



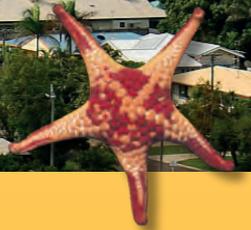
National Environmental
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TROPICAL ECOSYSTEMS *hub*

Technical Report

The Social and Economic Long Term Monitoring Program (SELTMP) 2014

Community Well-being in the Great Barrier Reef



Lea M. Scherl, Sarah Gillet, Erin Bohensky, Matt Curnock,
Jeremy Goldberg, Margaret Gooch, Nadine Marshall,
Petina Pert, Samantha Stone-Jovicich and Renae Tobin



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RESEARCH CENTRE

The Social and Economic Long Term Monitoring Program (SELTMP) 2014 Community Well-being in the Great Barrier Reef

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2014



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Introduction

The Great Barrier Reef (GBR) is an iconic place which is important for residents of the region and attracting national and international tourism. A thriving, significant tourism industry has been a part of the Marine Park since the early 1930s, for instance but in addition other industries like fisheries are also important in his region. In addition, the GBR is part of many residents lives and an important contributor to quality of life. There is no doubt that the Great Barrier Reef is an important asset in the northern Australia region. But in what ways? How can this be better understood and valued beyond its environmental qualities? For that, it is particularly important that we understand the many facets that permeate the relationships between people, communities and different user groups with the Great Barrier Reef, which we have done through the lenses of understanding well-being in the GBR.

This technical report presents a snapshot of social, cultural and economic data and indicators relevant to capturing well-being in the Great Barrier Reef region. It provides new insights into those relationships above, values and perceptions of the Reef, and will become an important baseline for monitoring and understanding well-being trends, and the potential impacts of changes in the environment and society.



Image by Matt Curnock

SELTMP 2014: WELL-BEING IN THE GREAT BARRIER REEF

What is SELTMP?

The Social and Economic Long Term Monitoring Program for the Great Barrier Reef (SELTMP) describes conditions and trends of the human dimension of the Great Barrier Reef (GBR) using both existing datasets (known as secondary data) and primary data. SELTMP was established in 2011 in response to Reef managers' and stakeholders' growing need for comprehensive social and economic data describing human activities and industries in the GBR, to enable the identification of socio-economic trends and drivers of change, and to assist with day-to-day management, planning and policy for the sustainable use of the Reef.

Long-term monitoring offers Reef managers, industries and communities the opportunity to understand the current status of GBR users, industries and communities, including those dependent on ecological components of the system. Long-term monitoring offers the opportunity to evaluate and plan for the future of each industry and community in the face of environmental and societal challenges, including climate change, environmental degradation, regulatory change, cultural and technological change. SELTMP provides the opportunity to evaluate the effectiveness of management interventions and to assess equity dimensions within the region. Long-term monitoring offers the best scientific approach for conceptualizing and assessing how people are prepared for change and adapt.

The success of a program such as the SELTMP can only occur with well-translated cutting-edge social and economic data and knowledge that directly feeds into current management processes. The science must be excellent, collaborative and must itself adapt as learnings from the monitoring datasets are developed. Hence, the SELTMP is governed by a Steering Committee and a Stakeholder and Scientific (S&S) Advisory Panel (See Figure 1). The design and working model for the SELTMP occurs through working groups. Each working group is led by a core team researcher and comprises members from industry, government and community. Some 100 individuals have so far been involved in Working Group processes to develop and implement SELTMP.

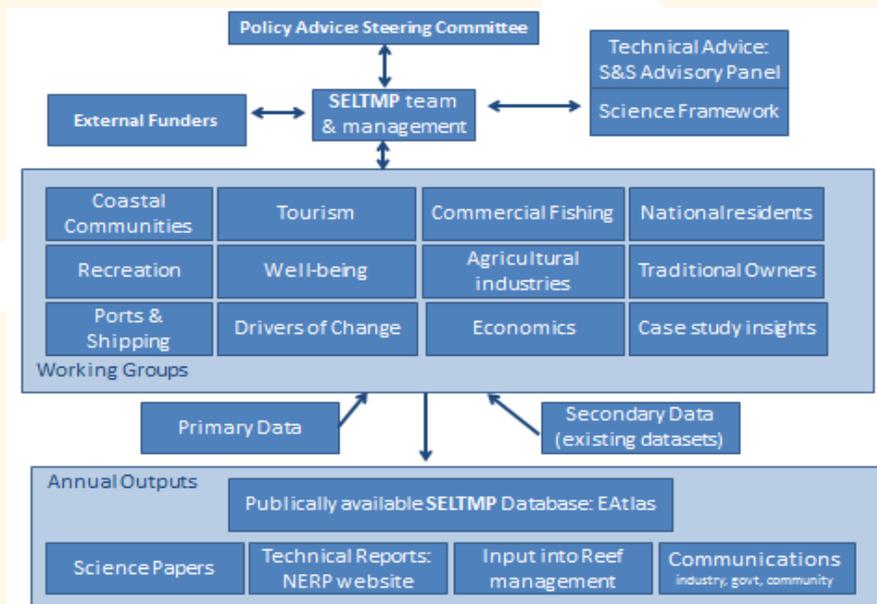


Figure 1. The operational structure of the SELTMP and its key outputs

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SELTMP outputs

SELTMP is strongly guided by both the scientific literature and by its end-users. The variables chosen to represent and monitor the human dimension through time were identified by working group members and by modifying and applying a well-known science framework (the 'Millennium Ecosystem Assessment' model). The resulting SELTMP framework provides a conceptual understanding of how the human dimension connects with the Great Barrier Reef. SELTMP represents one of the first monitoring programs in the world to comprehensively identify and measure socio-economic components of a natural resource system and that are increasingly needed for resource management.

Through monitoring existing regional datasets and undertaking survey work in the region, SELTMP provides annual snapshots of key communities and industry sectors associated with the Reef, including national residents, recreational users, marine tourism, commercial fishing and ports and shipping. SELTMP monitors human use of and dependency on the GBR, human and community well-being (as they relate to the GBR), as well as a range of socio-cultural drivers such as perceptions, values, attitudes and behaviours. We anticipate that SELTMP will collect new data annually.

Annual snapshots of the human dimensions of the Reef and learnings will be communicated via four main outputs:

- (i) **A web-based database.** Each year, the SELTMP web-based database will be updated to reflect the most up-to-date socio-economic data for the Reef and its catchment. Through web-based facilities, researchers will be able to access data for research purposes, industry will be able to use data to inform their planning and management, and Reef and regional managers will be able to better understand the complex social and economic environment within which they operate and use the data in their day-to-day decision-making processes. The current database, held with eAtlas contains survey results from over 8,000 individuals across each of the following user-groups: commercial fishers, tourism operators, tourists, local residents, and Australians.
- (ii) **Technical reports.** Each year a series of technical reports are published that provide the latest information on conditions for that year based on both primary and secondary data. SELTMP 2011 was the inaugural year in which the design and conceptual model were developed. It assembled and presented data from a range of existing sources relevant to people and industries in the GBR and catchment. SELTMP 2012 was refined in terms of its design and included updated secondary data. SELTMP 2013 was the first year in which data gaps were addressed with primary data collected to add to the secondary data. **This report represents Well-Being in the GBR within the "SELTMP 2014 Technical Report Series" and includes a wide range of data and analyses of relevant SELTMP survey data.**
- (iii) **Science papers.** Human trends are analysed and communicated through peer-reviewed scientific literature, that showcase the science value and management application of SELTMP. As SELTMP is currently at the end of its design and implementation phase, there is so far limited longitudinal value. Science papers in the immediate term are drawn from the comprehensive baseline dataset for scientific and policy relevance.
- (iv) **Targeted communications for industry, government and community.** Key findings will be highlighted through media campaigns in which communication products such as 'key findings booklets', press-releases, popular media articles, seminars and conferences, will be developed. For sectoral specific outputs, we will consult and be advised by members of our sectoral working groups.

SELTMP 2014: WELL-BEING IN THE GREAT BARRIER REEF

The SELTMP Framework for Describing the Reef Relationship

The framework chosen to guide the choice of indicators was based on the Millennium Ecosystem Assessment (2003, 2005), which established a 'big picture' conceptual overview of the relationship between people and natural resources for the purposes of assessing ecosystem condition. The Millennium Ecosystem Assessment conceptual framework was developed in consultation with over 2,000 scientists. It is based on the "DPSIR" model which focuses on drivers, pressures, states, impacts on and responses of systems. Human use and dependency, community wellbeing, and the direct and indirect drivers of change can influence the Great Barrier Reef ecosystem and its services at multiple spatial scales, from local to global. For more information on the SELTMP monitoring framework, please see the *SELTMP 2014 Key Findings Technical Report*, available via the NERP website.

i) Use and Dependency

How people use and depend on the GBR. Components include:

- Use of the Environment: Where, When, How, How Much
Activities (what, how, how much)
Spatial and temporal patterns of use (where and when)
- Social Relationship with the Environment: Who and Why
Cultural, spiritual and intellectual inspiration and experiences (place, identity, aesthetics, satisfaction)
- Economic Relationship with the Environment (What is the relationship like?):
Employment, value and investment

ii) Human and Community Well-being

Societal benefits derived from the environment. Components include:

- Security (e.g. for livelihoods and lifestyles)
- Opportunities (e.g. for access and development)
- Empowerment (e.g. in determining future outcomes)

iii) Drivers of Change

Includes direct and indirect drivers, including (but not limited to):

- Employability
- Environmental stewardship
- Information and Networks
- Sector-specific drivers



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

Why do we need to understand human & community wellbeing?

The status of the Great Barrier Reef as a World Heritage area brings along with it an added layer of responsibility with respect to its management. The World Heritage Convention obliges State Parties to the convention to identify, protect, conserve, rehabilitate, present and transmit to future generations the natural and cultural heritage of the World Heritage properties within its territory (Article 4). The convention also obliges State Parties to '*adopt general policies which [aim] to give the cultural and natural heritage a function in the life of the community and to integrate the protection of that heritage into comprehensive planning programs*' (Article 5 (a), World Heritage Centre 2012, Scherl 2012). Understanding the links between environmental values and services and human and community wellbeing, as part of the SELTMP, will contribute towards the Australian Government and management agencies meeting their obligations with respect to the World Heritage Convention, i.e. with respect to the GBRWHA providing a 'function in the life of the community'.

In addition, there is a tremendous paucity of information through studies conducted within the GBR with respect to addressing these direct links between environmental values and services and human and community wellbeing. Whilst the topic of human wellbeing of residents of coastal communities adjacent to the GBR has received attention previously (e.g. Silva 2010), how much such human wellbeing is perceived to be directly related to or dependent upon the environmental goods and services provided by the GBR is still very much untapped research terrain. Nevertheless, there is ample acknowledgment that the GBR has a value that goes beyond any market or economic values (e.g. Stoeckl et al 2011). Many studies that address only selective facets of such values, such as the opportunities for recreation and tourism experiences, have been conducted previously (see other chapters in this report). There is also a growing movement linked to promoting the notion of 'Healthy Parks, Healthy People' that is exploring the many ways in which nature and parks significantly contribute to our health and wellbeing (Healthy Parks, Healthy People 2010). These reasons (identified in the paragraph above) are also important considerations for including a more holistic understanding of human and community wellbeing as a cross cutting theme within the SELTMP. Supporting such efforts here, are growing calls in the literature that wellbeing connections to nature need to be addressed in the context of marine and coastal strategies (e.g. Koss and [Kingsley](#) 2010) and that enhancement of health and human wellbeing is an important pillar of effective coral reef governance (Schuttenberg 2010). Some studies elsewhere have already been addressing these topics and their relevance to management in the marine environment (e.g. Gjertsen 2005; Koss and Kingsley 2010; Scherl 2008, van Beukering et al.2013).



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What is human & community wellbeing?

Human and community wellbeing refers to the goodness of a person or community's life, or to some aspect of it such as health, relationships with others and the environment, a sense of belonging to a place or a group, or spirituality. We make a distinction that there are two levels of wellbeing; one related to individuals and the other that encompasses community at large. The latter is often also referred to as 'quality of life' (Gasper 2010) with human wellbeing as the 'subjective' dimension of such quality of life (Cummins 2007). Human and community wellbeing is not only about individual or community needs that are being met but also about the freedom to exercise choice and the opportunity to have an influence on factors that affect one's life conditions (c.f. Coulthard et al 2011). The concept of wellbeing comprises both notions of feeling good and functioning well. "Feelings of happiness, contentment, enjoyment, curiosity and engagement are characteristic of someone who has a positive experience of their life. Equally important for well-being is our functioning in the world. Experiencing positive relationships, having some control over one's life and having a sense of purpose are all important attributes of wellbeing" (Aked et al., cited in White 2009b, p. 5). In summary, the notion of wellbeing provides a holistic and positive perspective to understand the connections between the GBR and individuals and communities.





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A framework for monitoring human & community wellbeing

Social assessments of conservation initiatives, and approaches to undertake these assessments, are now receiving far more attention (Schreckenberget al 2010). The overall framework proposed here was part of this review. It borrows from the development literature (the World Bank Attacking Poverty framework) and was first identified as a useful framework for the conservation and natural resource management (NRM) context by Scherl et al 2004 (noting here that the concept of poverty reduction is interchangeable with the concept of human wellbeing). It was then used to specifically address the relationship between marine protected areas and poverty reduction/human wellbeing (with indicators tailored to the marine environmental management context) in four countries (Scherl 2008, van Beukering et al., 2013). It has then be adapted to the Great Barrier Reef Region and is presented below.

This framework portrays human and community wellbeing as a multi-dimensional and dynamic concept whereby the dimensions are inter-linked can affect each other and sometimes be overlapping; following from the holistic notion of wellbeing mentioned above. The generic human and community wellbeing framework, as a proposed component of the Socio-Economic Long-term Monitoring framework, is presented below in Figure 1.





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A framework for monitoring human & community wellbeing

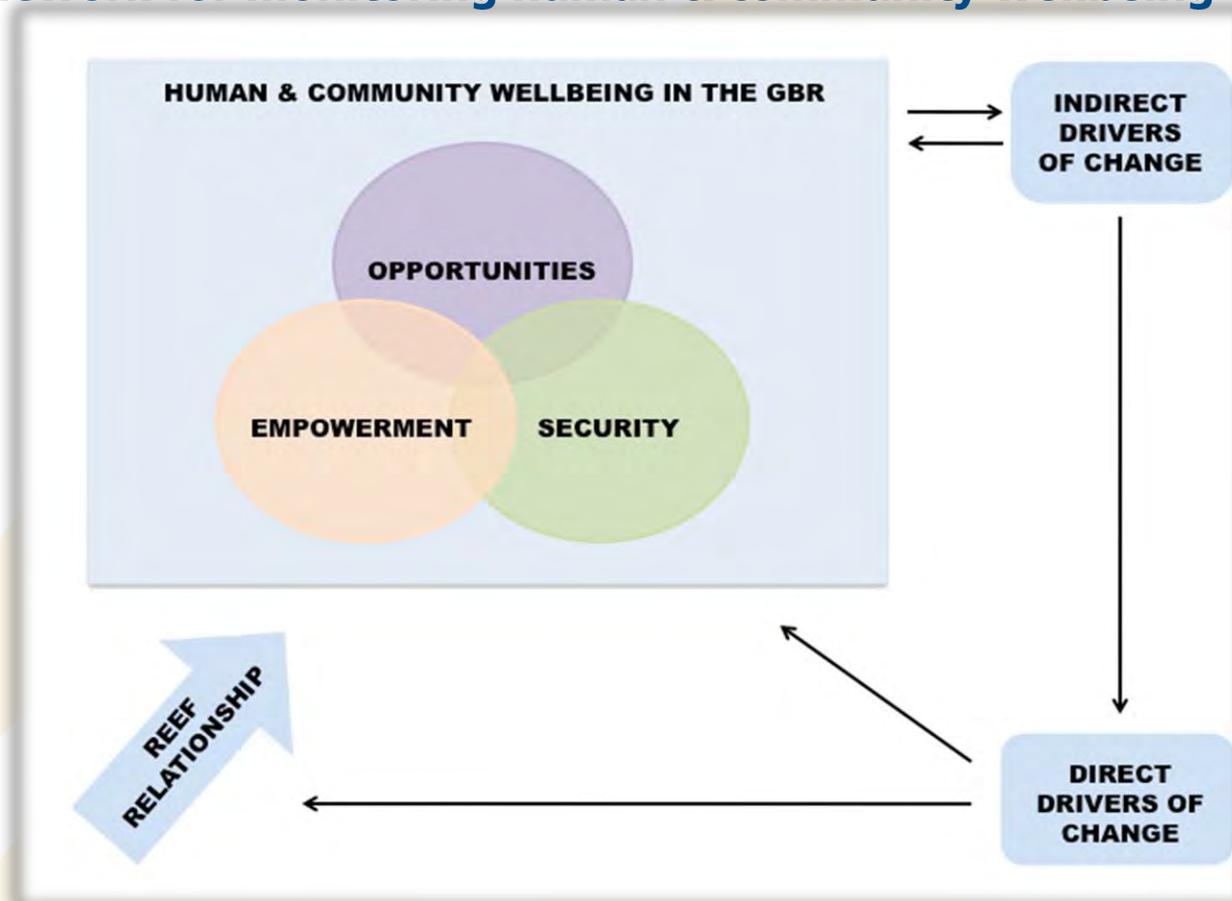


Figure 1: Proposed Framework to Understand Human and Community Wellbeing in the GBR. *The indirect and direct drivers of change and the range of reef relationships described in the next chapters all affect human and community wellbeing.*



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A framework for monitoring human & community wellbeing

The indirect and direct drivers of change and the range of reef relationships described in the next chapters all affect human and community wellbeing.

The rationale and its relevance to the Great Barrier Reef Marine Park for each of the broader dimensions follow. They are addressed from the perspective of people, groups and industries associated with the GBR (i.e. what do opportunities, empowerment and security mean to people, groups and industries)?

Opportunities refers to perceived range of options that are related to access to the natural environment for different purposes, the development and maintenance of reef-dependant industries, direct employment in these industries and GBR management, including the building of skills and capacity for management and sustainable use of marine resources. Whilst there can be conflict amongst opportunities, addressing those is part of maintaining a wide spectrum of such opportunities within a multiple use marine park like the GBR.

Empowerment refers to perceptions that the needs of a range of different stakeholders are acknowledged and have been taken into account, avoiding exclusion and strengthening the ability of people to contribute to decision-making processes. Multiple-use protected areas like the GBR are more than just a biophysical location wherein ecological integrity and ecosystems services are sustained. It is also the associated governance mechanisms including its cultural and social institutions, legal and policy frameworks and the partnerships and collaborations that have been established for effective management, and how people perceive these are functioning.

Security refers to perceptions of stability, sustainability and environmental quality that the GBR and its management provides to individuals and communities, which in turn contribute to reduce vulnerability, to health, to a sense of pride and identity and to social engagement, cohesion and cultural practices' opportunities surrounding the GBR and its management.

Impacts on one dimension can potentially affect others, so it is important to look at the dimensions as an interconnected web. For instance, taking away opportunities for resource access without relevant user groups perceiving they can contribute to such a decision can have an impact on people's perceptions of stability, equity and ultimately pride that one or a group may feel in relation to the GBR. Being unaware of cultural traditions because of lack of empowerment of relevant groups can impact on opportunities and sense of belonging, and undermine social cohesion. Decisions related to development activities that impact on environmental quality can also impact on human health, sideline some user groups from a particular area and may erode confidence in the governance mechanisms that exist in the GBR.



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Human & community wellbeing indicators

The indicators presented below are portrayed from the perspective of individuals, groups or industries (i.e. their perceptions of these indicators in relation to the GBR and its management). They are also meant to be cross cutting for a number of users of the GBR, but not all indicators will be suitable to every direct or indirect user group. They are derived from analysis of the following sources of material:

1. A *selective* literature review of both: (i) research and frameworks related to different types of uses, experiences within, and perceptions of, the GBRMP as well as management and governance practices; and (ii) research from elsewhere on the specific relationship between conservation and NRM programs and human and community wellbeing, particularly in marine environments (e.g. Gjertsen 2005; Scherl 2008; Schuttenberg 2010) and the growing literature showing interest in the identification of indicators to measure benefits of conservation initiatives and protected areas (e.g. Dudley and Stolton 2008, Pabon-Zamora et al 2008, Schreckenberget al 2010);
2. Information from stakeholder meetings that have been conducted over the past 12 months for development of the comprehensive SELTMP for the GBR;
3. Information which, at the time of writing, was just emerging through the process of the GBRMP Strategic Assessment and the accompanying stakeholder workshops that have taken place during the last 12 months and was shared within the SELTMP team; and
4. The practical knowledge and experiences of the SELTMP GBR team conducting relevant research.

There are three points worth noting in this first SELTMP GBR report:

Items b) and c) above provide a good basis and reality check, in the interim, from the perspective of users about the indicators (in the absence of much previous systematic research and the ability to conduct a multi-stakeholder workshop to validate such indicators thus far).

While a comprehensive list of human and community wellbeing indicators have been identified and are provided below, the SELTMP GBR will not be able to monitor all of these from the outset. A process for further definition and refinement of those indicators to be monitored is part of the next steps (see also chapter footnote).

The final Indicators that are chosen for long-term monitoring have to be relevant both across groups (at a broader level) and within each specific group (tailored for different groups at the more specific level). A nested approach for indicators of human and community wellbeing is recommended.



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Human & community wellbeing indicators

INDICATORS FOR EACH DIMENSION OF THE H & C WELLBEING FRAMEWORK	BROAD INDICATORS	SPECIFIC INDICATORS
OPPORTUNITIES	i. Employment, income, contribution to livelihoods	1. Direct employment in industry related to GBR 2. Satisfaction with Income generation 3. Contribution to livelihoods
	ii. Recreation, tourism and enjoyment	4. Recreation and sports 5. Tourism experiences 6. Vicarious enjoyment 7. Maintenance of wide spectrum of uses and access
	iii. Industries' development and maintenance	8. Development and maintenance of industries 9. Local, regional, national economic contribution of industries 10. Payment for environmental services
	iv. Skills and capacity building for management and stewardship	11. Skills development and training programs available



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Human & community wellbeing indicators

INDICATORS FOR EACH DIMENSION OF THE H & C WELLBEING FRAMEWORK	BROAD INDICATORS	SPECIFIC INDICATORS
EMPOWERMENT	v. Contribution to decision-making	12. Direct contribution to decision-making and satisfaction with management 13. Integration of local and direct users' knowledge in management and decision-making
	vi. Collaborative and effective governance	14. Effective partnerships (to support management, sustain industries, maintain spectrum of opportunities) 15. Effective models of collaborative management (e.g.. co-management) 16. Promotion of mutual respect amongst stakeholder groups and knowledge holders 17. Clear and transparent policies, guidelines and management decisions and actions 18. Clear legal obligations 19. Equity (across groups and intra and inter generations)
	vii. Knowledge and stewardship	20. Knowledge, understanding and appreciation 21. Mechanisms and activities for promoting stewardship 22. Freedom of choice and action
	viii. Cultural respect and rights	23. Indigenous culture (stewardship, incorporation in management, respect) 24. Historical and evolving cultural value (stewardship, incorporation in management, respect)



SELTMP 2013: HUMAN AND COMMUNITY WELL BEING

Human & community wellbeing indicators

INDICATORS FOR EACH DIMENSION OF THE HUMAN AND COMMUNITY WELLBEING FRAMEWORK	BROAD INDICATORS	SPECIFIC INDICATORS
SECURITY	ix. Health and quality of life	25. Overall quality of life (at the individual and community level) 26. Human and community health
	x. Group, organization membership and relationships	27. Belongingness of a group, organization or networks 28. Social cohesion 29. Relationships (family, friends, community groups)
	xi. Environmental quality, amenity and aesthetics	30. Aesthetics/Visual amenity 31. Health of environmental values and services (water quality, reef abundance and health, diversity and abundance of marine life, condition of coastal beaches and islands)
	xii. Identity, sense of place, pride	32. Identity, sense of place and attachment, personal connection, pride 33. Cultural, spiritual connection
	xiii. Sustainability and resilience	34. Sustainability of industries 35. Food provisioning 36. Management effectiveness 37. Climate change mitigation and adaptation efforts 38. Buffer to natural disasters



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SELTMP Surveys 2013 – Methods & Response rate

The social and ecological components of the Great Barrier Reef are inseparable. Understanding how these components interact may contribute to strategic interventions that can halt, reverse, or change a negative impact. However, there has been a considerable lack of attention given to the contextual forces that shape the direct drivers of change along the GBR. New data has been collected in 2013 in order to complete the information gaps identified in previous SELTMP Reports and to achieve our goal, namely assisting environmental decision-making in the Great Barrier Reef by providing knowledge of the social and economic dimensions of the region. The five stakeholder groups that have been surveyed over the past year for the SELTMP project are the national residents, the GBR coastal residents, tourists, tour operators and commercial fishers. In total 8103 surveys have been collected.

National Resident Survey

Surveys were conducted online from March 26 to April 2, 2013 and from September 4 – 10, 2013 via Pollinate, a market research firm based in Sydney, Australia. Since 2007, Pollinate has conducted bi-annual surveys of more than 20,000 Australians via its ongoing Green Pulse Omnibus Survey, an ongoing, representative market monitor dedicated to understanding people's attitude towards the environment and associated consumer behaviours. Pollinate constructed the online survey format in collaboration with Lightspeed Research, a global provider of research panels and products related to advertising, consumer insights and market research. The survey was sent to a nationally representative sample (i.e. in terms of age, gender, location, etc..) of randomly selected people throughout Australia. 2002 Australians completed the national survey.

GBR Resident Survey

3181 respondents were surveyed via face-to-face interviews, with responses to survey questions entered into an iPad, using the iSurvey application. In some cases respondents opted to complete the survey on paper, and their responses were later entered into the iPad app. For the purposes of this survey, **residents were defined as people who live within the GBR catchment** (bounded by Bundaberg in the south, Cape York in the north and the Great Dividing Range in the west). **Recreational users were defined as residents undertaking recreational activity in the GBRWHA**, anywhere from the mainland beaches to the eastern boundary of the GBRMP.

GBR Tourist Survey

A sample of 2621 tourists completed the survey. Respondents were surveyed in the same way as residents, namely via face-to-face interviews, with responses to survey questions entered into an iPad, using the iSurvey application. For the purposes of this survey, **tourists were defined as non-resident visitors to the GBR region** (i.e. the GBR catchment, bounded by Bundaberg in the south, Cape York in the north and the Great Dividing Range in the west). Surveys were conducted in English only, and access to tour groups (e.g. on board coaches, in hotels etc.) was limited. It is therefore likely that some important tourist market segments (e.g. Asian tour group travellers) and non-English speaking visitors are under-represented.

The resident and tourist surveys were conducted at locations in and around 14 coastal towns of the GBR region, from Cooktown to Bundaberg. Survey locations included (but were not limited to) public beaches and esplanades, nearby islands, airports, boat ramps, jetties, shopping centres, caravan parks, markets, popular public education locations (e.g. Aquarium, museum) and a limited number of Reef tourism vessels. The resident surveys were conducted at the same time as tourist surveys, and the response rate for both survey types combined was over 53%



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

SELTMP Surveys 2013 – Methods & Response rate

GBR Tourism Operator Survey

Respondents were surveyed via telephone interview, with responses entered directly into the iPad app. A database was compiled to identify all GBR tourism businesses that were currently operating. Tourism operations were identified initially via a comprehensive web search, followed by snowball sampling once surveys had commenced. A total of 213 tourism businesses were identified and requested to participate. Of these, 34 declined, 57 were unresponsive to contact attempts and 122 agreed to participate. A total of 119 respondents completed the survey.

GBR Commercial Fisher Survey

Surveys were designed with input from key end-users and industry representatives. The commercial fisher surveys were conducted on the phone, with survey staff completing the survey on iPads during July and August 2013. Surveys were anticipated to take approximately 15 minutes, however many took over 30 minutes or even an hour due to fishers wanting to share experiences and opinions.

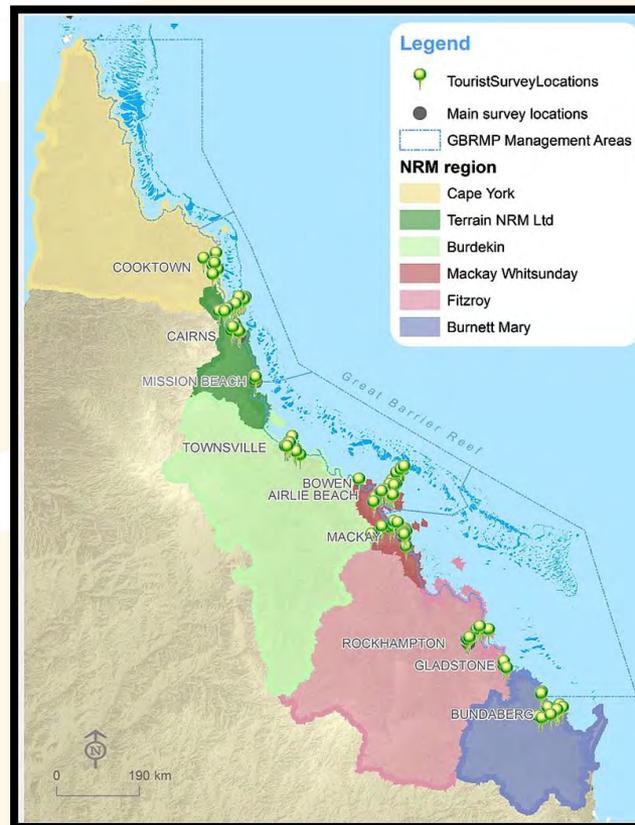
To contact the fishers, publicly available list of current (2013) commercial fishery and harvest licence holders from Fisheries Queensland – this list included licence holders' name and home address, were obtained. Introductory letters were sent to all relevant licence holders – i.e. those holding symbols that allowed access to the GBR – 2 weeks prior to starting the surveys to alert fishers to the upcoming surveys. Phone numbers for these fishers were sourced from previous JCU and CSIRO research projects where fishers had given explicit permission to be re-contacted for future research. Remaining phone numbers were sourced from the electronic white pages, via snow-ball sampling from contacted fishers, and directly from fishers who contacted the project team after receiving the introductory letter.

A total of 303 licence holders were contacted. Of those, 26 claimed they did not fish in the GBR and hence did not continue the survey, and 67 fishers refused to participate. Some licence holders referred surveyors to their licence operator, where appropriate. A total of 210 fishers completed the survey, giving a response rate of 75% of relevant contacted fishers. Given an estimate of 759 active licences in the GBR, held by approximately 592 individuals / businesses (based on 'best guesses' of duplicates of names and/or addresses), the surveys sampled at least 35% of active GBR licence holders. Respondents were spread throughout the GBR catchment, and included some licence holders residing outside of the catchment (but fishing in the GBR), and included fishers from all fishery types.

SELTMP 2014: WELL-BEING IN THE GREAT BARRIER REEF

Data Presented in this Report

This technical report presents a snapshot of socio-economic data and indicators relevant to the current state of well-being in the Great Barrier Reef region. Other detailed analyses and discussion of SELTMP results can be found in scientific papers and targeted communications for industry, government and community (e.g. See GBRMPA Outlook Report 2014: <http://www.gbrmpa.gov.au/managing-the-reef/great-barrier-reef-outlook-report>. Potential users of SELTMP are encouraged to contact the research team to develop specific research and communications outputs drawing on these data. The data presented here draws from the 2013 SELTMP Survey conducted in the GBR region depicted in the map below. Well-being questions were inserted in all different user groups surveys.



Data presentation

Most data, which follows below, are presented as **% of respondents**. Where 10-point scales were used to elicit agreement with statements (where 1 = strongly disagree, 10 = strongly agree), we display the **mean score** and the **% of respondents who agreed** with the statement (i.e. scored a 6 or above). [All survey related data are referenced as "SELTMP Survey 2013".]

Data are presented by each dimension of the well being framework: Opportunities, empowerment and security. For each one of those dimensions data for each group of respondents (and questions that were asked of them pertaining to those dimensions of wellbeing) are presented.

Limitations to note

Data from the surveys are relevant to **residents of coastal towns (CTs)** adjacent to the GBR only. They cannot be extrapolated to the entire catchment. As such, where SELTMP data are shown, they are represented as the "**NRM CT**" in which they were surveyed – E.g. "Burdekin CT" which includes Townsville and Bowen. (Note 88% of respondents were surveyed in the same NRM that they reside in).



National Environmental
Research Program

SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART A: OPPORTUNITY





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART A: OPPORTUNITY (GBR COASTAL RESIDENTS)

Human and Community Wellbeing – Residents’ Survey (3151)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE) OR % OF RESPONDENTS

BROAD & SPECIFIC INDICATORS*	OPPORTUNITIES	AVERAGE	PERCENTAGE
ii (4,7), ix, xi	There are many other places better for the recreation activities I enjoyed than the GBR	4.6	34%
xii (32)	I live in this region because of the GBR	4.8	41%
ix (25, 26)	The GBR contributes to my quality of life and well-being	7.5	80%
I (1,2,3)	The GBR is a valuable asset for the economy of this region	8.9	95%
ix (25, 26)	I value the GBR because it supports a desirable and active way of life	8.5	93%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART A: OPPORTUNITY (GBR REGION TOURISTS)

Human and Community Wellbeing – Tourist’s Survey (2621)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE) OR % OF RESPONDENTS

SPECIFIC & BROAD INDICATORS*	OPPORTUNITIES	AVERAGE	PERCENTAGE
ii (4,7), ix, xi	There are many other places that are better than the GBR for the tourism activities I enjoy	5.2	42%
ix (25, 26)	I value the GBR because It supports a desirable and active way of life	8.0	89%
	It means a lot to me that I have been to the GBR	8.3	92%
	The GBR was an important influence on my decision to visit the region	6.9	70%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART A: OPPORTUNITY (GBR TOURISM INDUSTRY)

Human and Community Wellbeing – Tourism Operator Survey (119)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE) OR % OF RESPONDENTS

SPECIFIC & BROAD INDICATORS*	OPPORTUNITIES	AVERAGE	PERCENTAGE
ii (4,7), ix, xi	There are many other places that are better than the GBR for the tourism operations I do	3.1	18%
xii (32)	I live in this region because of the GBR	7.4	76%
ix (25, 26)	The GBR contributes to my quality of life and well-being	8.7	93%
I (1,2,3)	The GBR is a valuable asset for the economy of this region	9.4	97%
ix (25, 26)	I value the GBR because it supports a desirable and active way of life	8.7	92%
	I feel optimistic about the future of my business in the GBR	7.1	76%
	My business has not performed as well this year as it did last year	4.7	39%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART A: OPPORTUNITY (GBR COMMERCIAL FISHERS)

Human and Community Wellbeing – Commercial Fishers Survey (210)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE) OR % OF RESPONDENTS

SPECIFIC & BROAD INDICATORS*	OPPORTUNITIES	AVERAGE	PERCENTAGE
ii (4,7), ix, xi	There are many other places that are better than the GBR for the commercial fishing I do	2.7	14%
xii (32)	I live in this region because of the GBR	6.6	65%
ix (25, 26)	The GBR contributes to my quality of life and well-being	8.2	88%
I (1,2,3)	The GBR it is a valuable asset for the economy of this region	9.0	95%
ix (25, 26)	I value the GBR because It supports a desirable and active way of life	8.7	94%
	I feel optimistic about the future of my business in the GBR	5.2	46%
	My business has not performed as well this year as it did last year	5.0	43%

* See page 9-11



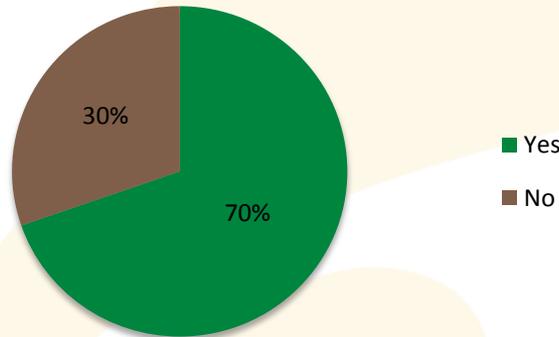
SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART A: OPPORTUNITY (EXAMPLE INDICATORS)

VISITATION RATES

SPECIFIC AND BROAD INDICATORS*: II (4,7)

TOURISTS (N=2619)

Have you visited the GBR during this current visit to the region

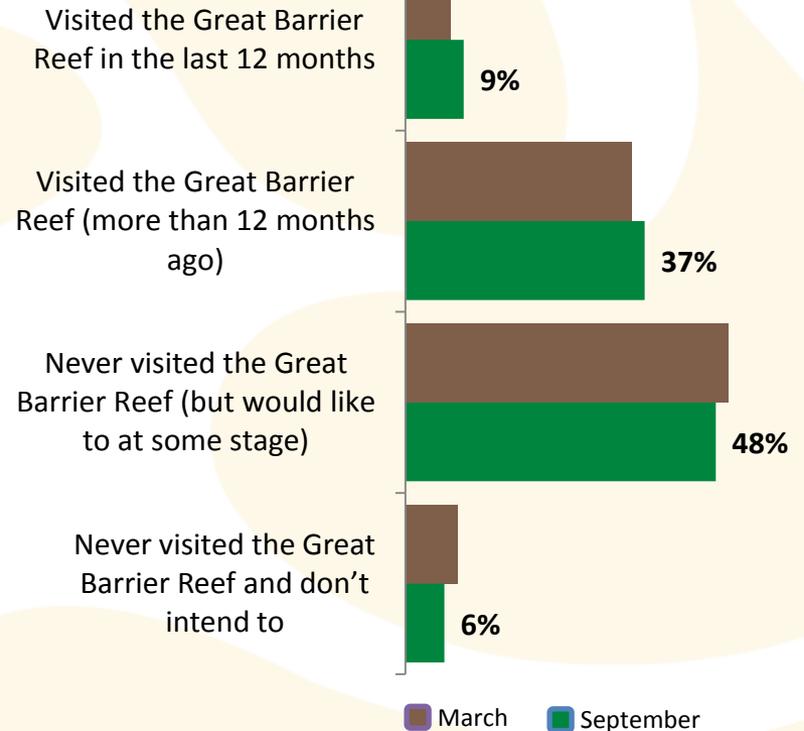


NATIONAL RESIDENTS

Total

(March vs September)

0% 10% 20% 30% 40% 50% 60%



* See page 9-11

Base: Total sample, Australians aged 14-64 (n=1,000)



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART A: OPPORTUNITY (EXAMPLE INDICATORS)

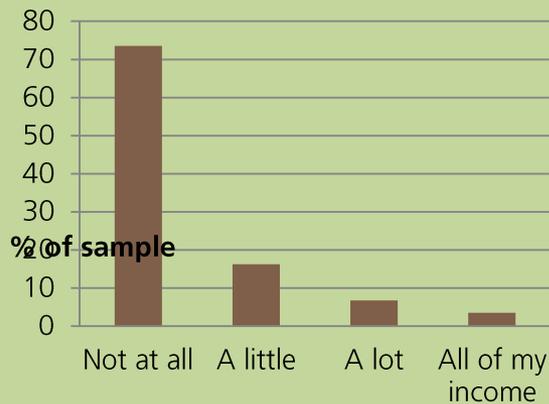
Human and Community Wellbeing – Residents’ Survey (3151)

HOUSEHOLD INCOME RELATED TO THE GBR

BROAD AND SPECIFIC INDICATORS*:...

To what extent does the GBR contribute to your household income

	% none;	a little;	a lot;	all
Cape York +				
Wet Tropics CT:	71;	9;	7;	4%
Burdekin CT:	72;	17;	8;	3%
Mackay-Whit CT:	69;	15;	10;	6%
Fitzroy Basin CT:	76;	18;	4;	2%
Burnett Mary CT:	83;	12;	3;	2%
GBR CTs overall:	74;	16;	7;	3%

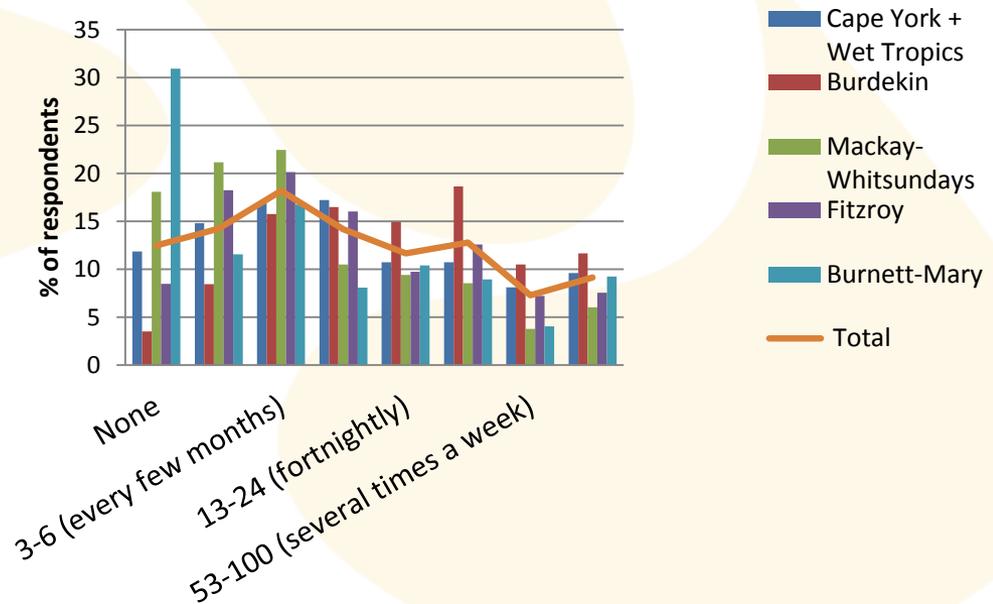


Ref: SELTMP Survey 2013

VISITATION RATES

BROAD AND SPECIFIC INDICATORS*: II (4,7)

How many days have you visited GBR in the past 12 months?



- 95% HAD VISITED THE GBR AT LEAST ONCE IN LIFETIME
- 88% VISITED AT LEAST ONCE IN PREVIOUS 12 MONTHS

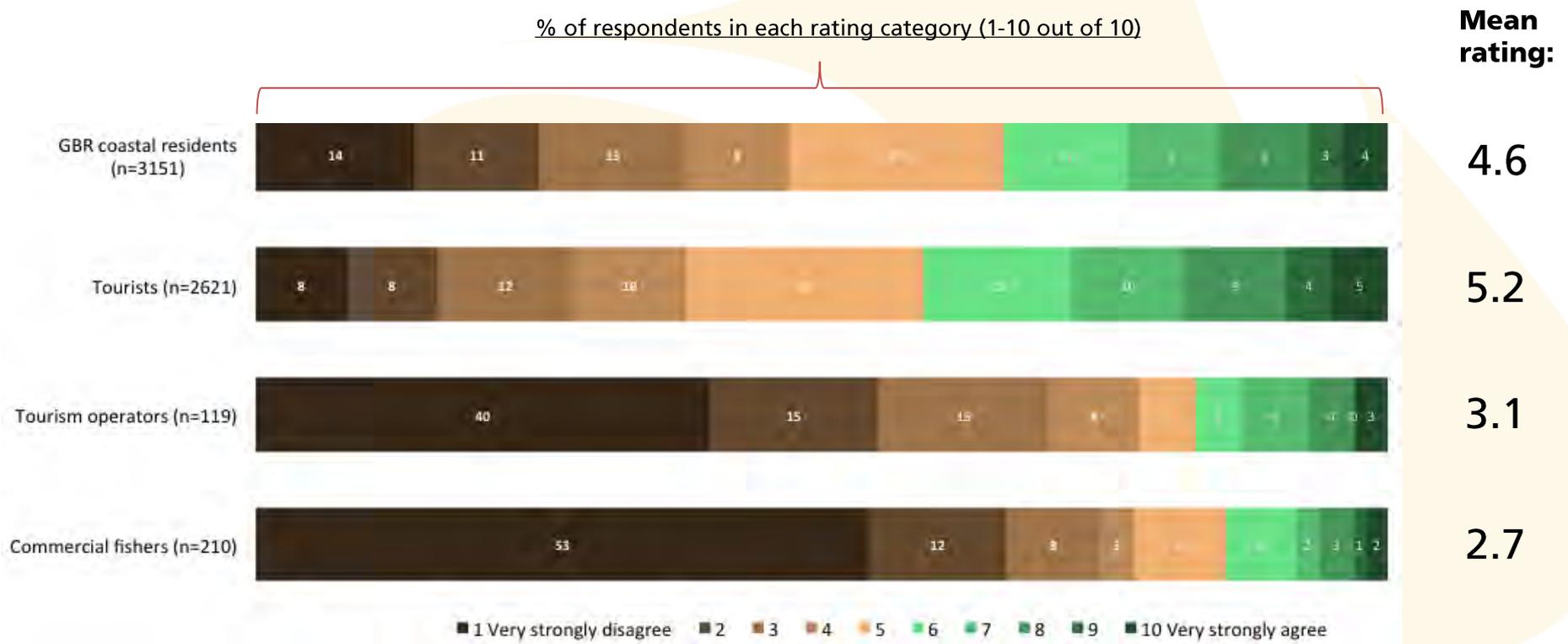
* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART A: OPPORTUNITY (EXAMPLE INDICATORS)

“THERE ARE MANY OTHER PLACES THAT ARE BETTER THAN THE GBR FOR THE RECREATION ACTIVITIES/ TOURISM OPERATIONS/ FISHING COMMERCIAL I DO”

% of respondents in each rating category (1-10 out of 10)



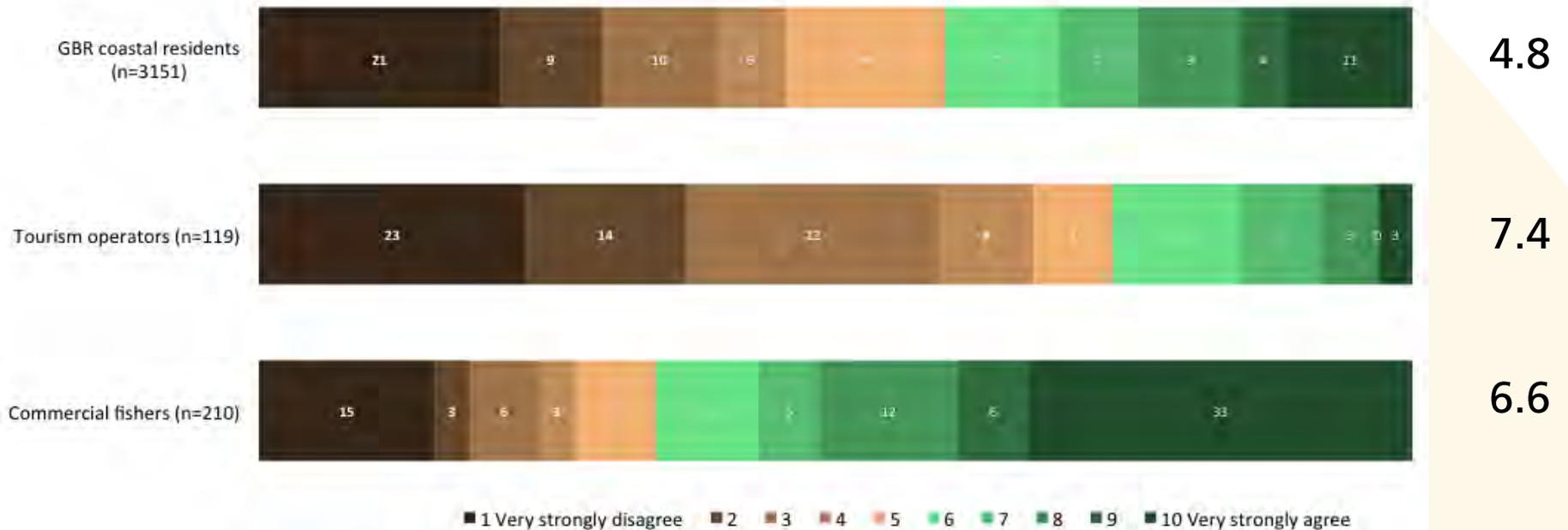


SELTMP 2013: HUMAN AND COMMUNITY WELL BEING PART A: OPPORTUNITY (EXAMPLE INDICATORS)

"I LIVE IN THIS REGION BECAUSE OF THE GBR"

% of respondents in each rating category (1-10 out of 10)

Mean rating:



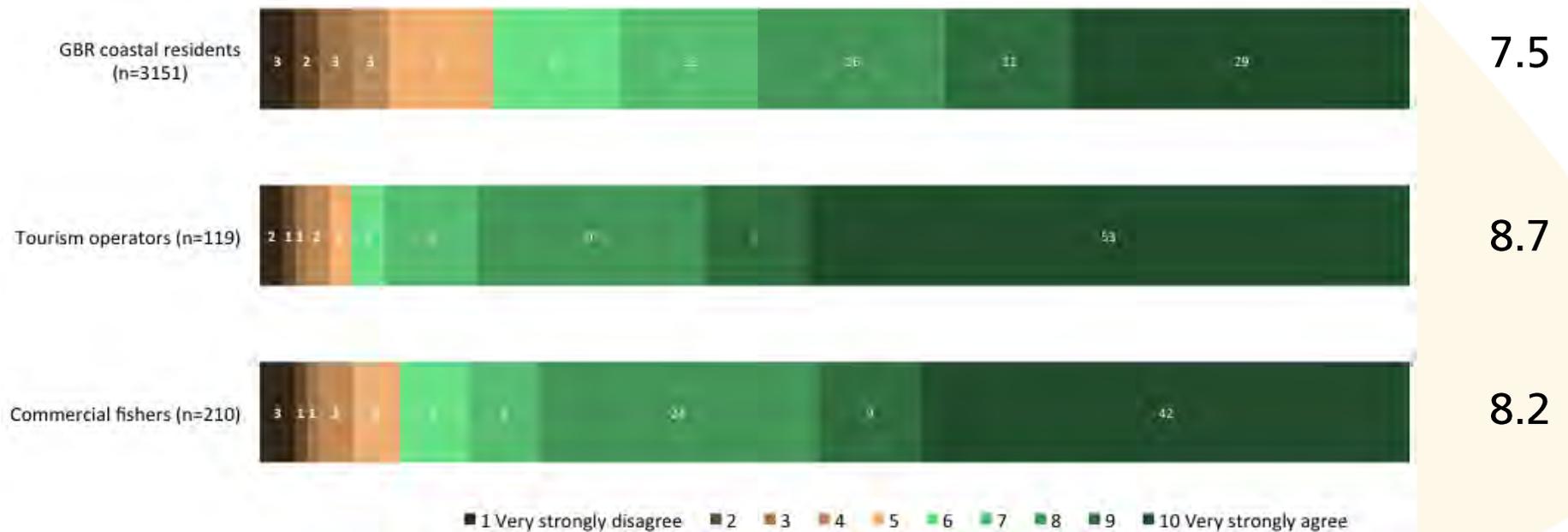


SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART A: OPPORTUNITY (EXAMPLE INDICATORS)

“THE GBR CONTRIBUTES TO MY QUALITY OF LIFE AND WELL-BEING”

% of respondents in each rating category (1-10 out of 10)

Mean rating:

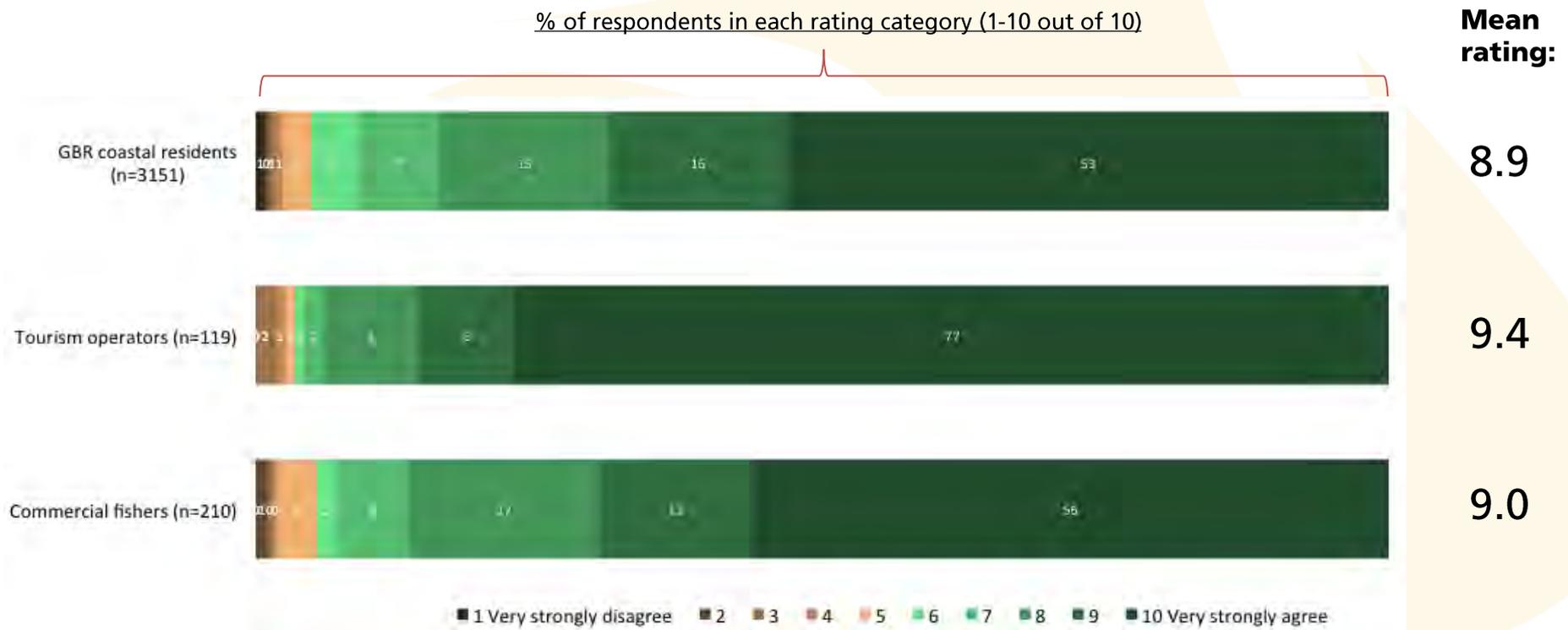




SELTMP 2013: HUMAN AND COMMUNITY WELL BEING PART A: OPPORTUNITY (EXAMPLE INDICATORS)

"THE GBR IS A VALUABLE ASSET FOR THE ECONOMY OF THIS REGION"

% of respondents in each rating category (1-10 out of 10)



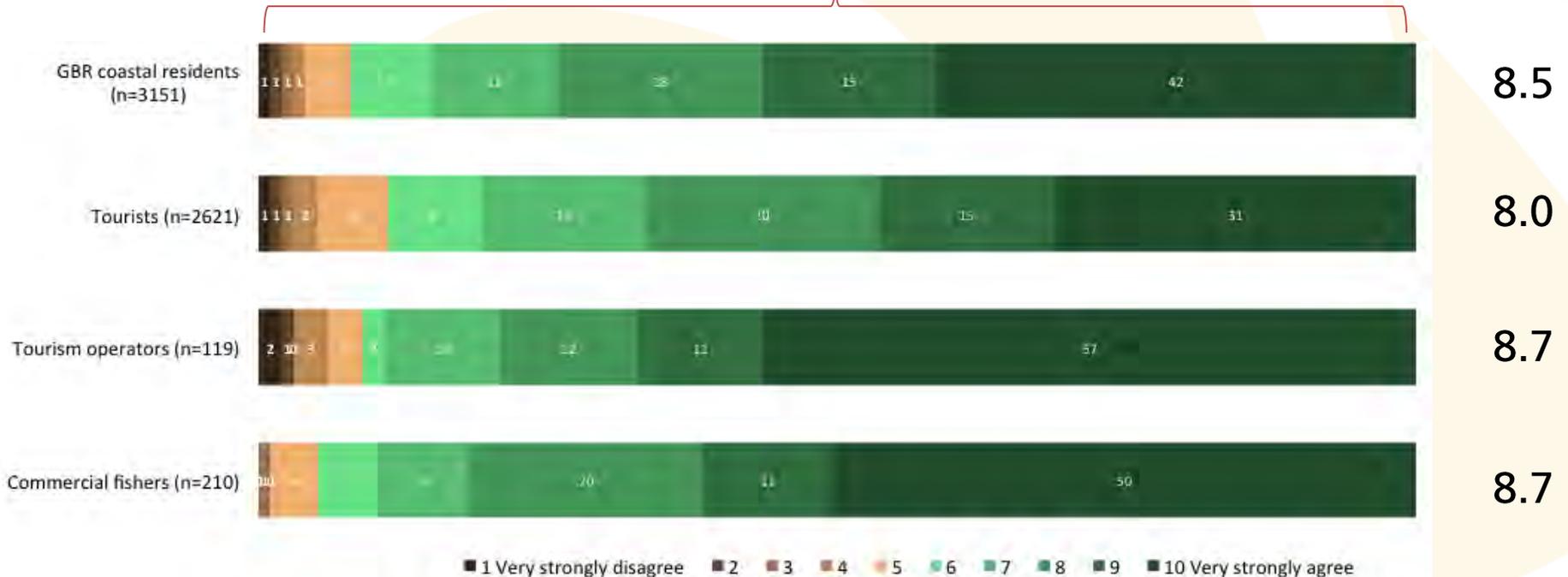


SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART A: OPPORTUNITY (EXAMPLE INDICATORS)

"THE GBR IS A VALUABLE ASSET FOR THE ECONOMY OF THIS REGION"

% of respondents in each rating category (1-10 out of 10)

**Mean
rating:**





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART A: OPPORTUNITY (EXAMPLE INDICATORS)

% of respondents in each rating category (1-10 out of 10)

Mean rating:

"IT MEANS A LOT TO ME THAT I HAVE BEEN TO THE GBR"



8.3

"THE GBR WAS AN IMPORTANT PART OF MY DECISION TO VISIT THIS



6.9

1 Very strongly disagree 2 3 4 5 6 7 8 9 10 Very strongly agree



National Environmental
Research Program

SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART B: EMPOWERMENT





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART B: EMPOWERMENT (GBR COASTAL RESIDENTS)

Human and Community Wellbeing – Residents’ Survey (3151)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE) OR % OF RESPONDENTS

BROAD & SPECIFIC INDICATORS*	EMPOWERMENT	AVERAGE	PERCENTAGE
vi (16, 19)	I do NOT have fair access compared to other user groups	3.5	21%
xiii (36)	I support the current rules and regulations that affect access and use of the GBR	7.3	78%
vii (22)	I would like to do more to help protect the GBR	7.1	78%
vii (22)	I try to encourage other people to reduce their impacts on the GBR	6.9	71%
vii (20)	I would like to learn more about the condition of the GBR	7.0	73%
vii (20)	I value the GBR because we can learn about the environment through scientific discoveries	8.5	91%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART B: EMPOWERMENT (GBR COASTAL RESIDENTS)

Human and Community Wellbeing – Residents’ Survey (3151)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE) OR % OF RESPONDENTS

BROAD & SPECIFIC INDICATORS*	EMPOWERMENT	AVERAGE	PERCENTAGE
v(12,13), vii (22)	I CANNOT make a personal difference in improving the health of the GBR	3.9	26%
vii (20, 22)	I have the necessary knowledge and skills to reduce any impact that I might have on the GBR	6.4	63%
vi (21, 22)	I do have the time and opportunity required to reduce any impact that I might have on the GBR	5.8	69%
vi (21)	It is too expensive for me to reduce any impact I might have on the GBR	3.4	17%
v (12,13), vii (22)	It is NOT my responsibility to protect the GBR	2.8	11%
vii (22)	Coastal residents should take steps to reduce their impacts on the GBR	8.5	92%
v (12,13), vii (22)	It is the responsibility of all Australians to protect the GBR	8.9	94%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART B: EMPOWERMENT (GBR REGION TOURISTS)

Human and Community Wellbeing – Tourist’s Survey (2621)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE) OR % OF RESPONDENTS

BROAD & SPECIFIC INDICATORS*	EMPOWERMENT	AVERAGE	PERCENTAGE
vii (22)	I would like to do more to help protect the GBR	7.0	78%
vii (22)	I try to encourage other people to reduce their impacts on the GBR	6.1	59%
vii (20)	I would like to learn more about the condition of the GBR	6.8	73%
vii (20)	I value the GBR because we can learn about the environment through scientific discoveries	8.3	91%
v(12,13), vii (22)	I CANNOT make a personal difference in improving the health of the GBR	5.1	41%
vii (20, 22)	I have the necessary knowledge and skills to reduce any impact that I might have on the GBR	5.3	46%
vi (21, 22)	I do NOT have the time and opportunity required to reduce any impact that I might have on the GBR	5.3	45%
vi (21)	It is too expensive for me to reduce any impact I might have on the GBR	4.2	28%
v (12,13), vii (22)	It is NOT my responsibility to protect the GBR	3.6	21%
vii (22)	Tourism operators should take steps to reduce impacts on the GBR	8.6	93%
v (12,13), vii (22)	It is the responsibility of all Australians to protect the GBR	8.6	91%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART B: EMPOWERMENT (GBR TOURISM INDUSTRY)

Human and Community Wellbeing – Tourism Operator Survey (119)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE) OR % OF RESPONDENTS

BROAD & SPECIFIC INDICATORS*	EMPOWERMENT (1)	AVERAGE	PERCENTAGE
vi (16, 19)	I do NOT have fair access to the GBR compared to other user	3.3	18%
xiii (36)	I support the current rules and regulations that affect access and use of the GBR	6.9	69%
	Industry rules and regulations create too great a burden on my time	6.2	55%
vii (22)	I would like to do more to help protect the GBR	8.0	87%
vii (22)	I try to encourage other people to reduce their impacts on the GBR	8.3	90%
vii (20)	I value the GBR because we can learn about the environment through scientific discoveries	8.7	94%
	I regularly get involved in research and/or management activities for the GBR	6.5	63%
v(12,13), vii (22)	I CANNOT make a personal difference in improving the health of the GBR	3.0	15%
vii (20, 22)	I have the knowledge and skills to reduce any impact that my business might have on the GBR	8.3	90%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART B: EMPOWERMENT (GBR TOURISM INDUSTRY)

Human and Community Wellbeing – Tourism Operator Survey (119)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE) OR % OF RESPONDENTS

BROAD & SPECIFIC INDICATORS*	EMPOWERMENT (2)	AVERAGE	PERCENTAGE
vi (21, 22)	I do NOT have the time and opportunity required to reduce any impact that I might have on the GBR	3.3	14%
vi (21)	It is too expensive for me to reduce any impact I might have on the GBR	3.6	24%
v (12,13), vii (22)	It is NOT my responsibility to protect the GBR	1.7	2%
vii (22)	Tourism operators should take steps to reduce impacts on the GBR	8.6	92%
	Industry expectations are that tourism operators should reduce their impacts on the GBR	7.7	83%
	Tourists do NOT expect that tourism operators will take steps to reduce impacts on the GBR	4.0	29%
v (12,13), vii (22)	It is the responsibility of all Australians to protect the GBR	8.6	86%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART B: EMPOWERMENT (GBR COMMERCIAL FISHERS)

Human and Community Wellbeing – Commercial Fishers Survey (210)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE)

BROAD & SPECIFIC INDICATORS*	EMPOWERMENT (1)	AVERAGE	PERCENTAGE
vi (16, 19)	I do NOT have fair access to the GBR compared to other user groups	5.2	41%
xiii (36)	I support the current rules and regulations that affect access and use of the GBR	4.7	39%
	Industry rules and regulations create too great a burden on my time	7.2	71%
vii (22)	I would like to do more to protect the GBR	6.7	68%
vii (22)	I try to encourage other people to reduce their impacts on the GBR	6.9	69%
vii (20)	I value the GBR because we can learn about the environment through scientific discoveries	7.3	76%
	I regularly get involved in research and/or management activities for the GBR	5.2	51%
v(12,13), vii (22)	I CANNOT make a personal difference in improving the health of the GBR	4.5	33%
vii (20, 22)	I have the knowledge and skills to reduce any impact that my business might have on the GBR	8.2	84%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT (GBR COMMERCIAL FISHERS)

Human and Community Wellbeing – Commercial Fishers Survey (210)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE)

BROAD & SPECIFIC INDICATORS*	EMPOWERMENT (2)	AVERAGE	PERCENTAGE
vi (21, 22)	I do NOT have the time and opportunity required to reduce any impact that I might have on the GBR	3.4	22%
vi (21)	It is too expensive for me to reduce any impact I might have on the GBR	4.4	36%
v (12,13), vii (22)	It is NOT my responsibility to protect the GBR	2.3	10%
vii (22)	Commercial fishers should take steps to reduce impacts on the GBR	5.6	57%
	Industry expectations are that commercial fishers should reduce their impacts on the GBR	5.5	53%
	Other commercial fishers think that I should reduce impacts on the GBR.	2.7	15%
v (12,13), vii (22)	It is the responsibility of all Australians to protect the GBR	8.3	86%

* See page 9-11

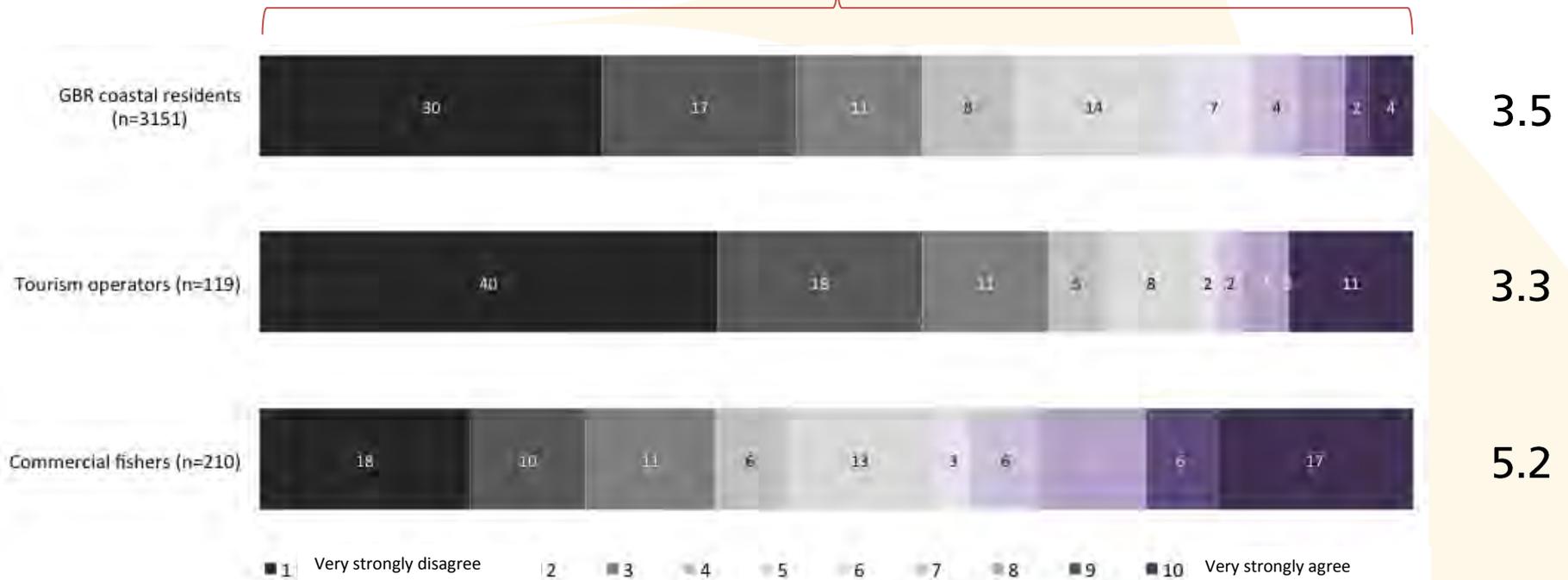


SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT (EXAMPLE INDICATORS)

"I DO NOT HAVE FAIR ACCESS TO THE GBR COMPARED TO OTHER USER GROUPS"

% of respondents in each rating category (1-10 out of 10)

Mean rating:





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT (EXAMPLE INDICATORS)

"I SUPPORT THE CURRENT RULES AND REGULATIONS THAT AFFECT ACCESS AND USE OF THE GBR"

% of respondents in each rating category (1-10 out of 10)

**Mean
rating:**





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT (EXAMPLE INDICATORS)

“INDUSTRY RULES AND REGULATIONS CREATE TOO GREAT A BURDEN ON MY TIME”

% of respondents in each rating category (1-10 out of 10)

**Mean
rating:**

Tourism operators (n=119)



6.2

Commercial fishers (n=210)



7.2

■ 1 Very strongly disagree ■ 2 ■ 3 ■ 4 ■ 5 ■ 6 ■ 7 ■ 8 ■ 9 ■ 10 Very strongly agree



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT (EXAMPLE INDICATORS)

"I WOULD LIKE TO DO MORE TO HELP PROTECT THE GBR"

% of respondents in each rating category (1-10 out of 10)

Mean rating:





SELTMP 2013: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT (EXAMPLE INDICATORS)

"I TRY TO ENCOURAGE OTHER PEOPLE TO REDUCE THEIR IMPACTS ON THE GBR"

% of respondents in each rating category (1-10 out of 10)

Mean rating:



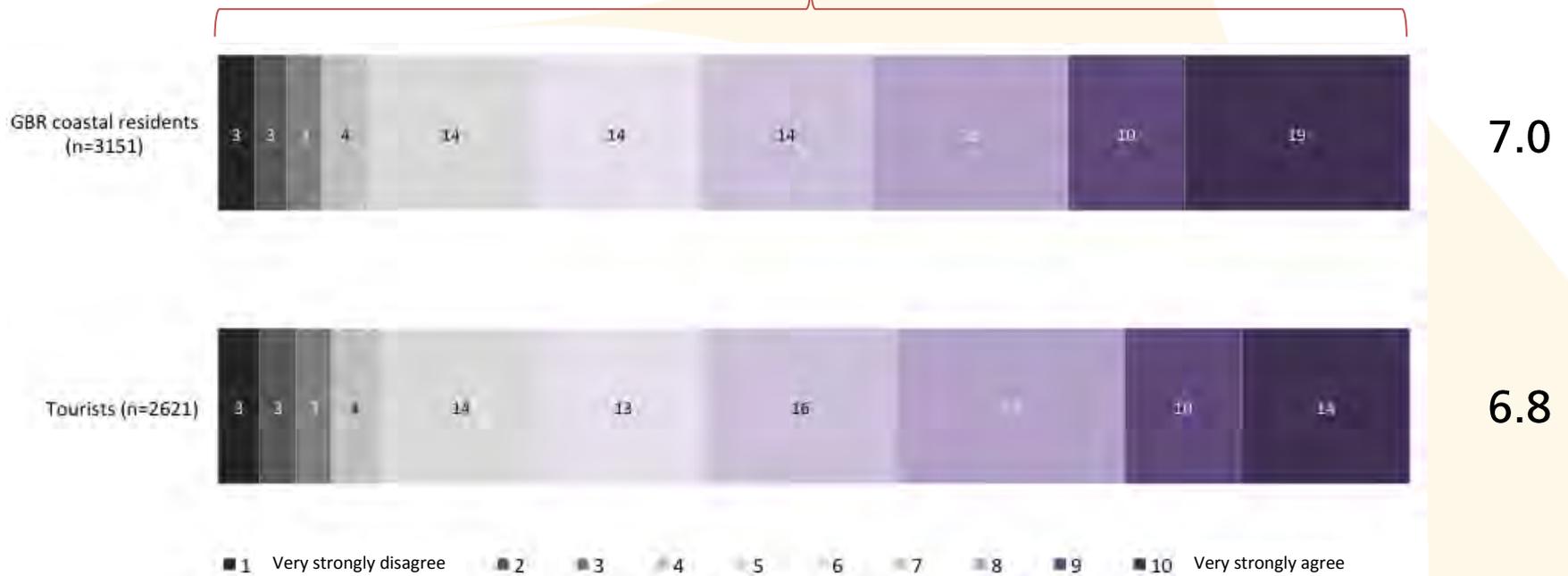


SELTMP 2013: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT (EXAMPLE INDICATORS)

"I WOULD LIKE TO LEARN MORE ABOUT THE CONDITION OF THE GBR"

% of respondents in each rating category (1-10 out of 10)

**Mean
rating:**





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT (EXAMPLE INDICATORS)

"I VALUE THE GBR BECAUSE WE CAN LEARN ABOUT THE ENVIRONMENT THROUGH SCIENTIFIC DISCOVERIES"

% of respondents in each rating category (1-10 out of 10)

Mean rating:





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT (EXAMPLE INDICATORS)

"I REGULARLY GET INVOLVED IN RESEARCH AND / OR MANAGEMENT FOR THE GBR"

% of respondents in each rating category (1-10 out of 10)

Mean rating:

Tourism operators (n=119)



6.5

Commercial fishers (n=210)



5.2

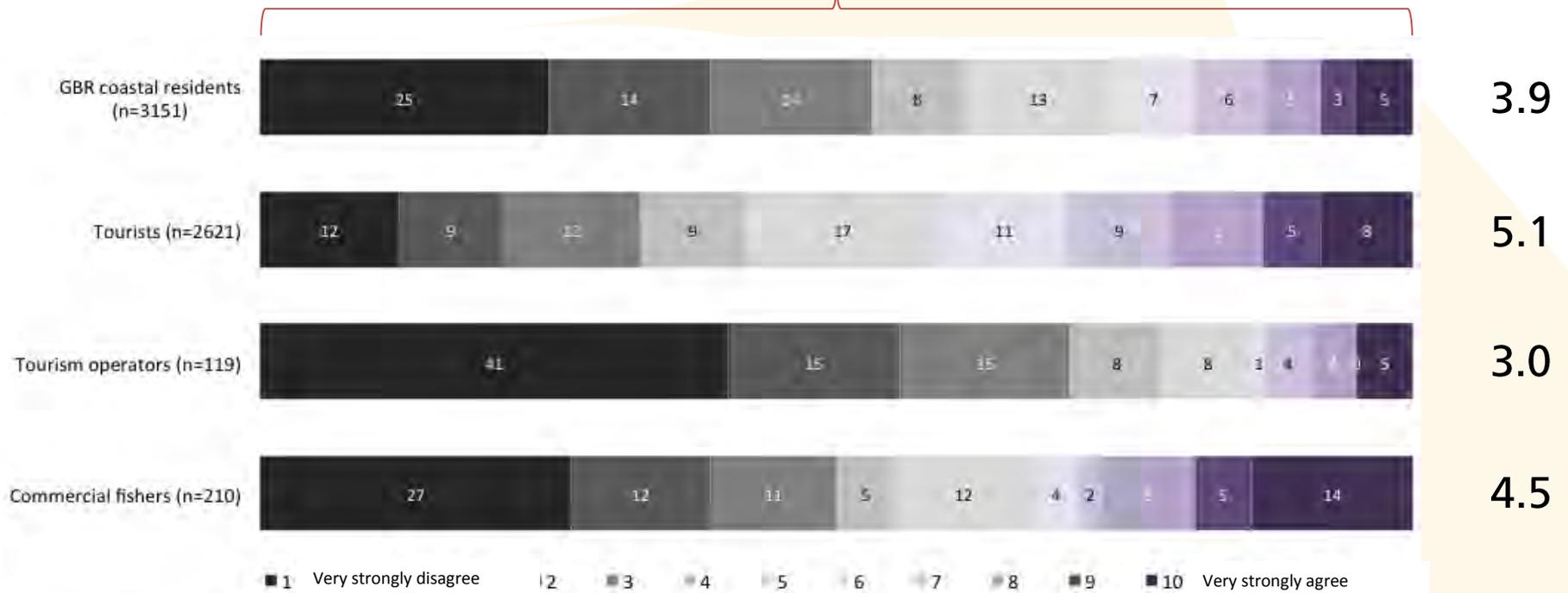
1 Very strongly disagree 2 3 4 5 6 7 8 9 10 Very strongly agree



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT (EXAMPLE INDICATORS)

"I CANNOT MAKE A PERSONAL DIFFERENCE IN IMPROVING THE HEALTH OF THE GBR"
% of respondents in each rating category (1-10 out of 10)

Mean rating:



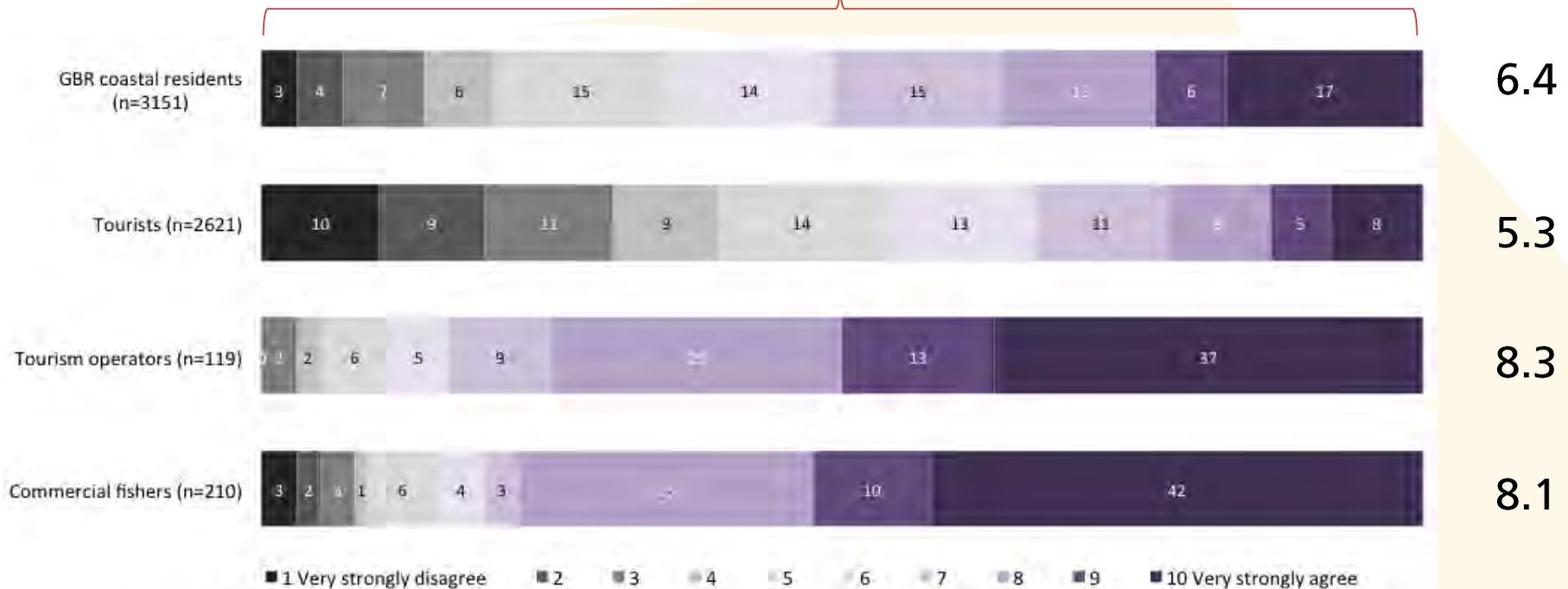


SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT (EXAMPLE INDICATORS)

"I HAVE THE NECESSARY KNOWLEDGE AND SKILLS TO REDUCE ANY IMPACT I MIGHT HAVE ON THE GBR"

% of respondents in each rating category (1-10 out of 10)

Mean rating:



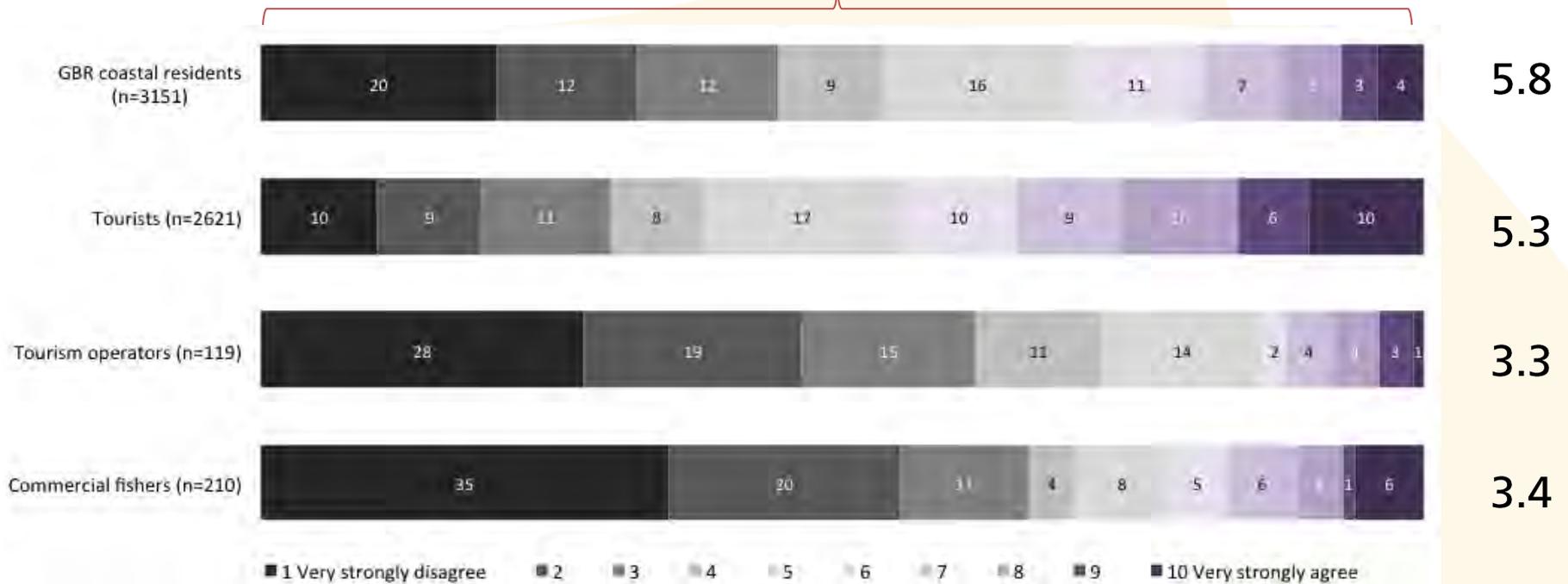


SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT (EXAMPLE INDICATORS)

"I DO NOT HAVE THE TIME AND OPPORTUNITY REQUIRED TO REDUCE ANY IMPACT THAT I MIGHT HAVE ON THE GBR"

% of respondents in each rating category (1-10 out of 10)

Mean rating:



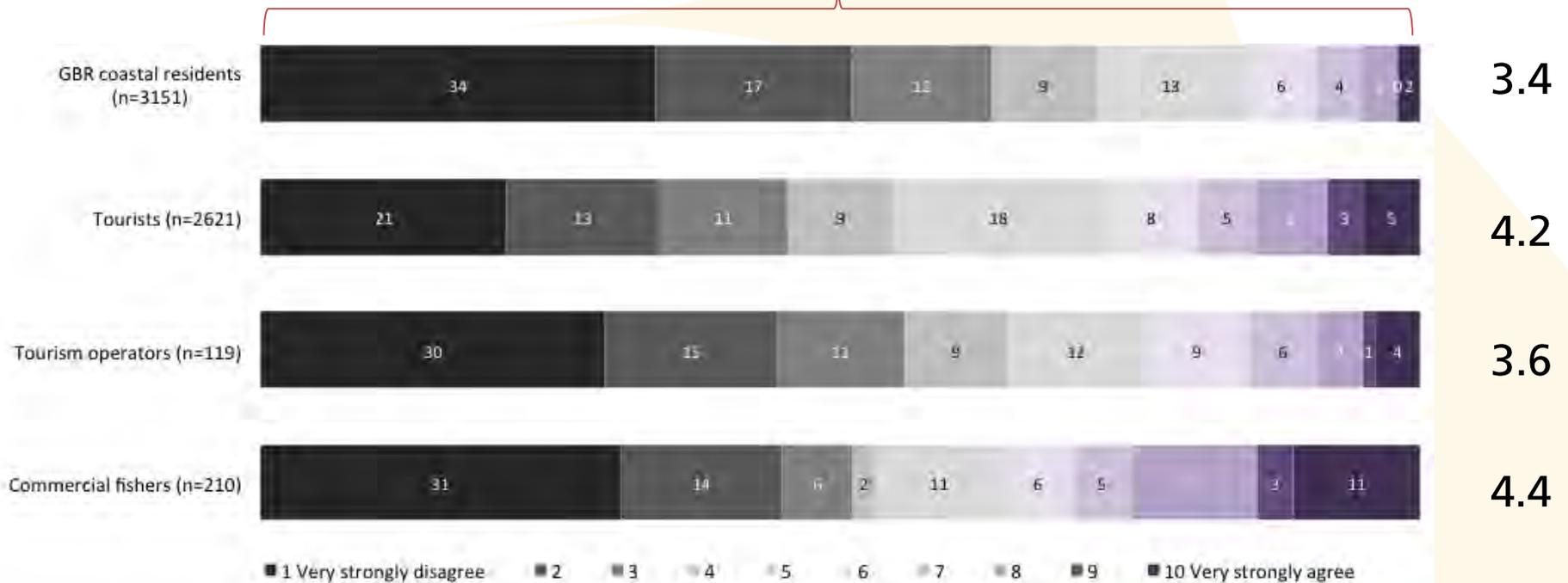


SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT (EXAMPLE INDICATORS)

"IT IS TOO EXPENSIVE FOR ME TO REDUCE ANY IMPACT I MIGHT HAVE ON THE GBR"

% of respondents in each rating category (1-10 out of 10)

Mean
rating:



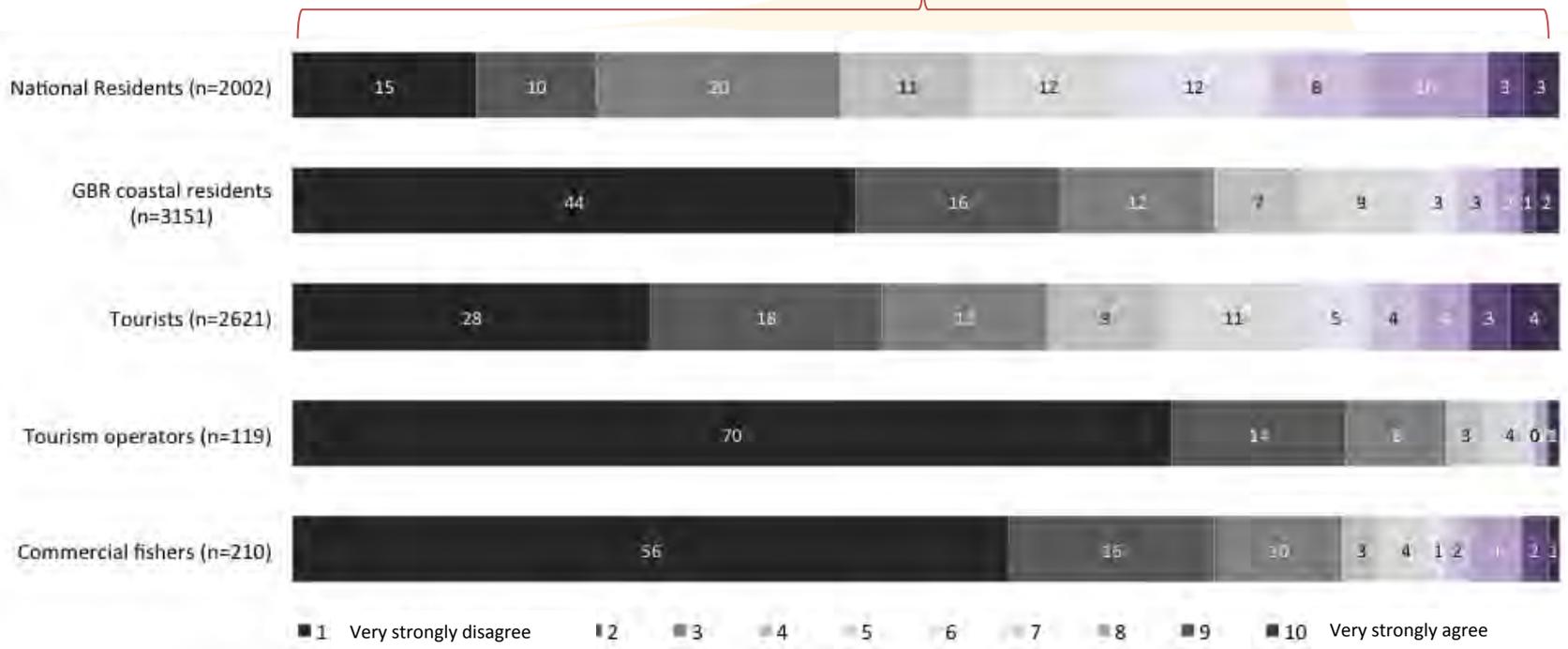


SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT (EXAMPLE INDICATORS)

"IT IS NOT MY RESPONSIBILITY TO PROTECT THE GBR"

% of respondents in each rating category (1-10 out of 10)

Mean rating:





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART C: SECURITY

% of respondents in each rating category (1-10 out of 10)

Mean rating:

“INDUSTRY EXPECTATIONS ARE THAT TOURISM OPERATORS SHOULD REDUCE THEIR IMPACTS ON THE GBR”



“INDUSTRY EXPECTATIONS ARE THAT COMMERCIAL FISHERS SHOULD REDUCE THEIR IMPACTS ON THE GBR”



1 Very strongly disagree 2 3 4 5 6 7 8 9 10 Very strongly agree

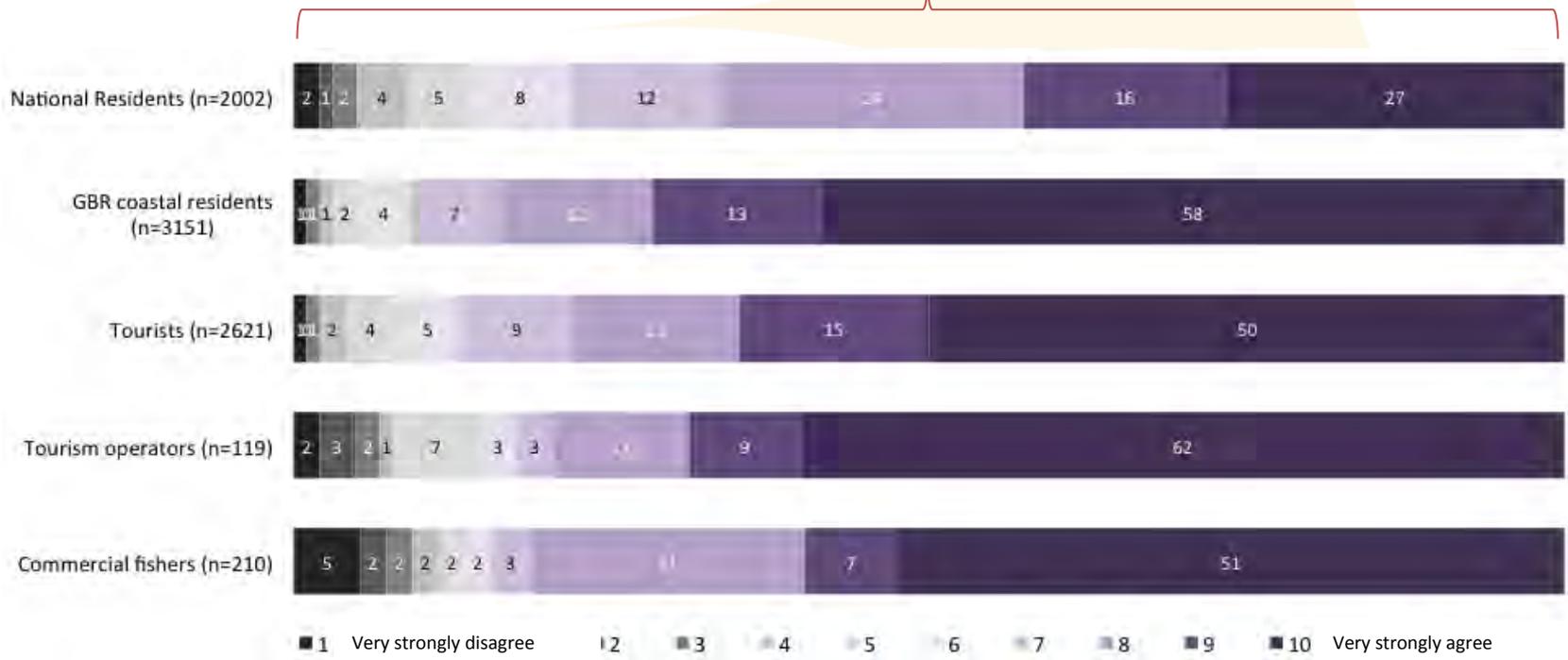


SELTMP 2014: HUMAN AND COMMUNITY WELL BEING PART B: EMPOWERMENT

"IT IS THE RESPONSIBILITY OF ALL AUSTRALIANS TO PROTECT THE GBR"

% of respondents in each rating category (1-10 out of 10)

Mean rating:





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (GBR COASTAL RESIDENTS)

Human and Community Wellbeing – Residents’ Survey (3151)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE) OR % OF RESPONDENTS

BROAD & SPECIFIC INDICATORS*	SECURITY	AVERAGE	PERCENTAGE
ix (25, 26), xii (32)	I would NOT be personally affected if the health of the GBR declined	3.2	19%
xii (32,33)	The GBR is part of my identity	6.4	64%
xii (32)	I value the GBR because it attracts people from all over the world	8.0	86%
xiii (35)	I value the GBR for the fresh seafood it provides	7.5	77%
xi (31), xii (35)	I value the GBR because it supports a variety of life such as fish and corals	9.1	97%
xii (32)	I feel proud that the GBR is a World Heritage Area	9.0	94%
xi (30)	Aesthetic beauty of the GBR is outstanding	9.1	96%
xi (30,31)	The place that I most recently visited in the GBR is in great condition	5.5	63%
ix (25), xi (30,31), xii (32,33), xiii (35,36)	I was overall satisfied with my experience of the GBR	8.3 (beach goers) 8.6 (non-beach goers)	95% (beach goers) 94% (non-beach goers)
xiii (36)	I feel confident that the GBR is well managed	6.0	61%
	I feel optimistic about the future of the GBR	6.2	61%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (GBR REGION TOURISTS)

Human and Community Wellbeing – Tourist’s Survey (2621)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE) OR % OF RESPONDENTS

BROAD & SPECIFIC INDICATORS*	SECURITY	AVERAGE	PERCENTAGE
ix (25, 26), xii (32)	I would NOT be personally affected if the health of the GBR declined	4.3	31%
xii (32,33)	The GBR is part of my identity	4.6	38%
xii (32)	I value the GBR because it attracts people from all over the world	7.8	83%
xiii (35)	I value the GBR for the fresh seafood it provides	6.2	61%
xi (31), xii (35)	I value the GBR because it supports a variety of life such as fish and corals	9.0	97%
xii (32)	I feel proud that the GBR is a World Heritage Area	8.8	9.3
xi (30)	Aesthetic beauty of the GBR is outstanding	9.0	96%
xi (30,31)	The place that I most recently visited in the GBR is not in great condition	4.0	30%
ix (25), xi (30,31), xii (32,33), xiii (35,36)	I was overall satisfied with my experience of the GBR	8.5	96%
	I feel optimistic about the future of the GBR	6.2	61%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (GBR TOURISM INDUSTRY)

Human and Community Wellbeing – Tourism Operator Survey (119)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE) OR % OF RESPONDENTS

BROAD & SPECIFIC INDICATORS*	SECURITY	AVERAGE	PERCENTAGE
ix (25, 26), xii (32)	I would NOT be personally affected if the health of the GBR declined	1.9	6
xii (32,33)	The GBR is part of my identity	8.0	84%
	The tourism industry to me is not just a job – it is my lifestyle	8.1	87%
	I wouldn't want to be anything other than a tourism operator	6.2	61%
	I plan to still be a tourism operator in 5 years time	8.0	84%
xii (32)	I value the GBR because it attracts people from all over the world	9.0	94%
xi (31), xii (35)	I value the GBR because it supports a variety of life such as fish, corals	9.5	98%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (GBR TOURISM INDUSTRY)

Human and Community Wellbeing – Tourism Operator Survey (119)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE) OR % OF RESPONDENTS

BROAD & SPECIFIC INDICATORS*	SECURITY	AVERAGE	PERCENTAGE
xii (32)	I feel proud that the GBR is a World Heritage Area	8.9	92%
xi (30)	Aesthetic beauty of the GBR is outstanding	9.2	97%
xi (30,31)	The areas that my operation uses in the GBR are NOT in great condition	3.7	26%
xiii (36)	I feel confident that the GBR is well managed	6.1	65%
	I feel optimistic about the future of the GBR	6.6	62%
	I am uncertain how to plan for changes in the GBR that may affect me such as floods, cyclones or financial crises	8.0	39%
	I am interested in learning how to better prepare for significant events, such as the global financial crisis, cyclones and floods	8.0	71%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (GBR COMMERCIAL FISHERS)

Human and Community Wellbeing – Commercial Fishers Survey (210)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE)

BROAD & SPECIFIC INDICATORS*	SECURITY	AVERAGE	PERCENTAGE
ix (25, 26), xii (32)	I would NOT be personally affected if the health of the GBR declined	2.1	6%
xii (32,33)	The GBR is part of my identity	7.0	71%
	I wouldn't want to be anything other than a commercial fisher	7.2	66%
	The fishing industry to me is not just a job – it is my lifestyle	8.6	90%
	I plan to still be a commercial fisher in 5 years time	8.1	82%
xii (32)	I value the GBR because it attracts people from all over the world	6.8	68%
xi (31), xii (35)	I value the GBR because it supports a variety of life such as fish, corals	9.0	96%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (GBR COMMERCIAL FISHERS)

Human and Community Wellbeing – Commercial Fishers Survey (210)

AVERAGES ON A 10 POINT SCALE (10 = VERY STRONGLY AGREE)

BROAD & SPECIFIC INDICATORS*	SECURITY	AVERAGE	PERCENTAGE
xii (32)	I feel proud that the GBR is a World Heritage Area	7.0	68%
xi (30)	The aesthetic beauty of the GBR is outstanding	9.0	94%
xi (30,31)	The habitats that I fish the most are not in great condition	3.2	22%
xiii (36)	I feel confident that the GBR is well managed	5.0	46%
	I am optimistic about the future of the GBR	7.1	75%
	I am uncertain how to plan for changes in the GBR that may affect me such as floods, cyclones or financial crises	6.2	63%
	I am interested in learning how to better prepare for significant events, such as the global financial crisis, cyclones and floods	6.7	70%

* See page 9-11



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

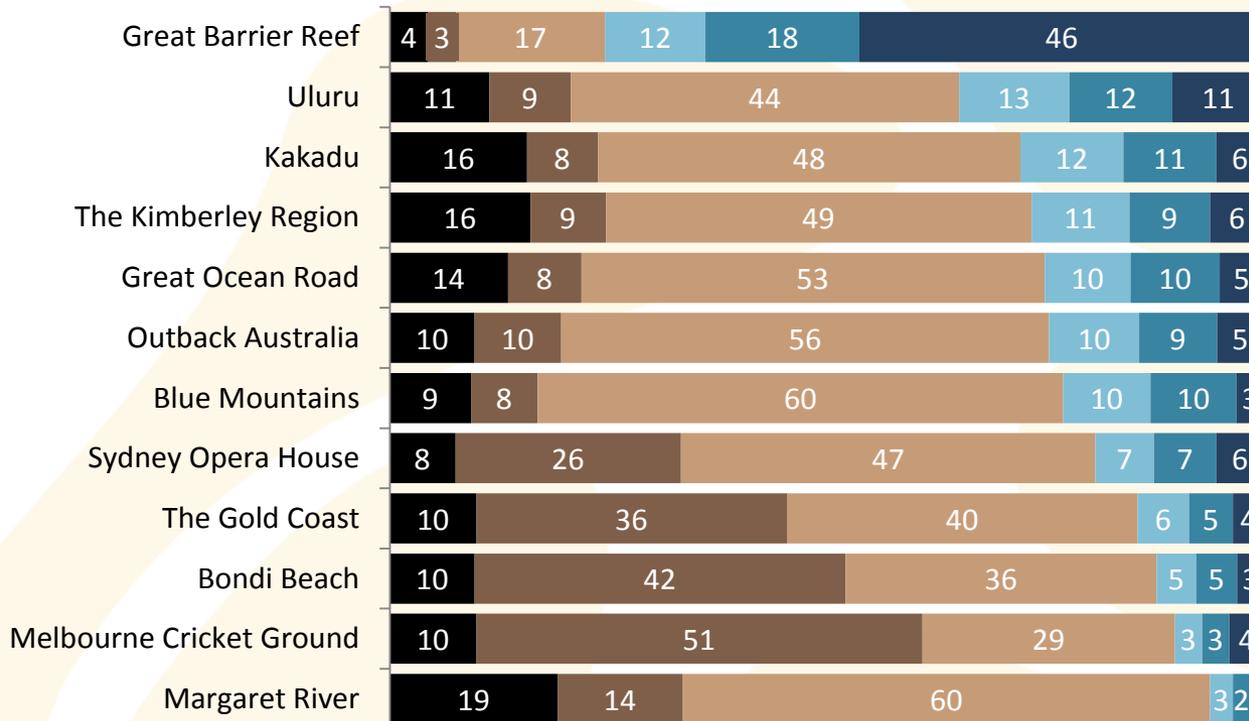
PART C: SECURITY (GBR COMMERCIAL FISHERS)

Human and Community Wellbeing – National residents (n=2002)

LEVELS OF INSPIRATION THE GBR PROVIDES RELATIVE TO OTHER PLACES

BROAD AND SPECIFIC INDICATORS*:

Inspiring Australian icons (%)



Higher amongst...

- ↑ Queenslanders Visited GBR
- ↑ West Australians
- ↑ Victorians
- ↑ Regional AUS
- ↑ New South Welshmen

Base: Total sample, Australians aged 14-64 (n=1,000)

* See page 9-11

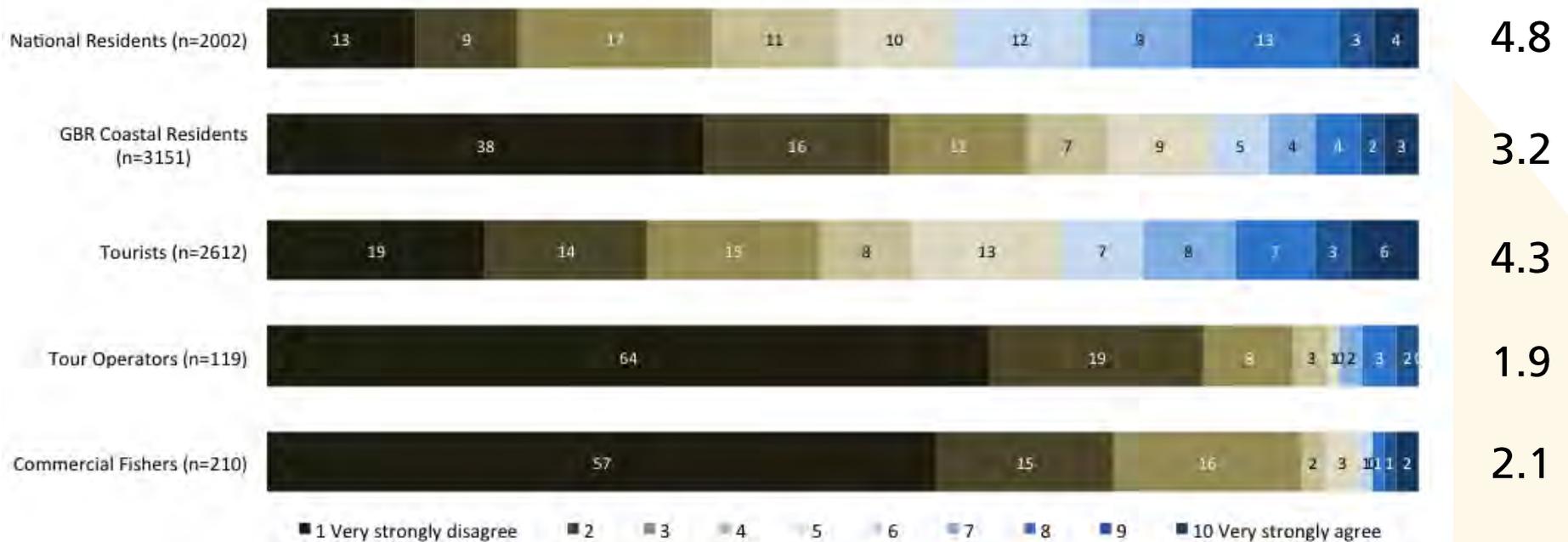


SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

"I WOULD NOT BE PERSONALLY AFFECTED IF THE HEALTH OF THE GBR DECLINED"
% of respondents in each rating category (1-10 out of 10)

Mean rating:





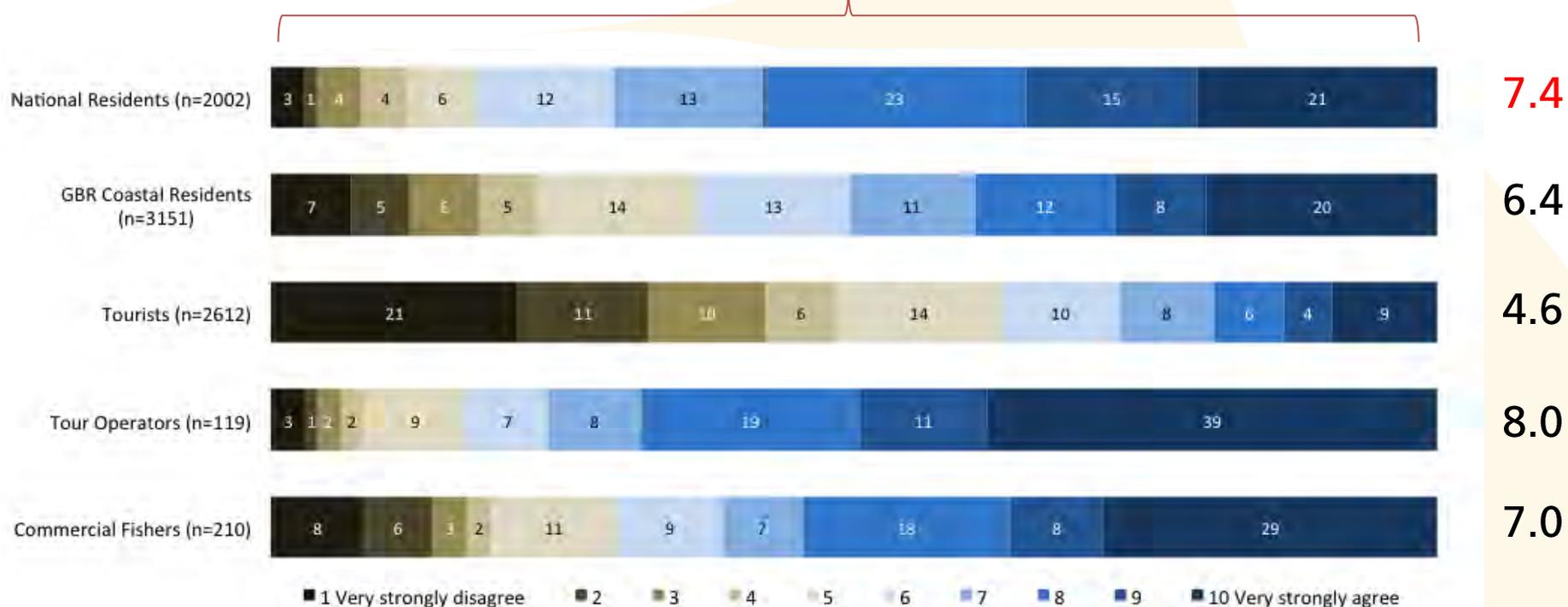
SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

"THE GBR IS PART OF MY IDENTITY"

% of respondents in each rating category (1-10 out of 10)

Mean rating:





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

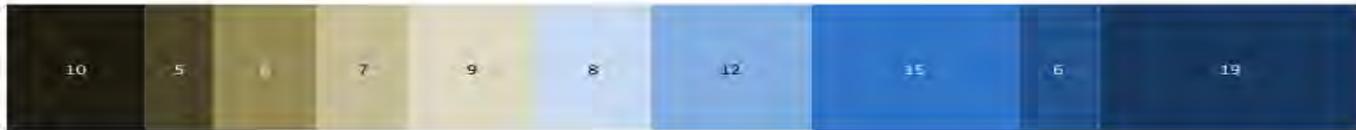
PART C: SECURITY (EXAMPLE INDICATORS)

% of respondents in each rating category (1-10 out of 10)

Mean rating:

"I WOULDN'T WANT TO BE ANYTHING OTHER THAN A COMMERCIAL FISHER/TOURISM OPERATOR"

Tour Operators (n=119)



6.2

Commercial Fishers (n=210)



7.2

"THE TOURISM/FISHING INDUSTRY TO ME IS NOT A JOB – IT IS MY LIFESTYLE"

Tour Operators (n=119)



8.1

Commercial Fishers (n=210)



8.6

1 Very strongly disagree 2 3 4 5 6 7 8 9 10 Very strongly agree



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

% of respondents in each rating category (1-10 out of 10)

Mean rating:

"I FEEL OPTIMISTIC ABOUT THE FUTURE OF MY BUSINESS IN THE GBR"



7.1



5.2

"MY BUSINESS HAS NOT PERFORMED AS WELL THIS YEAR AS IT DID LAST YEAR"



4.7



5.0

1 Very strongly disagree 2 3 4 5 6 7 8 9 10 Very strongly agree

Coastal residents should take steps to reduce their impacts on the GBR

PART C: SECURITY (EXAMPLE INDICATORS)

Tourism operators (n=119)



GBR coastal residents (n=3151)



1 Very strongly disagree 2 3 4 5 6 7 8 9 10 Very strongly agree

“COMMERCIAL FISHERS SHOULD TAKE STEPS TO REDUCE THEIR IMPACTS ON THE GBR”

Commercial fishers (n=210)



1 Very strongly disagree 2 3 4 5 6 7 8 9 10 Very strongly agree

5.6

in ng:

5



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

"TOURISM OPERATORS SHOULD TAKE STEPS TO REDUCE THEIR IMPACTS ON THE GBR"
% of respondents in each rating category (1-10 out of 10)

Mean rating:





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

% of respondents in each rating category (1-10 out of 10)

Mean rating:

“TOURIST DO NOT EXPECT THAT TOURISM OPERATORS WILL TAKE STEPS TO REDUCE THEIR IMPACTS ON THE GBR”

Tourism operators (n=119)



4.0

“OTHER COMMERCIAL FISHERS DO NOT EXPECT THAT I, AS A COMMERCIAL FISHER, SHOULD REDUCE IMPACTS ON THE GBR”

Commercial fishers (n=210)



2.7

1 Very strongly disagree 2 3 4 5 6 7 8 9 10 Very strongly agree



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

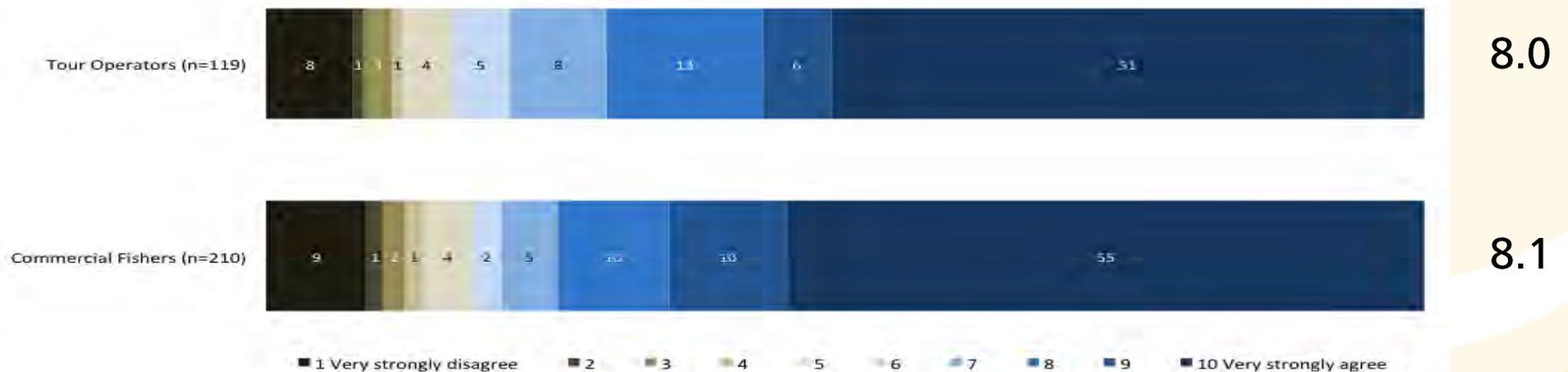
% of respondents in each rating category (1-10 out of 10)

Mean rating:

"I DO NOT PLAN TO STILL BE A RESIDENT OF THIS REGION IN FIVE YEARS TIME"



"I PLAN TO STILL BE A TOURISM OPERATOR/COMMERCIAL FISHER IN FIVE YEARS TIME"





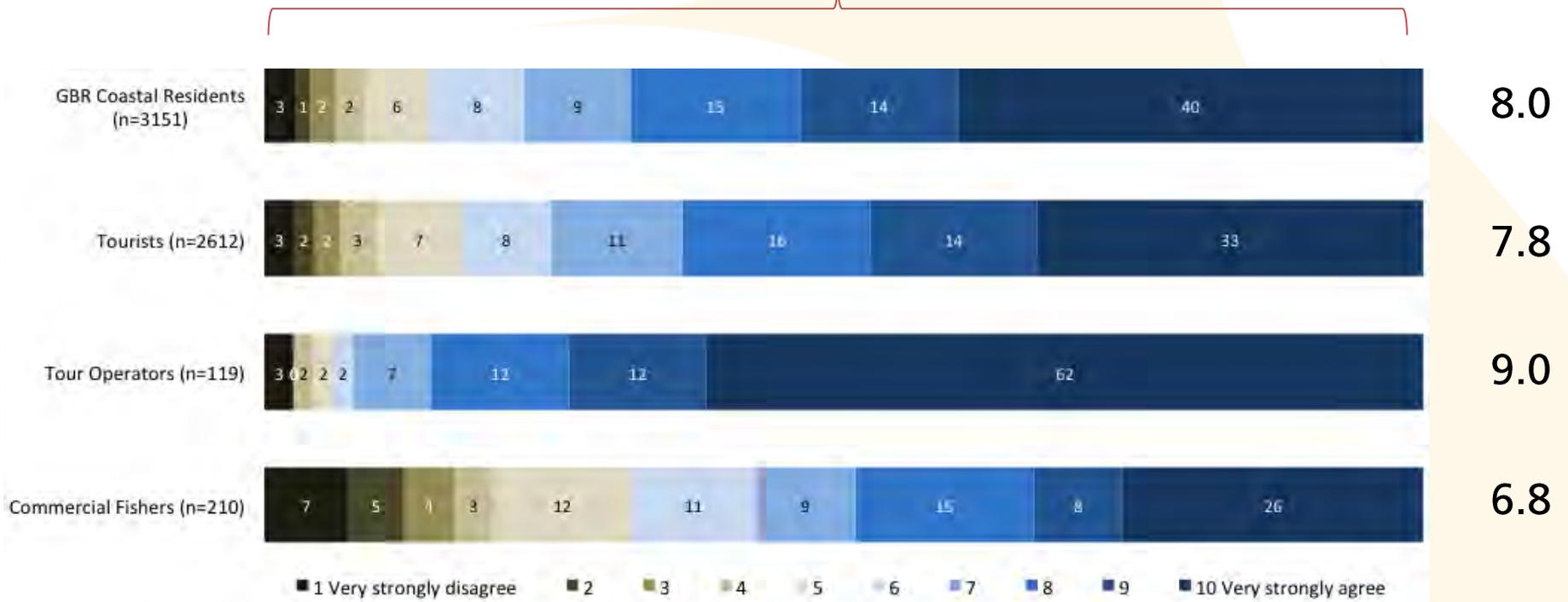
SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

"I VALUE THE GBR BECAUSE IT ATTRACTS PEOPLE FROM ALL OVER THE WORLD"

% of respondents in each rating category (1-10 out of 10)

Mean rating:





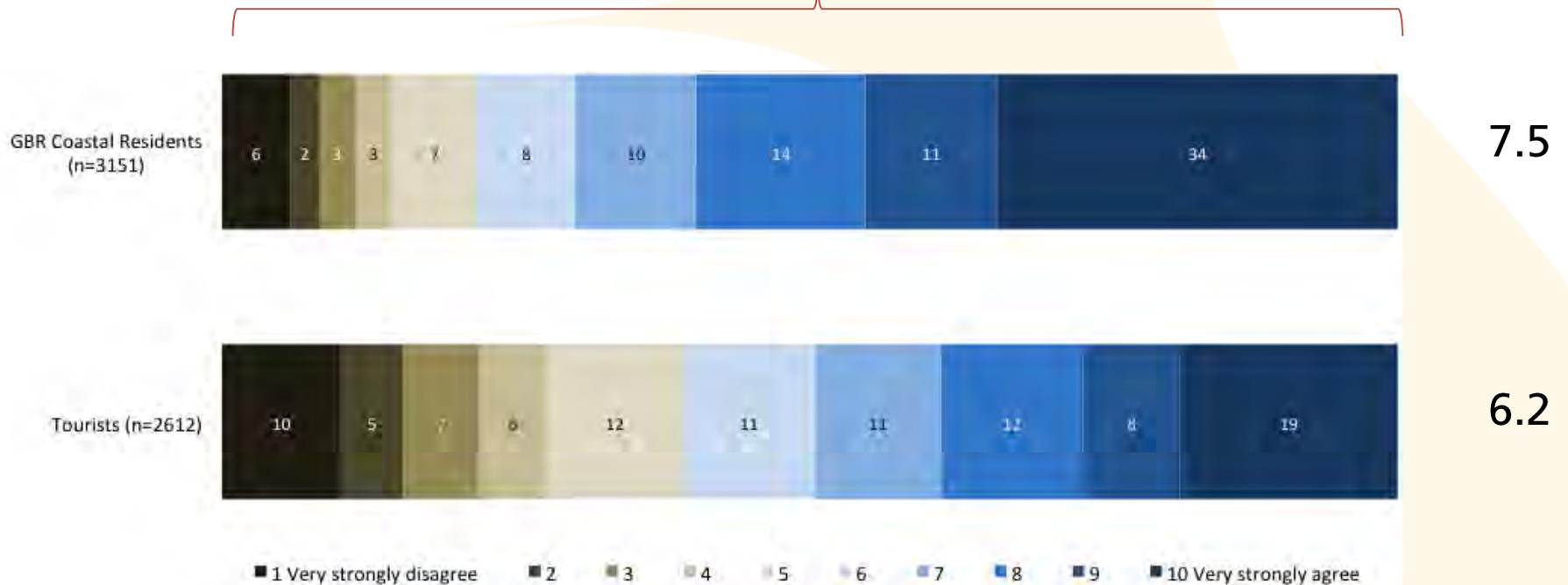
SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

"I VALUE THE GBR FOR THE FRESH SEAFOOD IT PROVIDES"

% of respondents in each rating category (1-10 out of 10)

Mean rating:





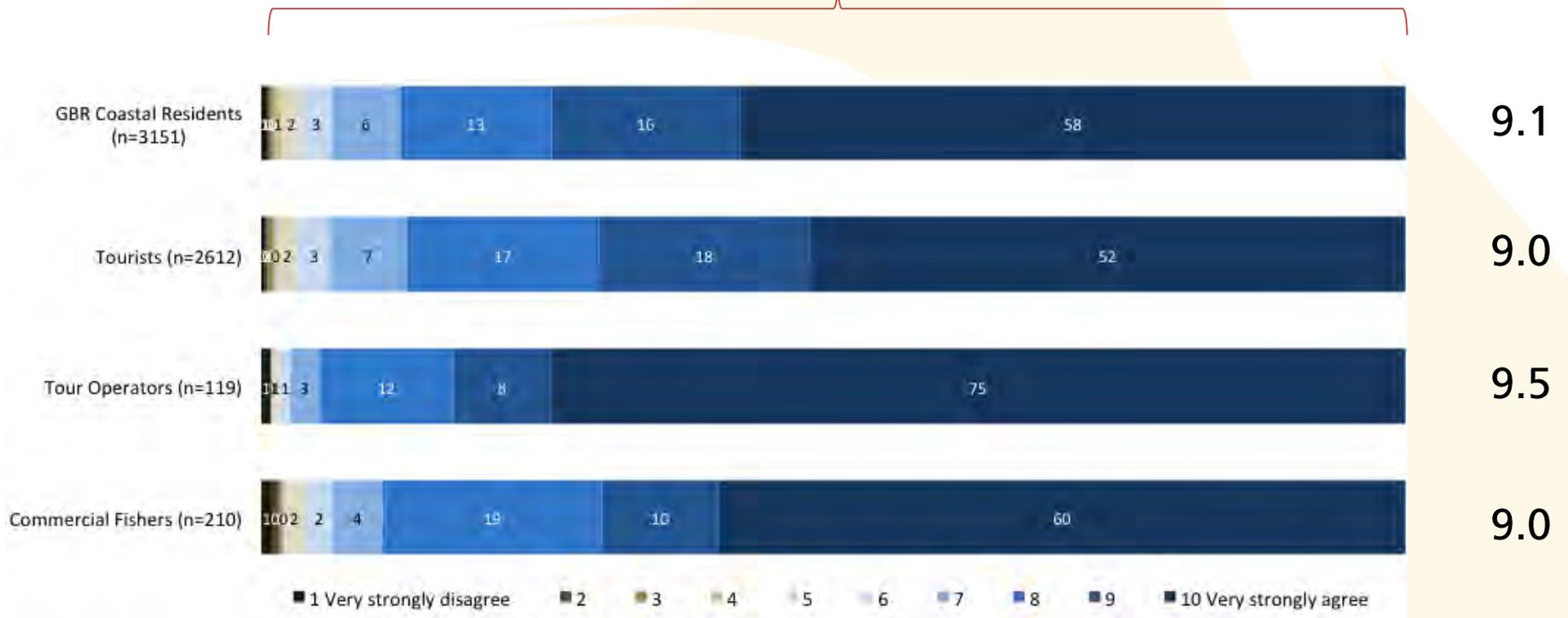
SELTMP 2013: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

"I VALUE THE GBR BECAUSE IT SUPPORTS A VARIETY OF LIFE SUCH AS FISH AND CORALS"

% of respondents in each rating category (1-10 out of 10)

Mean rating:





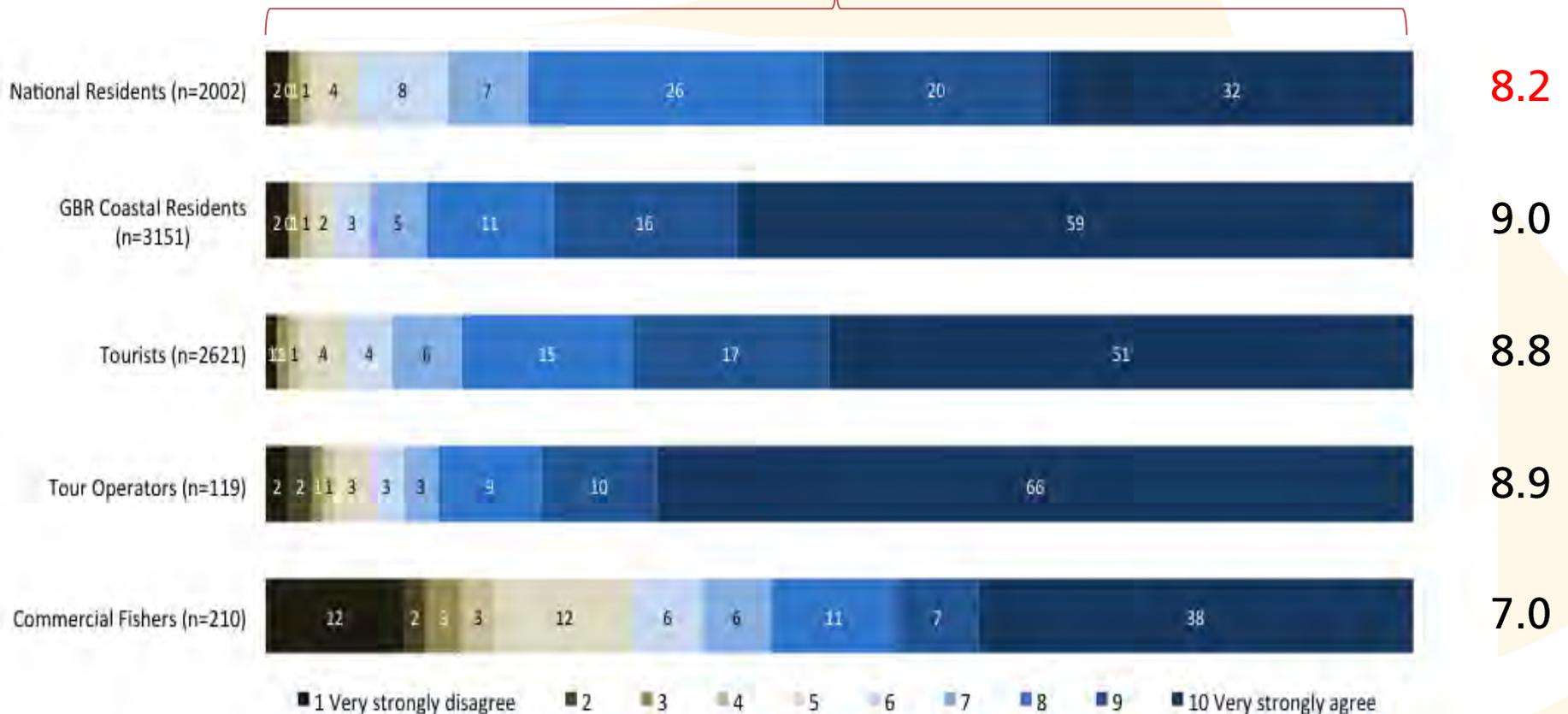
SELTMP 2013: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

"I FEEL PROUD THE GBR IS A WORLD HERITAGE AREA"

% of respondents in each rating category (1-10 out of 10)

Mean rating:





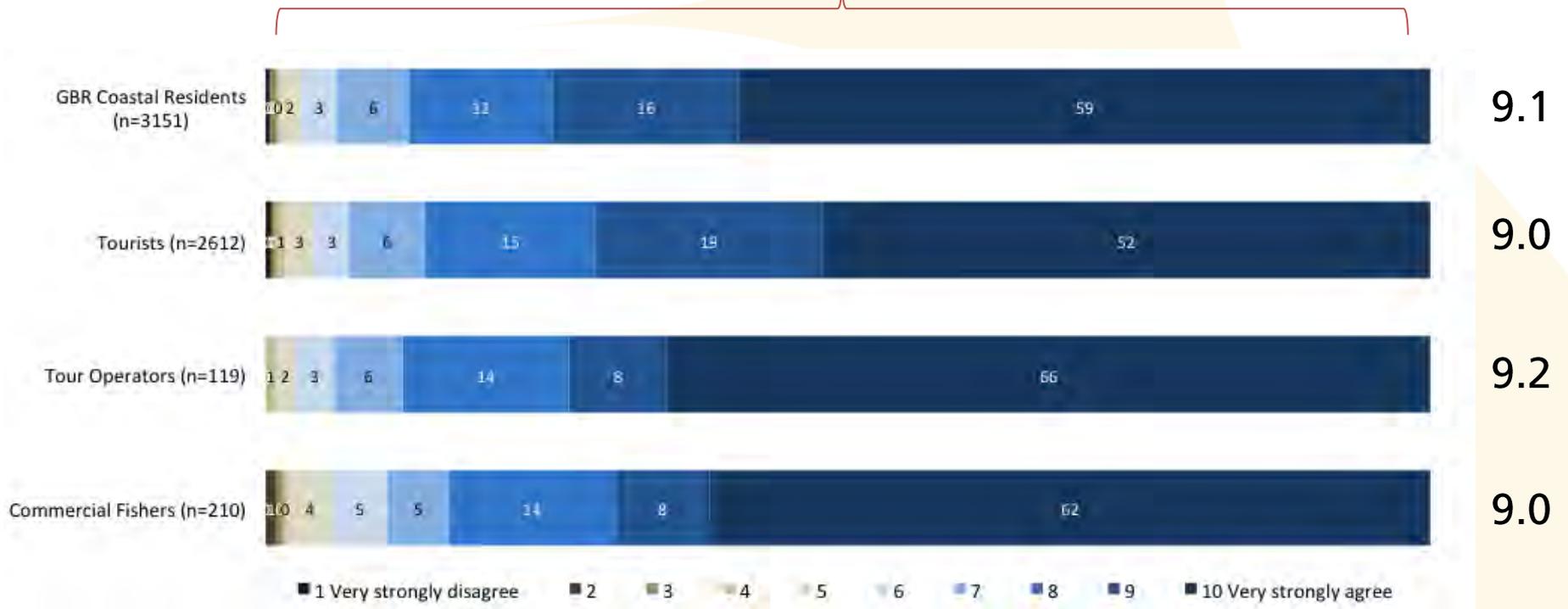
SELTMP 2013: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

"THE AESTHETIC BEAUTY OF THE GBR IS OUTSTANDING"

% of respondents in each rating category (1-10 out of 10)

**Mean
rating:**





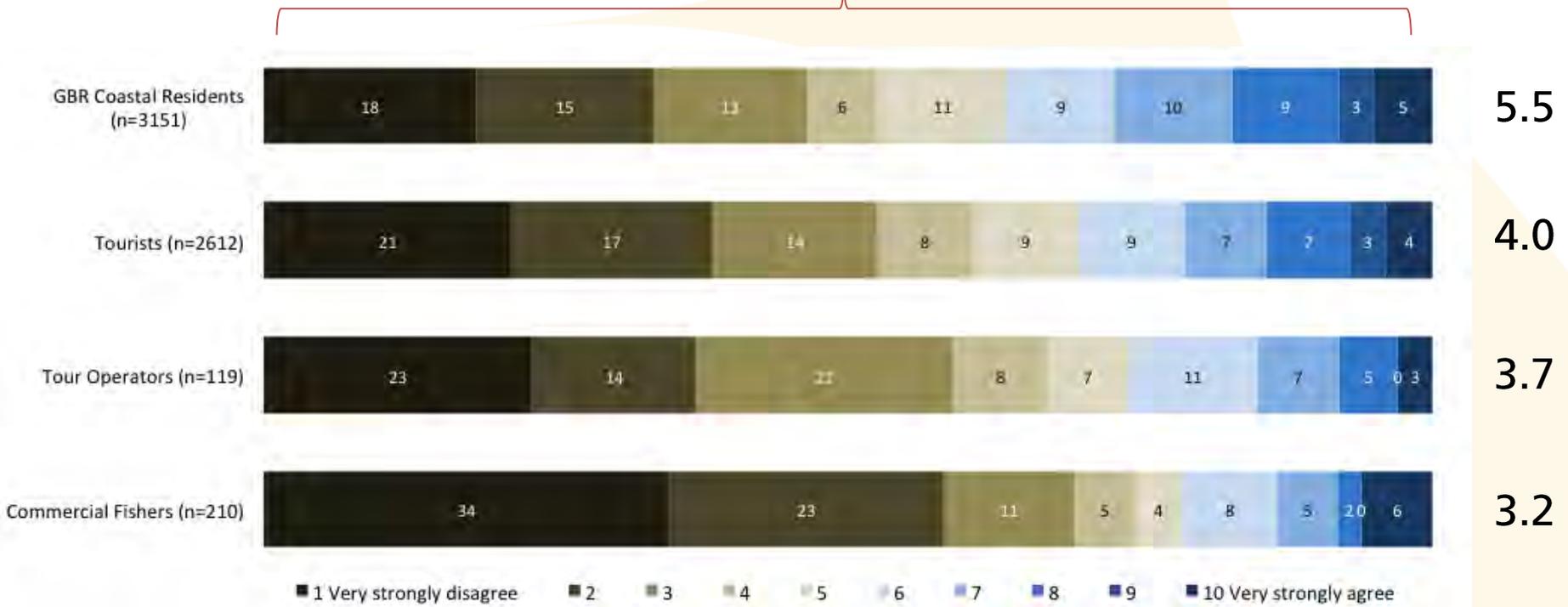
SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

"THE AREA I MOST RECENTLY VISITED/MY OPERATION USES IN THE GBR IS NOT IN GREAT CONDITION"

% of respondents in each rating category (1-10 out of 10)

Mean rating:



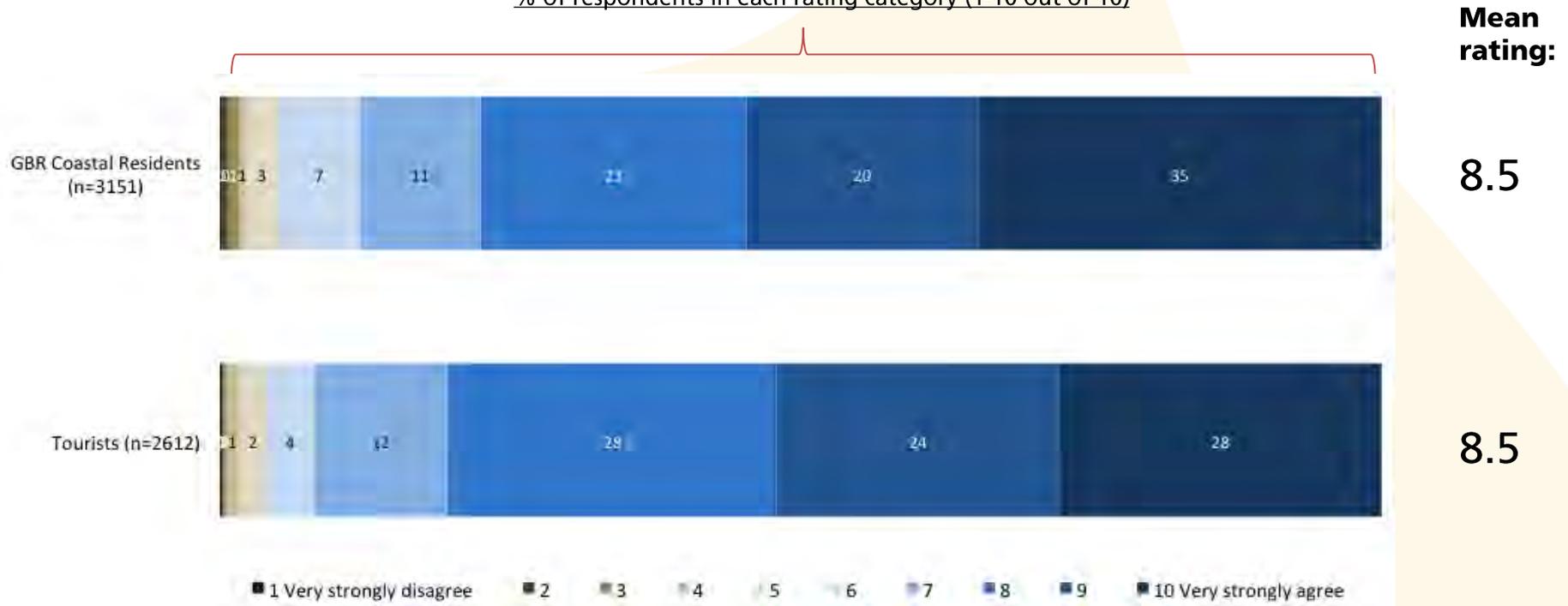


SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

"I WAS OVERALL SATISFIED WITH MY EXPERIENCE OF THE GBR"

% of respondents in each rating category (1-10 out of 10)





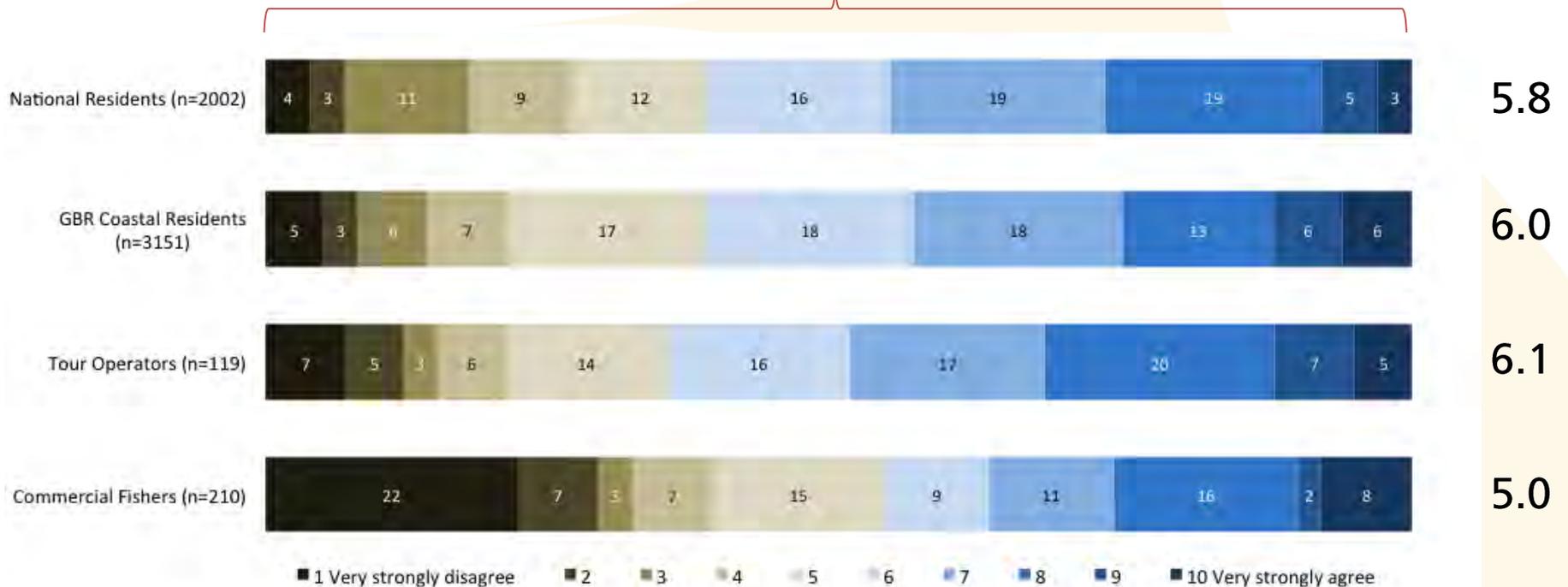
SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

"I FEEL CONFIDENT THAT THE GBR IS WELL MANAGED"

% of respondents in each rating category (1-10 out of 10)

Mean rating:





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

"I FEEL OPTIMISTIC ABOUT THE FUTURE OF THE GBR"

% of respondents in each rating category (1-10 out of 10)

Mean rating:





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

% of respondents in each rating category (1-10 out of 10)

Mean rating:

"I AM CONCERNED ABOUT THE IMPACTS OF CLIMATE CHANGE ON THE GBR"



"LEVELS OF INSPIRATION THE GBR PROVIDES RELATIVE TO OTHER PLACES"

8.5



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

"I AM UNCERTAIN HOW TO PLAN FOR CHANGES IN THE GBR THAT MAY AFFECT ME SUCH AS FLOODS, CYCLONES OR FINANCIAL CRISES"

Mean rating:

% of respondents in each rating category (1-10 out of 10)

Tour Operators (n=119)



8.0

Commercial Fishers (n=210)



6.2

1 Very strongly disagree 2 3 4 5 6 7 8 9 10 Very strongly agree



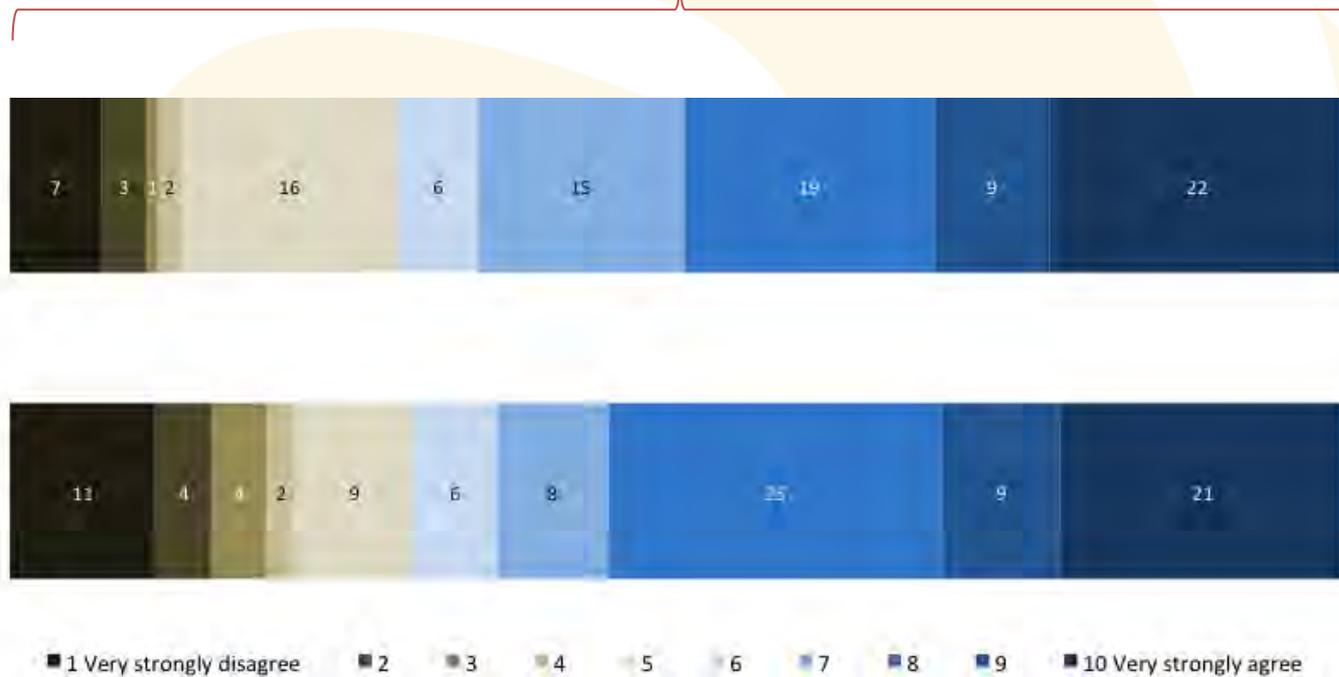
SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

PART C: SECURITY (EXAMPLE INDICATORS)

"I AM INTERESTED IN LEARNING HOW TO BETTER PREPARES FOR SIGNIFICANT EVENT"

Mean rating:

% of respondents in each rating category (1-10 out of 10)





SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

IMPLICATIONS INTO THE FUTURE

Well being in conservation contributing to sustainable development

The UN Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (UN IPBES) released and endorsed in plenary a recommended conceptual framework, which as an overarching theme addressed the notion of wellbeing (UN IPBES, 2013). Moreover, in the recent “Promise of Sydney” which summarized the commitments of the World Parks Congress (November 2014) there was a mention that: “we promise to inspire ... all people ... to experience the wonder of nature through Protected Areas, to engage their hearts and minds and engender a life-long association for physical, psychological, ecological and spiritual well-being.” [This coming from a whole workshop stream specifically addressing the links between Protected Areas and Health and Wellbeing”.]

This movement towards progressively acknowledging worldwide the inextricably close connection between provision of sustainable environmental services through effective management of natural resources and well being augurs well with the work that we have been conducting in the Great Barrier Reef Region for a few years and is described above. Moreover, the framework to measure well being used here is also aimed at being meaningful to management needs – i.e. translating the need for understanding impacts on wellbeing to management actions that can contribute to sustain those. Such a need is becoming increasingly more apparent as recently others working within the conservation sector have also been discussing the need to capture the notion of well being in this context and to understand the impacts on wellbeing as a result of conservation initiatives (Milner-Gulland, et. Al. 2014).



SELTMP 2014: HUMAN AND COMMUNITY WELL BEING

Our results present a baseline from which more meaningful insights will be gained as longitudinal data are collected. Meanwhile, these results can contribute to assist the Australian Government and management agencies to understand how they are meeting their obligations to the World Heritage Convention with respect to the GBRWHA having a role in the life of the community (as mentioned earlier). More so, as Long-Term Regional Sustainability plans are developed it becomes increasingly important to consider the three pillars: the environment, the economy and society (and social capital). The holistic concept of well being particularly helps to address the connections amongst those three pillars. It helps to demonstrate the inextricable links between environmental conservation and management and the social and economic fabric of societies; particularly in locations where the natural environment is such and important part of the lives of communities as it is in the Great Barrier Reef region.



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