided a useful framing device to explore practitioner perceptions of community wellbeing, moving discussion beyond basic physiological needs to higher-order needs, whilst also uncovering diverse within community nuances not apparent in broad socio-economic measures. The adoption of alternate frameworks may however deliver different results.

#### 4. Conclusion

As the impacts of climate change and development place increasing pressure on coastal communities, there is a growing need to better understand the status of community wellbeing via approaches that extend beyond a reliance on broad measures such as average socio-economic conditions. By examining practitioners perceptions of community wellbeing through the lens of needs attainment, this study has uncovered systemic issues such as employment opportunities, affordable



housing and access to health services that impact wellbeing in rapidly growing coastal communities. Whilst not new issues, their presence in all communities regardless of objective measures of socio-economic wellbeing highlights the importance of greater integration of social context in coastal planning and management. This can be achieved via improved integration of marginalised community members, and the sectors that support them, within coastal planning and management.

We also uncovered clear differences in perceptions of needs attainment based on practitioner vocation. This is one of the first studies in a coastal context to move beyond a consideration of coastal practitioners perceptions of vulnerability or risk, to incorporate the perspectives of other sectors with a leading role in improving the wellbeing of coastal communities. Our results, which highlight differences across sectors, suggest some needs may receive greater attention in coastal planning and management than others, based on core sectoral responsibilities and associated resourcing. In the absence of greater integration between sectors, the ability to improve or maintain wellbeing in coastal communities will likely be hampered.

Future research may explore practitioner perceptions of wellbeing in other contexts, in particular in areas where there is greater cross-sectoral collaboration in coastal planning and management, to explore the degree to which the benefits of diversity in perspectives lead to optimal outcomes for rapidly growing coastal communities.

### CRedit authorship contribution statement

**Carmen E. Elrick-Barr:** Writing – original draft, Visualization, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Timothy F. Smith:** Writing – review & editing, Project administration, Methodology, Funding acquisition, Data curation, Conceptualization. **Dana C. Thomsen:** Writing – review & editing, Methodology, Formal analysis, Conceptualization.

### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ocecoaman.2025.107668>.

### Data availability

The data that has been used is confidential.

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