

Department of Regional NSW

Lord Howe Island Marine Park - Community Survey

(EY Sweeney Ref No. 32107)

| 1

EY contact:
Project no.
Date:

Erik Heller
32107
22nd April 2024

Table of contents

Executive summary	3
Overview of the program	10
1. Introduction and background	11
Detailed results of the program	18
2. Connection with LHIMP	18
3. Values and threats - what needs to be managed?	25
3.1 Analysis of environment values and threats	26
3.2 Analysis of social values and threats	30
3.3 Analysis of cultural values and threats	34
3.4 Analysis of economic values and threats	38
Appendices	42

Executive summary



Lord Howe Island Marine Park

COMMUNITY VALUES SURVEY

Lord Howe Island Marine Park is one of six marine parks within the New South Wales (NSW) marine estate and was first established in 1999. Located in the Pacific Ocean, approximately 600 kilometres from the coast of NSW, the marine park covers 480 km² of the NSW marine estate, including the waters surrounding, and seabed of, Lord Howe Island, Balls Pyramid and the South-East Rock. Its unique environmental and geological characteristics support the world's most southerly shallow water coral reef, seagrass beds, and a vast array of marine species.

The Marine Estate Management Authority (MEMA) recognise the importance of input from the Lord Howe Island, and NSW mainland population to help guide marine park management planning.

On behalf of the Marine Estate Management Authority (MEMA), the Department of Primary Industries (DPI) - Fisheries engaged the professional services of EY Sweeney to undertake an independent community survey program with a diverse array of stakeholders, including residents of Lord Howe Island, subject matter experts, Lord Howe Island

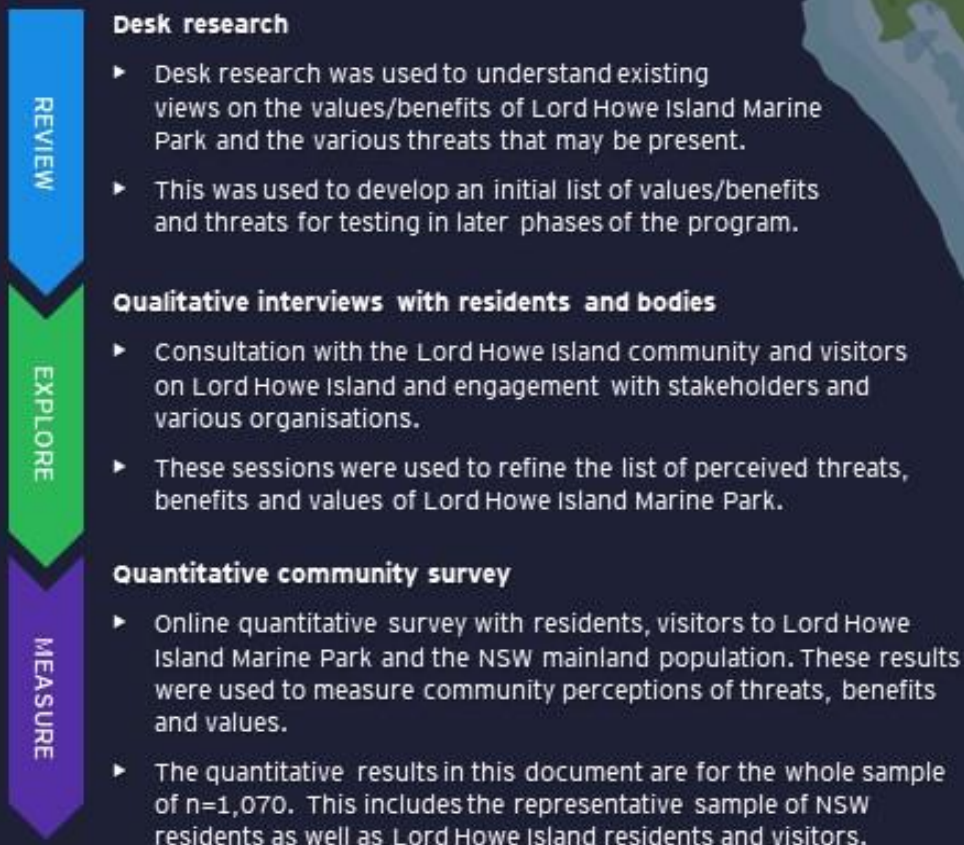
Marine Park Advisory Committee members, community bodies, marine park users or visitors and the mainland population.

The primary objective of the program was to identify community and stakeholder values (environmental, social, cultural, and economic) for Lord Howe Island Marine Park, and the perceived threats to these values. The outcomes from this community survey will inform a risk assessment for the values of the Marine Park, and the preparation of a management plan for the Lord Howe Island Marine Park.

This document provides a high-level summary of results from this community survey, across four areas of consideration: Environmental values, Economic values, Social values, Cultural values. The threats to these values were also identified.

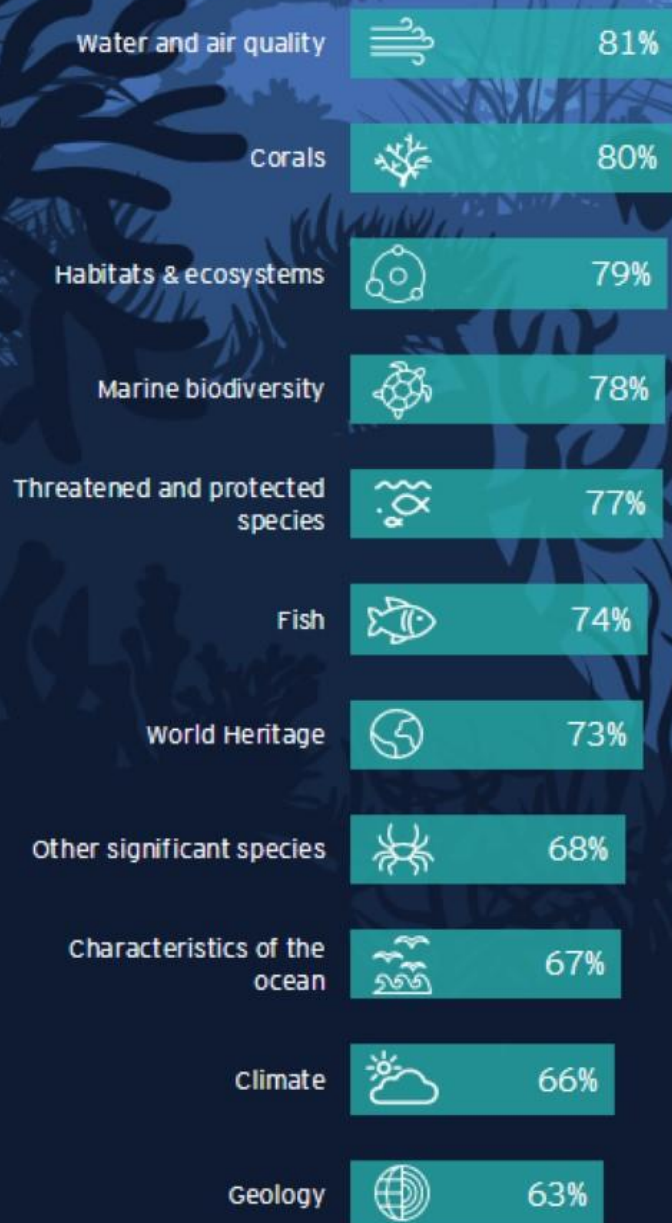
Over the following pages, all quantitative results have been derived from a representative sample of NSW residents and an opt-in survey with residents and visitors to Lord Howe Island.

Summary of the approach



Environmental values

NSW residents are highly conscious of the natural environment within, and surrounding Lord Howe Island Marine Park. Water and air quality, as well as corals, unique habitats and ecosystems are top considerations for the public - highlighting the importance they place on the preservation of marine flora and fauna. The geology and ecology of the area is also recognised to be highly important.



“

I think there needs to be more regulations and education around damaging/maiming sharks during fishing as there is a culture... of bycatch.

Lord Howe Island resident

“

The LHI Marine Parks [sic] are truly unique - the only place I have visited with such a pristine, untouched, and continuously monitored marine environment.

Visitor to Lord Howe Island

Economic values

Lord Howe Island Marine Park supports a thriving tourism economy, driven by the unique location and dedication of the Lord Howe Island community. The Marine Park plays a key role in driving economic opportunities, through tourism, employment, fish-related activities and shipping.



“

Proposed foreshore and marine developments have the potential to adversely affect the coastal marine environment.

Lord Howe Island resident

“

It is very important to not overly exploit Lord Howe Island for economic purposes and the protection and preservation of the island should be the most important factor in any decisions made with regard to the island because if the island and its fauna and flora are not protected then there is no value to the island.

Visitor to Lord Howe Island

Social values

There are a variety of social benefits and values related to Lord Howe Island Marine Park including physical and mental health benefits, which can benefit the overall wellbeing of the NSW community. The people of NSW feel a connection to nature in the Marine Park and many say a key benefit of the Marine Park is the ability to leave something valuable for future generations.



“

I believe the interactive relationship developed with the ocean and its marine life whilst spending hours underwater observing the behaviour of fish fosters a deep and genuine desire to protect.

Lord Howe Island resident

“

Special places like this need to be monitored and protected so our future generations can enjoy them as we have.

NSW resident

Cultural values

There are a range of iconic symbols and animals that represent the unique and diverse cultural history of Lord Howe Island. Maritime heritage is a key focal area for Lord Howe Island Marine Park. The NSW mainland population recognise this and place a high degree of value on these parts of the island's history as a result.



“

The cultural practices that are protective of living creatures their habitats and the environment, their history, buildings and wrecks, should be respected and encouraged.

NSW resident

“

The locals are the ones who are consistent. They are the ones who have been here for six, seven generations (...). Often when [government] executives come in (...) they don't have cultural or environmental knowledge to back up their decisions.

Lord Howe Island resident

Threats to values

The community identified a range of potential threats to the values/benefits offered by Lord Howe Island Marine Park. From an environmental and social perspective, pests, diseases and invasive species are recognised as key concerns. From an economic perspective, losing its World Heritage status is seen to be a primary risk (although the likelihood of this occurring is limited). Finally, at a cultural level, damage to historical sites is recognised as a potential issue for regulators and marine park managers.

TOP 5 THREATS TO






Environmental threats

Pests, diseases and invasive species		66%
Extraction of natural resources		64%
Climate change		59%
Land-based pollution		59%
Vessel-sourced pollution		58%

Economic threats

Loss of World Heritage status		58%
Climate change		57%
Coastal erosion / coastal works		55%
Declining fish populations		55%
Extreme weather events		53%

Social threats

Pests, diseases and invasive species		67%
Habitat and wildlife disturbance		64%
Coastal erosion / coastal works		58%
Loss of World Heritage status		56%
Potential impact of fishing		46%

Cultural threats

Physical damage to historical and underwater cultural heritage sites		59%
Development		53%
Loss of traditional practices		44%
Loss of cultural information		44%
Resistance to change		27%

Overview of the program



1. Introduction and background

Understanding how the community values Lord Howe Island Marine Park, and the threats that may impact these values.

Lord Howe Island Marine Park (LHIMP) is a pristine and ecologically diverse aquatic region located 600km off the northern coast of New South Wales. Its unique environmental and geological characteristics include vibrant coral reefs, seagrass beds, and a vast array of marine species.

As a World Heritage-listed site, LHIMP offers numerous benefits to local residents and the NSW mainland population, including the natural beauty of the area, sustainable fishing opportunities, recreational activities and tourism. The Marine Park also acts as a crucial habitat for endangered and endemic species and serves as a living laboratory for scientific research.



Image: Lord Howe Island Marine Park
Source: nsw.gov.au, NSW locations and attractions

Despite its many benefits and values, LHIMP also faces potential threats, both from natural and anthropogenic influences. As a result, the Marine Park must be carefully managed for future generations to enjoy.

UNDERSTANDING PERCEPTIONS OF THE COMMUNITY

To inform a future threat and risk assessment and management planning for LHIMP, the Marine Estate Management Authority (MEMA) sought the views of local residents, visitors and

the NSW mainland population on the values of the Marine Park and threats to those values.

To ensure this process was comprehensively and independently managed, EY were commissioned by the NSW DPI Fisheries (in consultation with the Marine Estate Management Authority (MEMA) to undertake a community survey with a diverse array of stakeholders, including residents of Lord Howe Island, various expert and community bodies, Indigenous Australians and the NSW mainland community.

The primary objective of the program s to identify community and stakeholder values (environmental, social, cultural, and economic) for Lord Howe Island Marine Park (LHIMP) and threats to these values, based on perceived benefits to Marine Park users and the community. Specifically, the program has been designed to address four core objectives:

Vision for the Marine Park:

- Understand key stakeholder and community perspectives regarding the objective of the LHIMP desired management approaches over the next two decades

Values of the Marine Park:

- Identify the economic, social, cultural, and environmental values that residents, stakeholders and the NSW mainland population associated with LHIMP

Threats to the Marine Park:

- Identify perceived threats to LHIMP values as identified by the community, including both present and potential risks

Opportunities for the Marine Park:

- Identify possible avenues for improvement or development of LHIMP.

1.1 A three-phased community survey program



Phase 1: Desk research

- Detailed review of existing literature.
- Used to identify an initial list of the potential threats, benefits and values of LHIMP.



Phase 2a: Qualitative interviews with expert groups

- Qualitative interviews and conversations with expert stakeholders and organisations.
- Used to refine the list of potential threats, benefits and values of LHIMP.



Phase 2b: Qualitative interviews with LHI residents

- Qualitative interviews and consultation sessions with Lord Howe Island residents and visitors.
- Used to understand perceptions of management and preferred future approaches.



Phase 3: Quantitative community survey

- Online quantitative survey with residents, visitors to LHIMP and the NSW mainland population.
- Used to measure community perceptions of threats, benefits and values.

Considering the nature of this program and the diversity of stakeholders involved, a flexible mixed-methods approach was used to engage participants through qualitative interviews via online depth interviews and focus groups, and a quantitative online survey (listed above and described in more detail below).

PHASE 1: DESK RESEARCH

At the commencement of the program, the Department provided EY with eight unique documents relating to values, benefits and threats - both for LHIMP specifically, as well as the NSW Marine Estate more broadly.

Across these documents, technical, scientific and sociological considerations were discussed for each of the four core focus areas: environmental values, social values, cultural values and economic values. For each of these values, a range of potential threats and issues were highlighted - helping inform an initial list

of values and threats for further analysis in the primary phases of the research.

A full list of references used to inform this phase has been provided in appendix 2.

PHASE 2a: QUALITATIVE INTERVIEWS WITH EXPERT GROUPS

Following the completion of the desk research phase, two qualitative interview phases were undertaken in parallel between the 6th of September and 5th of October 2023.

The first of these two phases included a range of expert interviews and groups with technical specialists and community organisations both onsite and off Lord Howe Island.

An overview of the stakeholders interviewed in this phase of the program has been provided below:

Expert stakeholders: focus groups

		No. of participants
1	Lord Howe Island Marine Park Advisory Committee (including representatives from the Temperate East Marine Advisory Committee)	6
2	Lord Howe Island residents	7
3	Research groups <ul style="list-style-type: none"> ▶ Reef Life survey ▶ Australian Museum Research Institute ▶ Queensland government, Department of Agriculture ▶ School of life and environmental sciences, University of Sydney 	4

Expert stakeholders: small groups and one-on-one interviews

		No. of participants
1	Commonwealth World Heritage group representatives	3
2	Lord Howe Island tourism board	1
3	Destination NSW	1
4	Commercial tour operators (inclusive of lagoon and offshore operators)	4
5	Charter Marine Park and organised event permit holders including land-based tourism industry (accommodation, tour providers, etc.)	2
6	LHI Community groups: Aquatic Club/Senior Citizens/LHI P&C	3
7	Ministerial Fishing Advisory Council (MFAC)	2
8	NSW Recreational Fishing Advisory Council (RFNSW)	1
9	Yachting NSW	1
10	Australasian Seabird Group	1
11	Conservation groups <ul style="list-style-type: none"> ▶ Australian Marine Conservation Society ▶ Taronga Conservation Society Australia ▶ Nature Coast Marine Group 	4

For all participants, an online pre-task was used to obtain preliminary information of values and threats to discuss in the sessions. The pre-task was also circulated amongst a wider set of participant groups (e.g., focus group participants and visitors) who were unable to attend the sessions.

A total of 15 responses were collected through the pre-task.

PHASE 2b: QUALITATIVE INTERVIEWS WITH LHI RESIDENTS

Alongside expert interviews and consultations, residents and visitors of Lord Howe Island were also engaged in the qualitative phase of the research. These sessions primarily occurred face-to-face on the island. To ensure all residents had the opportunity to provide their feedback, a communication plan was developed and deployed on the island.

An A4 flyer was published in the September 2023 issue of the Lord Howe Island Signal, a local newsletter distributed on the island.

Flyers were also printed and distributed to each household on Lord Howe Island, displayed at the LHIMP office and circulated amongst local businesses and stakeholders by LHIMP staff. A final breakdown of participants has been provided in the table below:

Lord Howe Island residents and visitors: on-island interviews

		No. of participants
1	Formal groups with Lord Howe Island residents	7
2	Conversations with senior residents	6
3	Conversations with other residents	4
4	Conversations with visitors on Lord Howe Island	2

PHASE 3: QUANTITATIVE COMMUNITY SURVEY

Following completion of the qualitative phases of the program, the list of community values/benefits and threats was reviewed and optimised - based on recommendations and feedback from the experts, local residents and visitors engaged in phases 2a and 2b.

This list was then used to build an online quantitative survey script in partnership between EY's survey design specialists, subject matter advisors from the Department of Primary Industries - Fisheries, and other marine estate agencies.

This survey script was programmed and deployed by EY using Qualtrics online surveying software. On average, the survey took respondents approximately 15 minutes to complete. Respondents were recruited via two channels:

Channel 1: Survey panel of mainland NSW community

A representative sample of n=1,014 people from the NSW mainland population were recruited via a commercial survey panel using a Random Stratified Sampling approach. This

approach ensures the final sample is representative of the NSW mainland population according to ABS Census data for age, gender and location of main residence (region).

To further ensure representativeness, this sample was statistically weighted post data-collection using Q Professional statistical software package.

Channel 2: Resident and Visitor recruitment strategy

To ensure Lord Howe Island residents and visitors were provided with the opportunity to participate in the survey, flyers were distributed across the island containing a QR code/ online link with access to the survey. Digital versions of the survey were also distributed via email.

Significant effort was made by the Department to ensure Lord Howe Island residents were made aware of, and provided ample opportunity to participate in the research. This included flyers, emails to tourism businesses and mailouts. A sample of n=56 was achieved in this survey, of which n=24 were residents who currently live, or have previously lived, on the island, and n=32 were current or past visitors to the island. The known population of

Lord Howe Island is 400, and due to the small sample size and small population, tests of statistical significance have not been conducted on this sample.

A detailed breakdown of the final sample has been provided below and on the following page. A copy of the piloting/validation techniques, values/benefits, and identified threats have been included in appendices 1 and 3.

Mainland NSW sample (recruited through online panel)

		No. of participants
1	Age	
	18-24	123
	25-34	165
	35-44	160
	45-54	185
	55-64	177
	65+	204
2	Gender	
	Female	520
	Male	494
	Non-binary/Other/Prefer not to say	-
3	Location of main residence	
	Central West, Far West and Orana	72
	New England North West	15
	Central Coast	51
	Hunter and Newcastle	124
	North Coast	99
	Illawarra-Southern Highlands-Shoalhaven	39
	Riverina-Murray	24
	South East and Tablelands	42
	Sydney	548
4	Aboriginal and Torres Strait Islander	
	Number of surveys	58
TOTAL NUMBER OF COMPLETED SURVEYS		1014

The sample of n=1,014 has a maximum margin of error of 3.1% at the 50% proportion. This means that, if we repeated the survey 20 times with the different samples, 19 of those surveys would produce the same results to within 3.1%.

Island residents and visitors sample

		No. of participants
1	Age	
	18-24	1
	25-34	7
	35-44	9
	45-54	11
	55-64	10
	65+	18
2	Gender	
	Female	27
	Male	27
	Non-binary/Other/Prefer not to say	2
3	Relationship with Lord Howe Island	
	I am a current resident of Lord Howe Island	21
	I have previously been a resident of Lord Howe Island	3
	I have visited Lord Howe Island, but have not lived there	32
TOTAL NUMBER OF COMPLETED SURVEYS		56

No statistical weighting applied to Island residents and visitors sample.

All quantitative data have been analysed using Q Professional software and the Statistical Package for the Social Sciences (SPSS). Within the NSW mainland population sample, where any comparisons are displayed between different subgroups of demographics, an appropriate test of statistical significance has

been run. Due to the difference in sampling strategies between the NSW mainland population sample and island residents and visitors, it is not appropriate to test the results of these two samples for significant differences.

Detailed results of the program



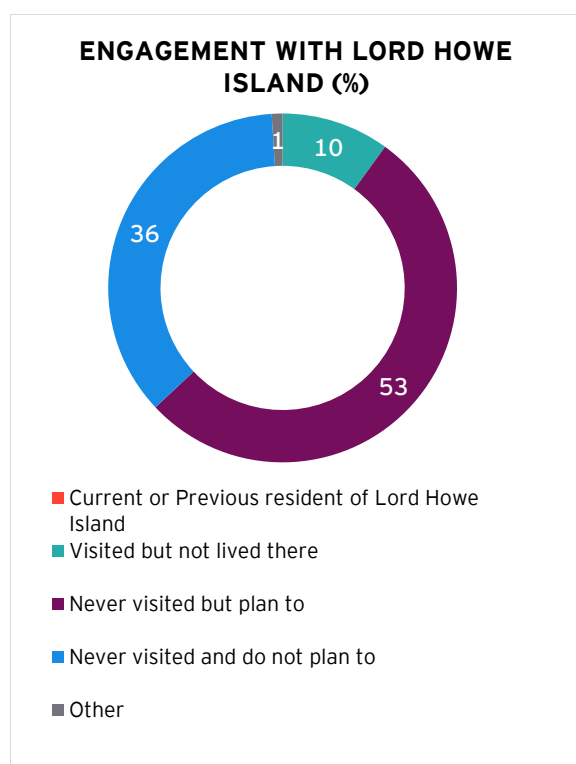
2. Connection with LHIMP

While most people in the mainland NSW community haven't visited LHIMP, many would like to do so sometime in the future.

LHIMP means a number of things to different people. Across NSW, connection with the Island and its Marine Park is highly diverse. Among the NSW mainland population, only half were aware of LHIMP prior to participating in the research¹. Alternatively, those who live on Lord Howe Island have a deep and meaningful relationship with the Marine Park.

To better understand these relationships, the research began by asking individuals about their interests and historical connection with the park.

In the NSW mainland population, interest in LHIMP is varied



Source: Representative NSW mainland survey, n=1,014
Q2. Which of the following best describes your relationship with Lord Howe Island?

Relatively few people in the NSW mainland population have visited Lord Howe Island and the Marine Park (10%). Despite this, there is substantial interest in visiting, with over half (53%) indicating they would like to sometime in the future.

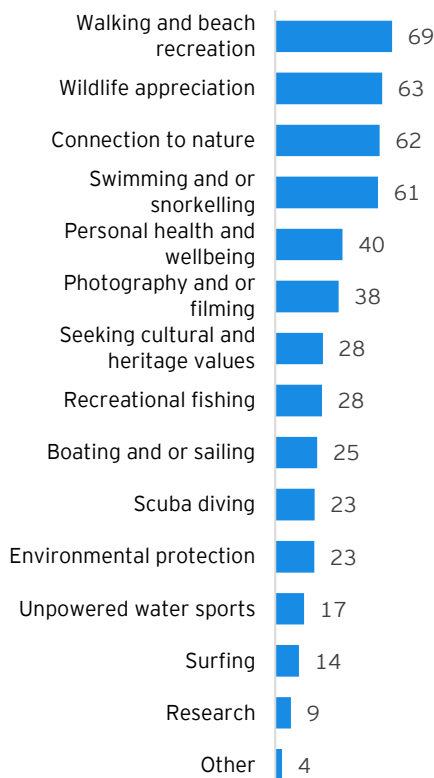
This sentiment is substantially higher among those aged 35-44 and 45-54, with almost two thirds of these age cohorts (66% and 63% respectively) saying they plan to visit.

Connection with the Marine Park is a key driver of interest

The Marine Park is a key driver of community interest in Lord Howe Island, with water-based activities heavily considered. For example, over 6 in 10 of the NSW mainland population say they would be interested in the natural aspects of the Marine Park, with walking and beach recreation, wildlife appreciation, connection to nature, and swimming/snorkelling the top interests.

¹ Source: Representative NSW mainland survey, n=1,014;
Q1. Prior to completing this survey, had you ever heard of Lord Howe Island Marine Park?

TOP 10 INTERESTS IN LORD HOWE ISLAND (%)



Source: Representative NSW mainland survey, respondents who are a current or previous resident or have visited Lord Howe Island, n=95.

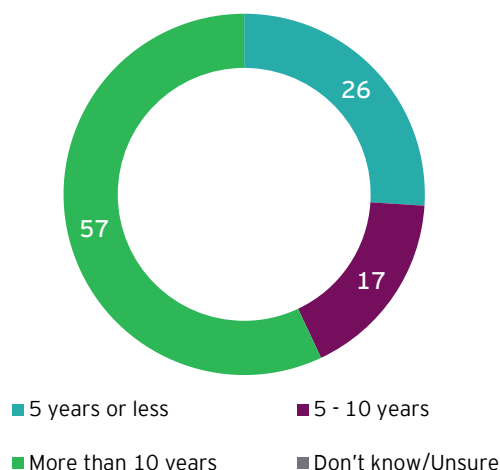
Q8. Which of the following are your main interests and activities related to Lord Howe Island Marine Park?

Residents of the island have deep and long-standing relationships with the Marine Park

Many residents of Lord Howe Island have family connections that go back multiple generations - often having lived on the island themselves for most, if not all, of their lives.

These long-standing relationships mean they have deep and meaningful connections to the waters that surround the island, and therefore the Marine Park itself.

LENGTH OF TIME SPENT LIVING ON THE ISLAND (%)



Source: Residents who completed the Residents and Visitors survey, n=23; Q3. How long have you been, or were, a resident on Lord Howe Island?

Qualitative interviews with residents highlighted a range of important associations between the Marine Park and their personal identity.

“The residents know the best places to go [e.g., for fishing and other activities] at different times of the year.”

- Resident and Community Group member (group interview)

As a result, residents recognise the importance of managing the Marine Park effectively and have many established views on how to do this (discussed in more detail over the coming pages).

“There are endless possibilities to discover the island and marine park. People often come here with five hobbies and are only able to fulfil two because there’s so much to do.”

- Visitor to Lord Howe Island

This positive sentiment has an important impact on their willingness and desire to return to the island.

2.1. Local sentiment towards the management of LHIMP



Qualitative interviews with members of the Lord Howe Island community and stakeholders identified seven core sentiments about ongoing management.

1. CUSTODIANSHIP FOSTERS SUPPORT FOR THE MARINE PARK

“Lord Howe Island always had its own informal laws. The Marine Park was a new thing, which is great. But, if you didn’t abide by the laws, you would be told off.”

- Resident and Community Group member (group interview)

Residents and stakeholders generally value the existence of LHIMP and appreciate its role in managing conservation. This view is informed by:

- ▶ A strong sense of custodianship for the island and the Marine Park
- ▶ Active involvement of the community in advocating for and helping establish the Marine Park
- ▶ On-going formal and informal involvement in managing the Marine Park alongside the government
- ▶ Social norms and practices that predate the formal establishment of the Marine Park. The community highlighted that they have always acted with care and consideration by “taking only what they need” from the natural environment

2. LOCAL STAKEHOLDERS WANT A MORE PROACTIVE ROLE

“Marine Park and fisheries should consult more and speak with the islanders (...) [For example] There is a lot of scientific research on seabirds and the island, but not enough Fisheries research to support the fishing industry.”

- Resident (informal conversation)

Stakeholders are eager to be more actively involved in the management of the Marine Park through:

- ▶ Increased avenues for consultation and collaboration amongst different government, mainland NSW and LHI stakeholders (e.g., Marine Park, Fisheries, and the Island board)
- ▶ Greater representation of views and traditional practices of long-term residents and islanders
- ▶ Informal “grassroots” channels of engagement to enable “safe spaces” for thoughts and ideas for managing the Marine Park

3. DIVERSE INTERESTS AND USES OF THE MARINE PARK CREATE TENSION

“A lady came across here five or so years ago working for the Nippers (...) and she went off at Ned’s beach into an area and had to be rescued. It was because she didn’t have an awareness of what was around, and she didn’t ask the locals or residents (...) there’s a sense of confidence that was overwriting the local’s knowledge, or arrogance.”

- Commercial tour operator (Group interviews)

Many Lord Howe islanders, long-term residents, researchers and Marine Park users feel a strong sense of pride in their association with the Marine Park, both in relation to their livelihood and lifestyle. The ways in which the Marine Park is experienced and used are often attached to a strong understanding of:

- ▶ Elements of nature
- ▶ Tidal and weather systems
- ▶ Spiritual and meditative benefits

However, different users feel their viewpoints are not adequately represented, creating friction or conflict. This includes, for instance:

- ▶ Regulation enacted by the Marine Park without adequate input from Islanders
- ▶ Insufficient information provided to visitors or tourists about safe use
- ▶ Commercial operators not adhering to safety protocols

As a result, diverse user groups want greater representation of their perspectives for the safe, effective and collective management of the Marine Park.

4. ECO-TOURISM IS KEY FOR ECONOMIC AND SOCIAL SUSTAINABILITY

“Surfing NSW wanted to come out and do a competition. But we can’t cater to too many people (...) We don’t want the infrastructure as well because that’s a threat to the environment of the island and the Marine Park. Small groups are fine, but anything more than 20 people will put a lot of pressure.”

- Resident (Focus group)

The uniqueness of LHIMP characterised by its isolation and the pristineness makes it a “premium” tourism destination. Other “drawcards” that attract tourists, explorers and researchers include the World Heritage Status and the southernmost shallow water coral reef ecosystem. While tourism provides a range of benefits for the community including income, revenue for management and conservation efforts, stakeholders are mindful of its potential threats. During the qualitative interviews, participants expressed a want for Marine Park management to focus on the value of sustainable tourism or eco-tourism. Key considerations include:

- ▶ Maintaining the cap on tourists to preserve the Marine Park and its pristine condition
- ▶ Limiting or restricting major events or activities (e.g., water sports, conferences) due to pressure on the infrastructure, community, and marine environment
- ▶ Limiting the allocation of commercial licenses for tour operators to protect the income of local businesses

5. REGULATION CAN BE BETTER ALIGNED WITH LOCAL PRACTICES

“The locals are the ones who are consistent. They are the ones who have been here for six, seven generations (...) Often when [government] executives come in (...) they don’t have cultural or environmental knowledge to back up their decisions and it sets a precedent which has legal ramifications and it’s creating divisions.... They will enforce something that hasn’t been enforced before... Sometimes the local base knowledge is more persuasive and correct.”

- Commercial tour operators (Group interview)

Stakeholders and Marine Park users expressed a sense of ambiguity around its management.

Key concerns include:

- ▶ A lack of clarity around the different roles played by the Lord Howe Island Board, Marine Park Management, and Maritime NSW for managing different aspects, regulations and permitted activities
- ▶ Traditional rules and practices are not always aligned with the regulations managed under the Marine Park, which can lead to community members feeling a sense of cultural erosion or loss
- ▶ Limited understanding of the rationale behind the parameters of the Marine Park and sanctuary zones creates issues around livelihood, sustenance, and enjoyment of the park (e.g. loss of traditional fishing sites)
- ▶ Rules and regulations are perceived to not be applied consistently, or changes communicated adequately
- ▶ There is a desire for more formal recognition of fishing activities that are currently accepted but not permitted

6. RESEARCH IS HIGHLY VALUED AND IT NEEDS TO BE COMMUNICATED

“[Vision for the Marine Park] I’d imagine that the scientific research that is being done in these waters is well communicated and therefore, celebrated by locals and visitors.”

- Resident (pre-task)

Residents, visitors, and stakeholders value the amount of scientific research conducted on and about LHIMP, but feel that it needs to be more effectively translated and communicated to the public. Key considerations include:

- ▶ A perception that most of the research leaves the island without its benefits or implications being shared with the residents
- ▶ A feeling of research fatigue in the community through participation in various surveys and conversations, but inability to access findings or information about the research
- ▶ The need for more research that will enable confidence and validity in the effective use of the Marine Park and justify its regulation and management. For example, research on current and future trends in fish stocks or data to justify the closure or opening of specific fishing sites in the Marine Park

7. MANAGEMENT OF LHIMP REQUIRES TAILORED SOLUTIONS

“[Vision for the Marine Park] To work closely with the community (to give them a voice like you are doing) for law making and ongoing management of the Marine Park.”

- Resident (pre-task)

Residents of Lord Howe Island feel the LHIMP is substantially different to the Mainland NSW Marine Park network and therefore, requires bespoke and tailored solutions that take the following considerations into account:

- ▶ Its unique environmental context illuminated through the values of biodiversity, pristine nature, and unique habitats and ecosystems not found elsewhere in the world
- ▶ Its location, relative isolation and World Heritage status that needs to be protected and maintained
- ▶ Its value of eco-tourism focused on sustainability and conservation that creates a different and more “premium” tourism experience
- ▶ The traditional and cultural values of islanders, their knowledge and practices (e.g., fishing) which they feel have been somewhat lost in the pursuit of bureaucratic protection and regulation.

3. Values and threats – what needs to be managed?



ENVIRONMENT

- ▶ LHIMP and its environment is a hub of biodiversity and ecology.
- ▶ This includes all the seabed and waters extending to three nautical miles from the mean high-water mark surrounding LHI.



SOCIAL

- ▶ There are a variety of social benefits to LHIMP that help underpin the physical and mental wellbeing of residents, and the NSW mainland population.



CULTURAL

- ▶ The rich history of the island is deeply embedded into local identity and the shared history of Australia.
- ▶ This includes settlement by sea travellers and the physical maritime reminders (such as shipwrecks).



ECONOMIC

- ▶ Tourism is the largest contributor to the LHI economy (including direct and indirect engagement with the Marine Park).
- ▶ There is also substantial intrinsic economic value through non-use values, such as bequeathment.

Four core types of values and threats to consider

Based on findings from the literature review and the qualitative community interview phase, it was identified that there are four focus areas when evaluating values and threats for LHIMP: environmental, social, cultural and economic.

While it is recognised these four areas can often be interrelated (e.g. eco-tourism fundamentally relies on a healthy and sustainable environment), separating them was crucial for the purpose of this analysis.

A full list of values and threats can be found in the appendices 3 and 4 of this document

A detailed breakdown of all identified values and threats for each of the four areas has been included in appendices 3 and 4. References have been provided for each value to demonstrate their origin and justification for inclusion.

Given that some of the values and threats tested in the research are relatively complicated, an agreed set of survey labels and descriptions were developed. These were refined and validated using cognitive pilot sessions prior to the survey being deployed.

3.1 Analysis of environmental values and threats

3.1.1. NSW mainland population

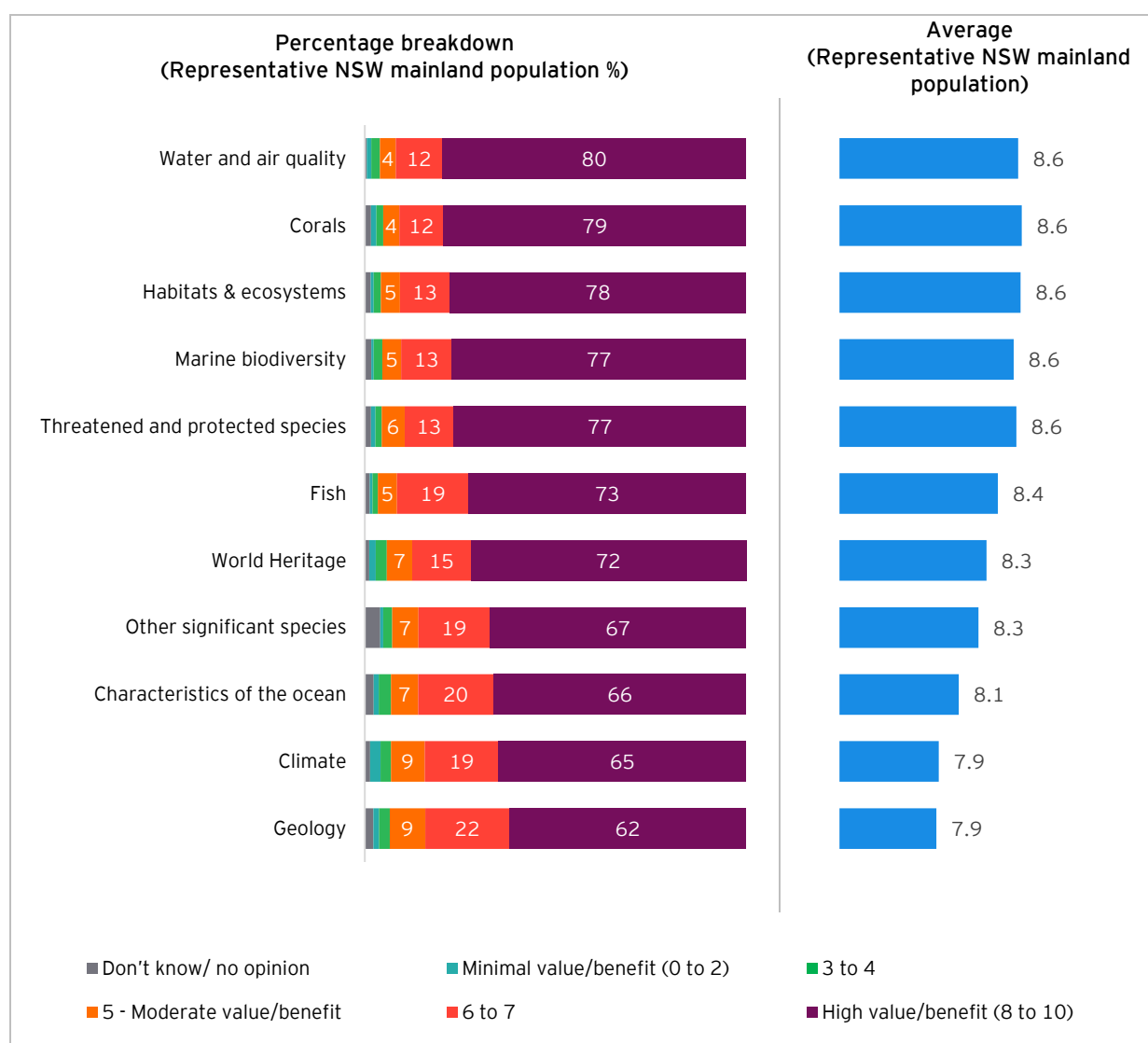
All environmental values hold importance, although corals, water and air quality are critical

The majority of NSW residents feel corals, the water and air quality are critically important for the future of LHIMP, followed closely by habitats & ecosystems, marine biodiversity, and threatened and protected species.

Climate is less of a focus, but still highly important

Climate received the least focus from respondents, with an average score of 7.9 out of 10, alongside Geology.

PERCEIVED ENVIRONMENTAL VALUES/ BENEFITS OF LHIMP
(Percentage breakdown and averages displayed as a score out of 10 for each value/benefit)



Source: Representative NSW mainland survey, n=1,014; Q9. The following is a list of the values/benefits associated with the natural environment of Lord Howe Island Marine Park. How valuable to do you believe each of these are?

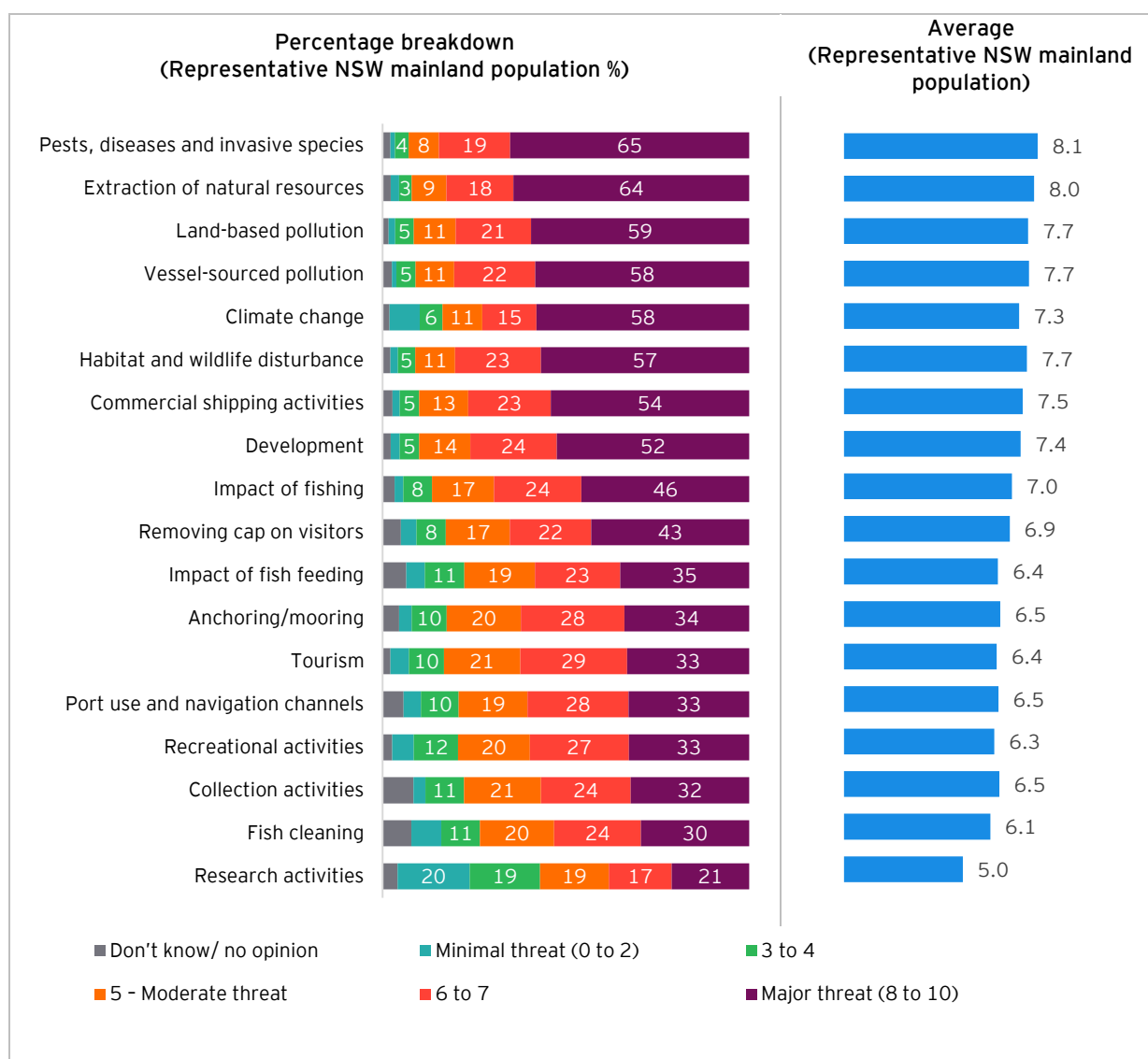
Pests/diseases and loss of habitat are particular topics of concern

When it comes to environmental threats, the introduction of disease through pests and invasive species is the most important consideration - likely due to the number of endemic species in the area.

A contingent of people do not feel climate change is a threat

Potentially due to the politicised nature of climate in mainstream and alternative media, there is a small (but not insignificant) contingent of people in the NSW mainland population (8%) who do not recognise it as a threat.

PERCEIVED THREATS TO THE ENVIRONMENTAL VALUES/ BENEFITS OF LHIMP (Percentage breakdown and averages displayed as a score out of 10 for each perceived threat)



Source: Representative NSW mainland survey, n=1,014; Q10. What level of threat do you believe each of the following have for the environmental values/benefits of Lord Howe Island Marine Park?

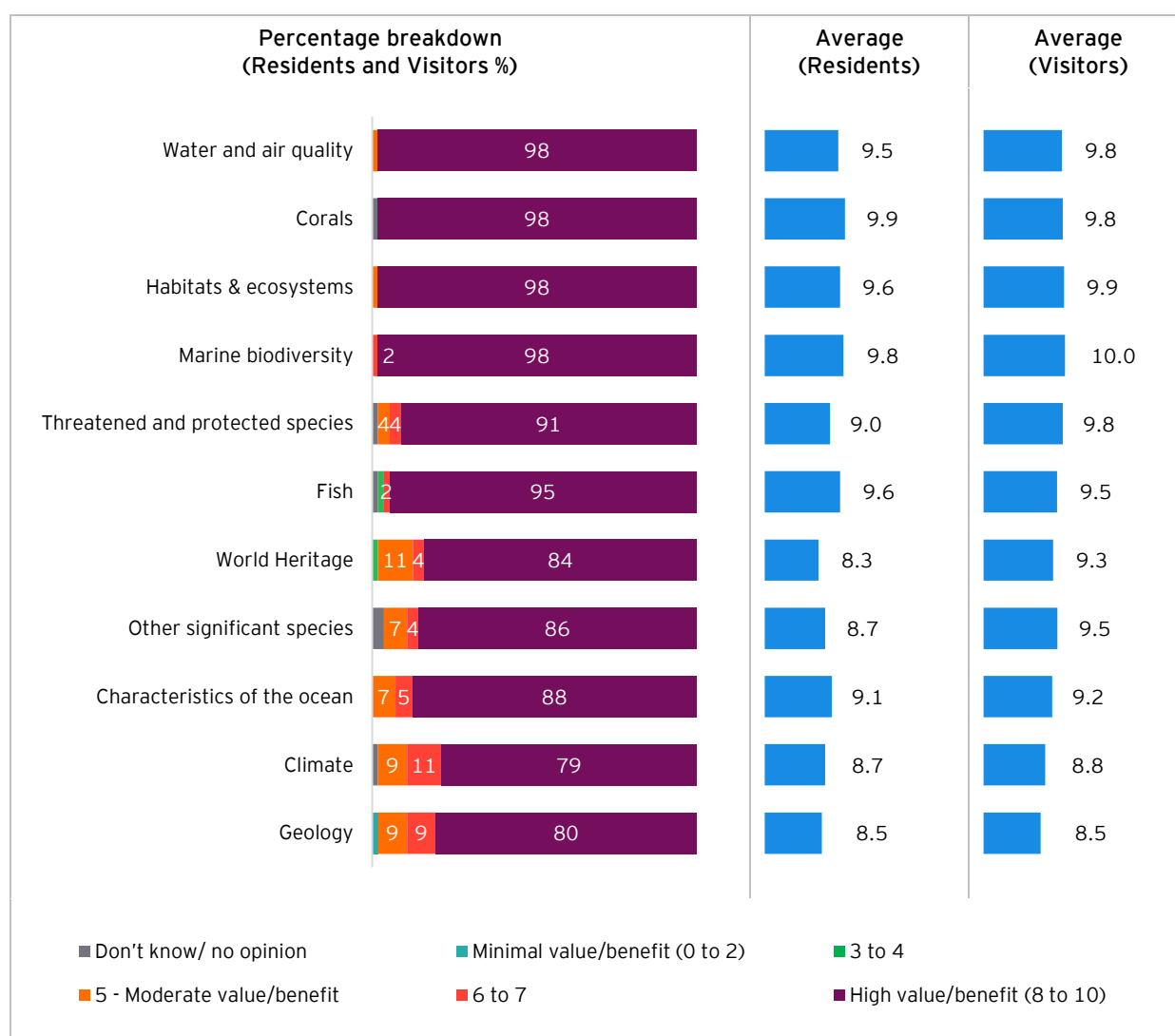
3.1.2. Residents and visitors results

Residents and visitors have similar values as the NSW mainland community, although they are even more pronounced.

mainland NSW community, likely due to their direct connection to the Marine Park.

Visitors and residents identify similar environmental values and benefits - although the average ratings are generally higher than the

PERCEIVED ENVIRONMENTAL VALUES/ BENEFITS OF LHIMP
(Percentage breakdown and averages displayed as a score out of 10 for each value/benefit)



Source: Residents and Visitors survey, n=56, Current and former residents, n=24, Visitors, n=32; Q9. The following is a list of the values/benefits associated with the natural environment of Lord Howe Island Marine Park. How valuable to do you believe each of these are? Note that these results are shown in the same order as the representative NSW mainland population results for ease of comparison.

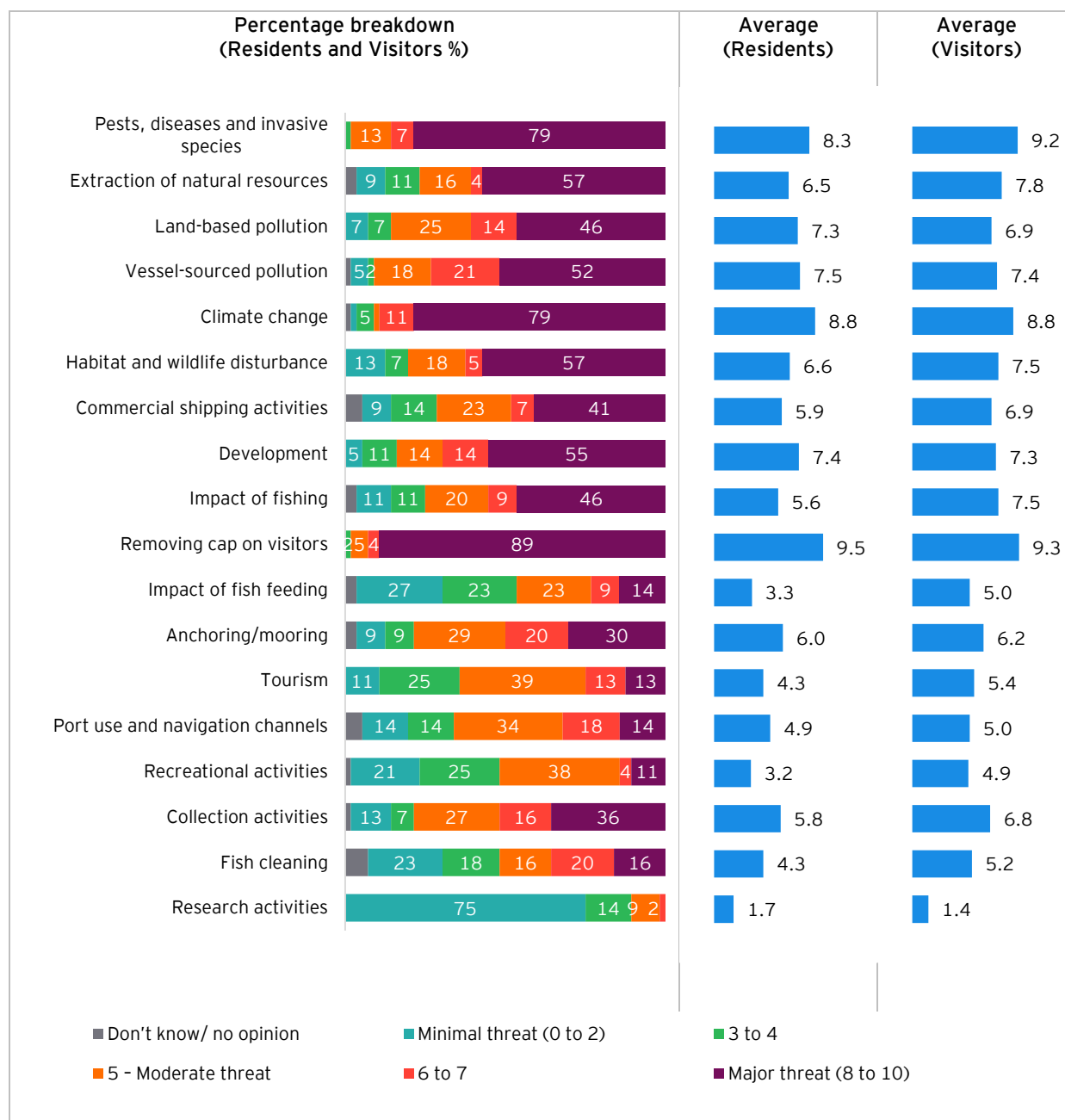
For both residents and visitors, removing the cap on visitor numbers would be a substantial environmental risk

Highlighting the importance of consultation with the local community if any such decision were ever considered.

Pests and diseases also a concern for those on the island

With almost 9 in 10 residents and visitors (89%) indicating this can be a major threat to the Marine Park.

PERCEIVED THREATS TO THE ENVIRONMENTAL VALUES/ BENEFITS OF LHIMP (Percentage breakdown and averages displayed as a score out of 10 for each perceived threat)



Source: Residents and Visitors survey, n=56, Current and former residents, n=24, Visitors, n=32; Q10. What level of threat do you believe each of the following have for the environmental values/benefits of Lord Howe Island Marine Park? Note that these results are shown in the same order as the representative NSW mainland population results for ease of comparison.

3.2 Analysis of social values and threats

3.2.1. NSW mainland population

Leaving something for future generations is an important social value

Feeling as if they are leaving something for the future is highly important to the community - with three-quarters saying this is a great value of the of Marine Park.

A similar proportion also say that the strong connection LHIMP has with nature is an important benefit they value.

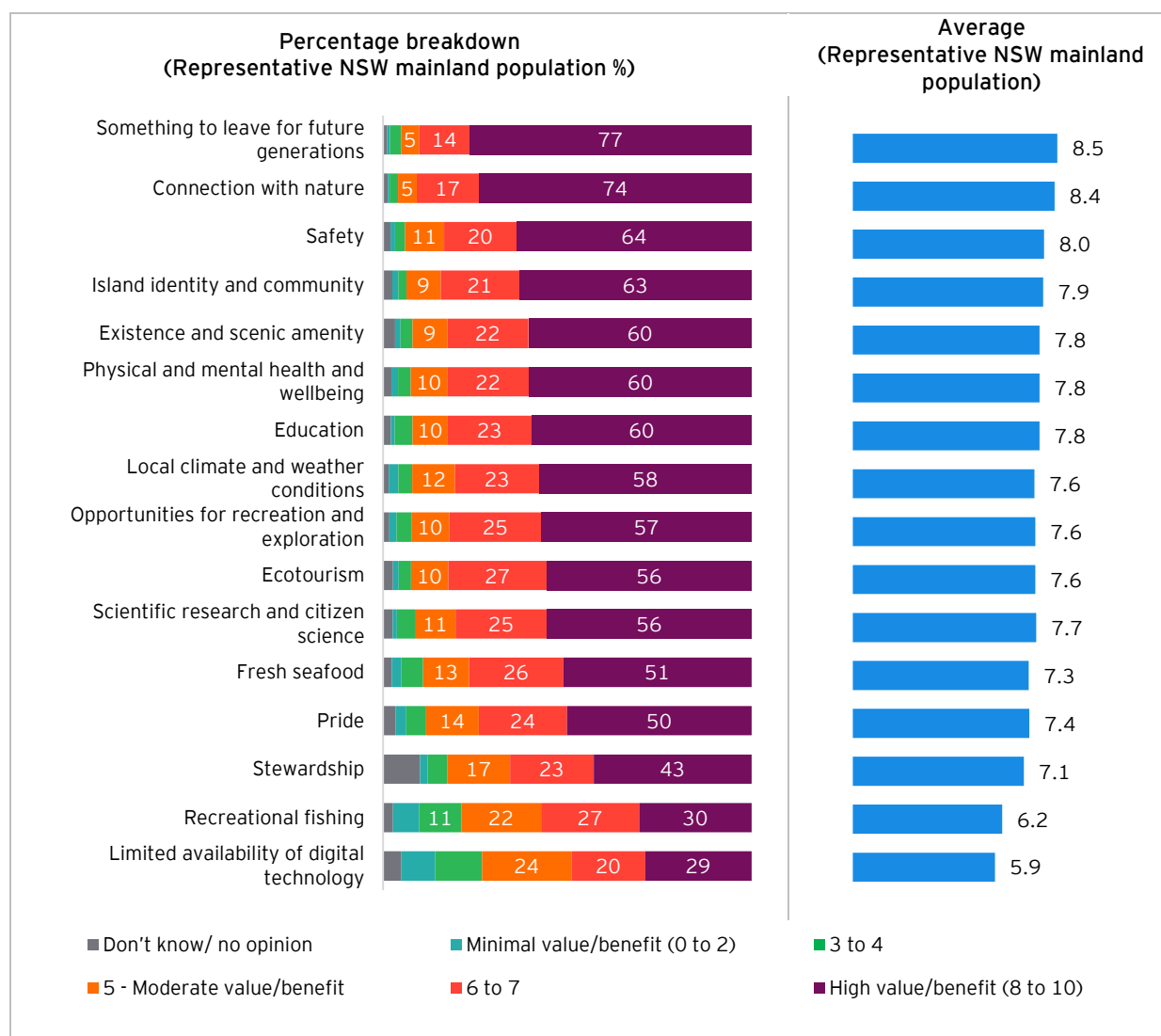
Limited availability of digital technology is least valued among the NSW mainland population

Receiving an average score of 5.9 out of 10, the NSW mainland population views this aspect as the least important benefit of the Marine Park.

During the qualitative research however, the limited access to technology was seen as a differentiator for residents, and the enforced digital disconnect was viewed as an asset for the island.

PERCEIVED SOCIAL VALUES/ BENEFITS OF LHIMP

(Percentage breakdown and averages displayed as a score out of 10 for each value/benefit)



Source: Representative NSW mainland survey, n=1,014; Q12. The following is a list of the values/benefits associated with the social aspects of Lord Howe Island Marine Park. How valuable to do you believe each of these are?

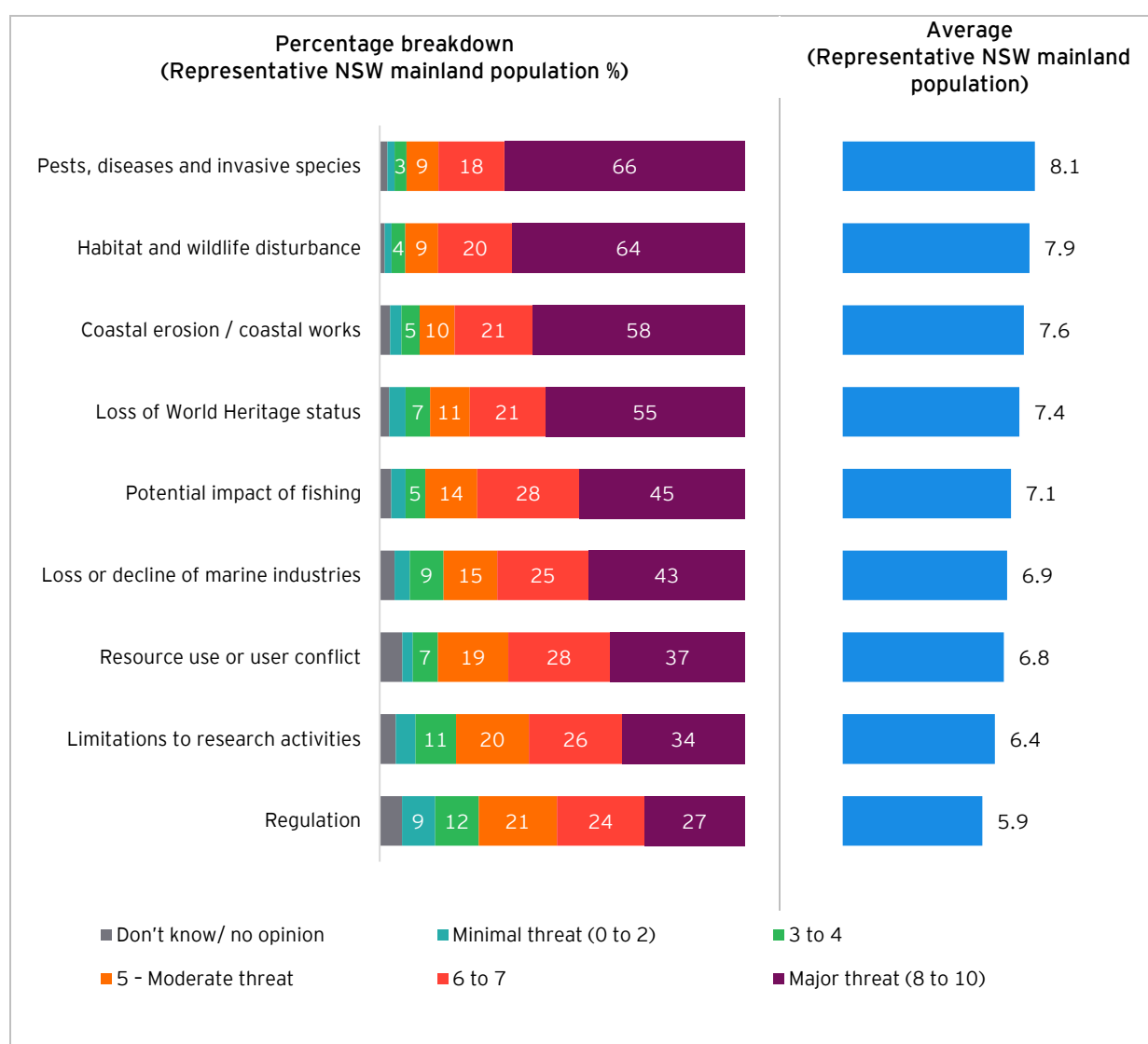
Pests, diseases, habitat and wildlife disturbance are also concerns at a social level

Although they are an environmental threat, many people recognise that these types of negative influences can have a substantive impact on the social fabric of Lord Howe Island.

Across the state, regulation is not viewed as a substantial threat

Regulation is relatively welcomed by the NSW mainland population. Although, it is important to recognise that regulatory intervention has limited impact on these individuals.

PERCEIVED THREATS TO THE SOCIAL VALUES/ BENEFITS OF LHIMP (Percentage breakdown and averages displayed as a score out of 10 for each perceived threat)



Source: Representative NSW mainland survey, n=1,014; Q13. What level of threat do you believe each of the following have for the social values/benefits of Lord Howe Island Marine Park?

3.2.2. Residents and visitors results

Leaving something for future generations is also important for those on the island

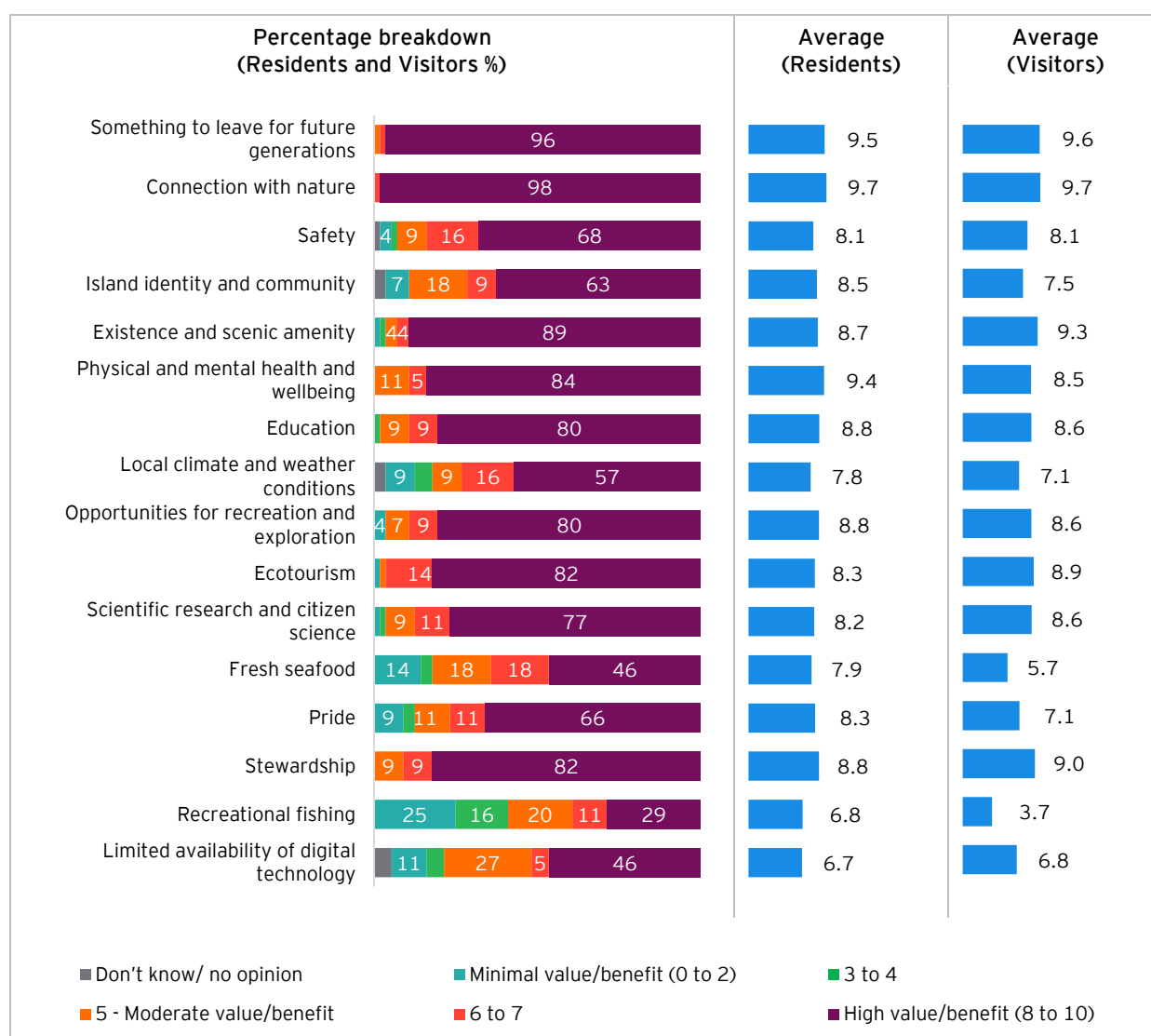
Feeling as if they are leaving something for the future is also highly important for the local community, with 96% saying this is a great value of the Marine Park.

The strong connection LHIMP has with nature is also important to these stakeholders.

Some dispute about the limited availability of technology

With some saying this has limited value, while others say it has moderate or moderately high value.

PERCEIVED SOCIAL VALUES/ BENEFITS OF LHIMP
(Percentage breakdown and averages displayed as a score out of 10 for each value/benefit)



Source: Residents and Visitors survey, n=56, Current and former residents, n=24, Visitors, n=32; Q12. The following is a list of the values/benefits associated with the social aspects of Lord Howe Island Marine Park. How valuable to do you believe each of these are? Note that these results are shown in the same order as the representative NSW mainland population results for ease of comparison.

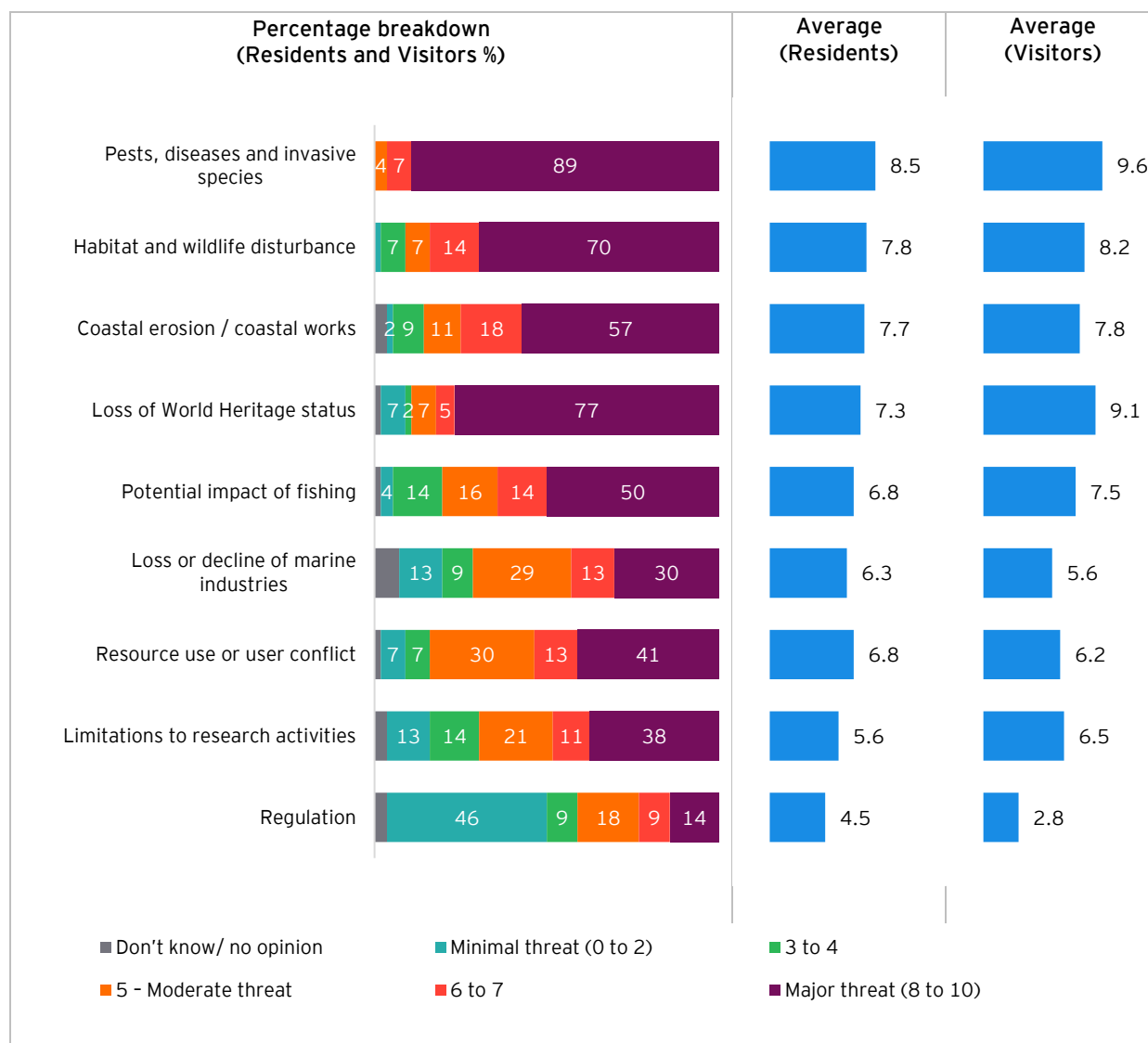
Pests and diseases are seen to have the largest potential social ramifications

With nearly 9 in 10 (89%) residents and visitors indicating that the introduction of diseases and pests could have a substantial impact on social outcomes on the island.

Resource/use conflict less of a concern, but still a factor for many

With around 2 in 5 residents/visitors indicating this is a particular threat to social outcomes on the island.

PERCEIVED THREATS TO THE SOCIAL VALUES/ BENEFITS OF LHIMP (Percentage breakdown and averages displayed as a score out of 10 for each perceived threat)



Source: Residents and Visitors survey, n=56, Current and former residents, n=24, Visitors, n=32; Q13. What level of threat do you believe each of the following have for the social values/benefits of Lord Howe Island Marine Park? Note that these results are shown in the same order as the representative NSW mainland population results for ease of comparison.

3.3 Analysis of cultural values and threats

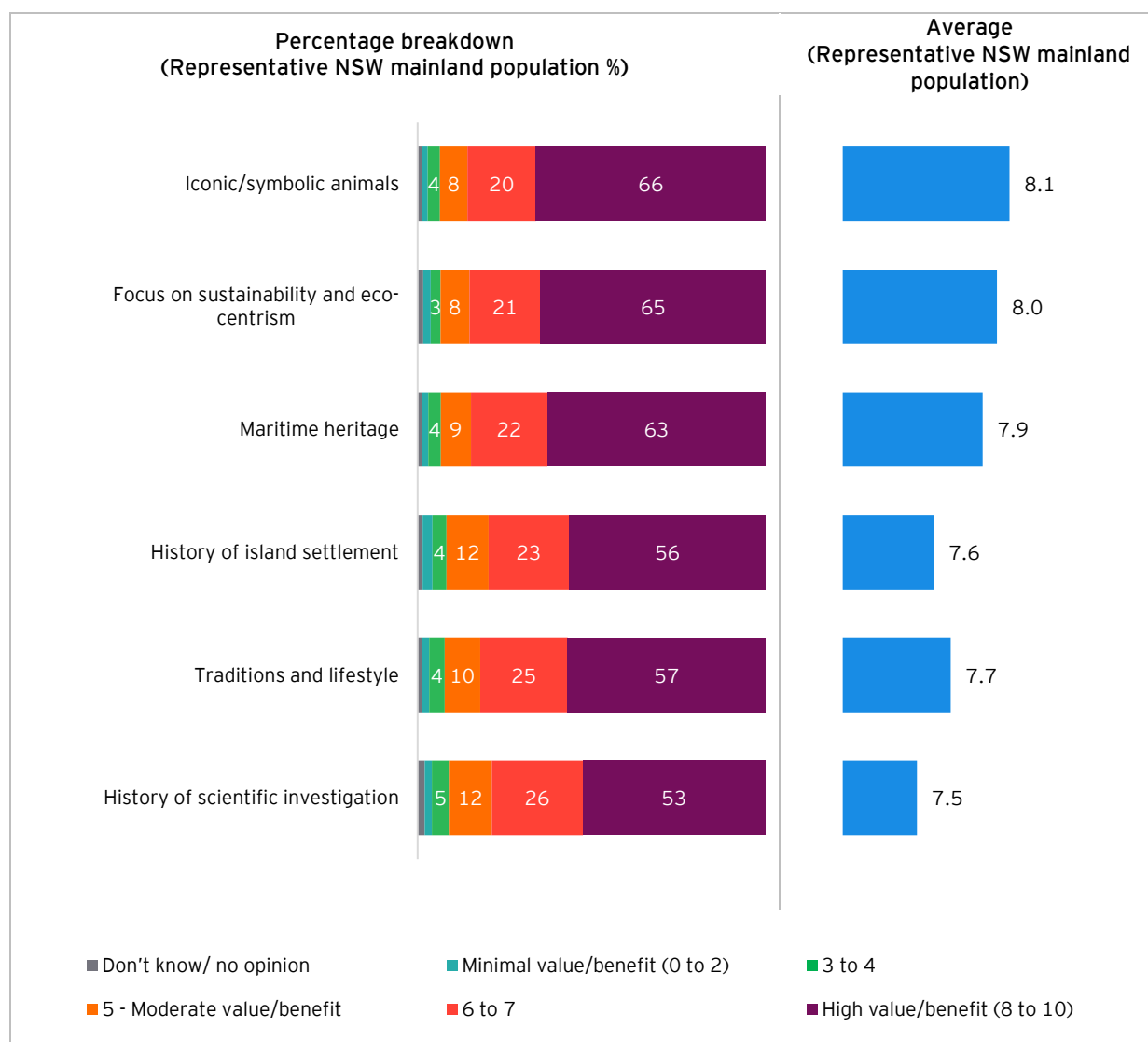
3.3.1. NSW mainland population

Iconic wildlife plays an important cultural role for the Marine Park

Two thirds (66%) of the NSW mainland community feel iconic and symbolic animals, such as Lord Howe Island butterflyfish, double header wrasse, Galapagos shark or McCulloch's anemonefish are highly valuable to the culture of NSW and Lord Howe Island.

Beyond this, sustainability and eco-centrism also have important roles in the culture surrounding LHIMP.

PERCEIVED CULTURAL VALUES/ BENEFITS OF LHIMP
(Percentage breakdown and averages displayed as a score out of 10 for each value/benefit)



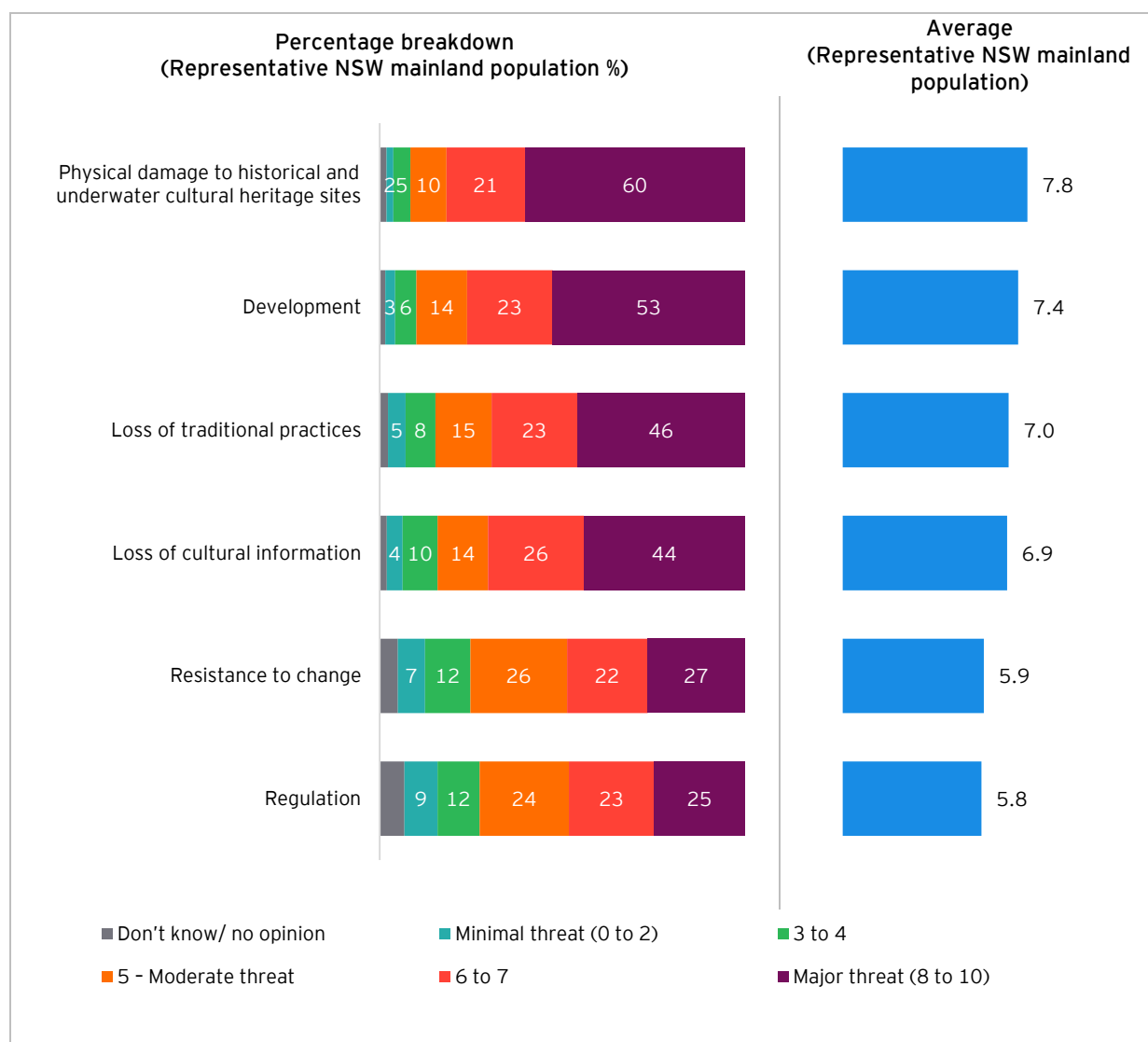
Source: Representative NSW mainland survey, n=1,014; Q15. The following is a list of the values/benefits associated with the cultural aspects of Lord Howe Island Marine Park. How valuable to do you believe each of these are?

Physical damage to heritage sites is of most concern to the NSW mainland population

Historical underwater sites are of key interest to the wider community, and physical damage to them is considered to be a major threat, with an average score of 7.8 out of 10.

Related to this, development on the island is also considered to be a threat, with an average score of 7.4 out of 10.

PERCEIVED THREATS TO THE CULTURAL VALUES/ BENEFITS OF LHIMP
(Percentage breakdown and averages displayed as a score out of 10 for each perceived threat)



Source: Representative NSW mainland survey, n=1,014; Q16. What level of threat do you believe each of the following have for the cultural values/benefits of Lord Howe Island Marine Park?

3.3.2. Residents and visitors results

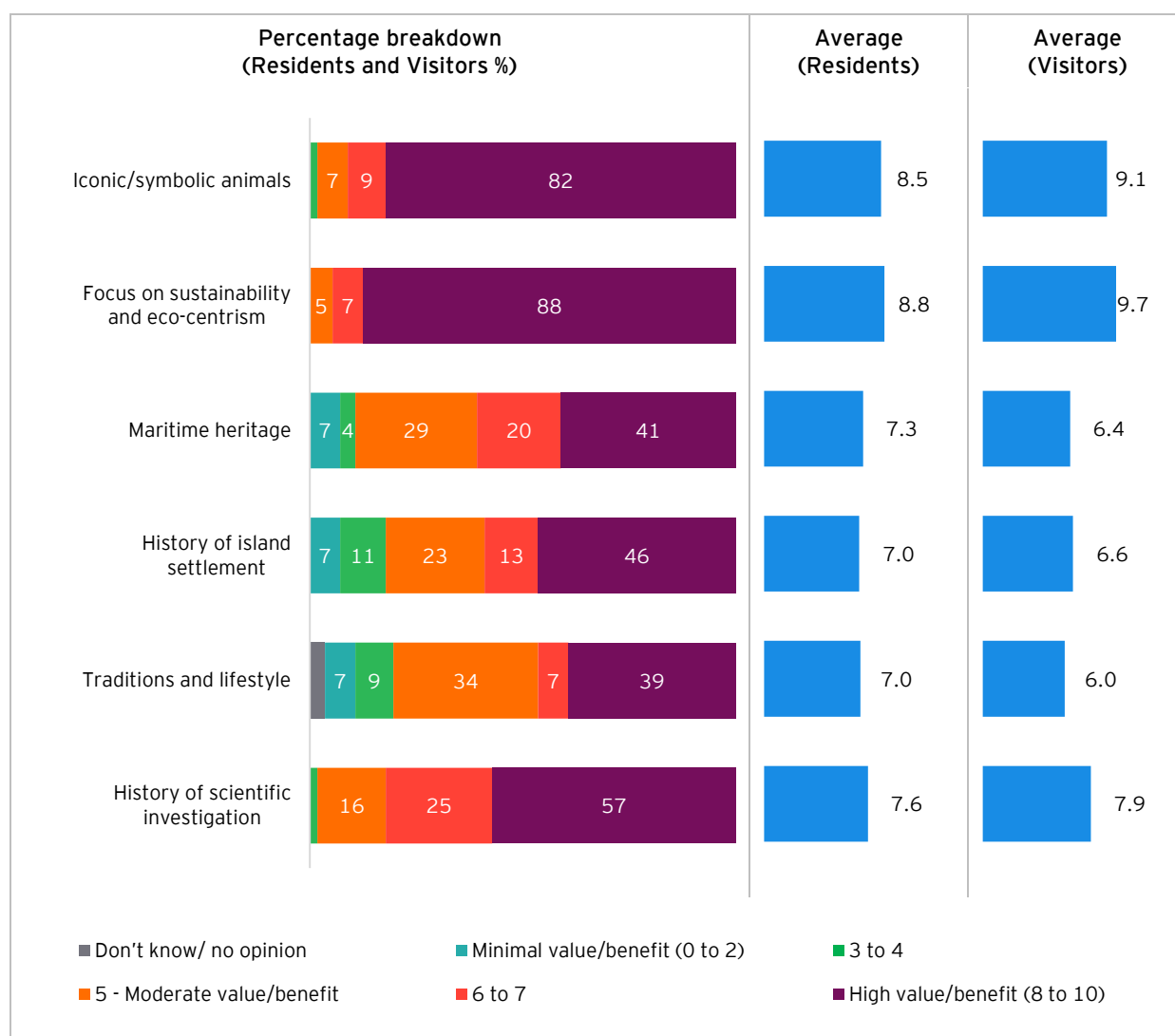
Having a focus on sustainable eco-tourism is critical for many residents

With almost 9 in 10 (88%) saying this is highly beneficial and a real value of the Marine Park, and all saying it is of at least a moderate value.

Iconic symbols and animals are also highly important

With 4 in 5 residents or visitors indicating this is a major value/benefit of the Marine Park.

PERCEIVED CULTURAL VALUES/ BENEFITS OF LHIMP
(Percentage breakdown and averages displayed as a score out of 10 for each value/benefit)



Source: Residents and Visitors survey, n=56, Current and former residents, n=24, Visitors, n=32; Q15. The following is a list of the values/benefits associated with the cultural aspects of Lord Howe Island Marine Park. How valuable to do you believe each of these are? Note that these results are shown in the same order as the representative NSW mainland population results for ease of comparison.

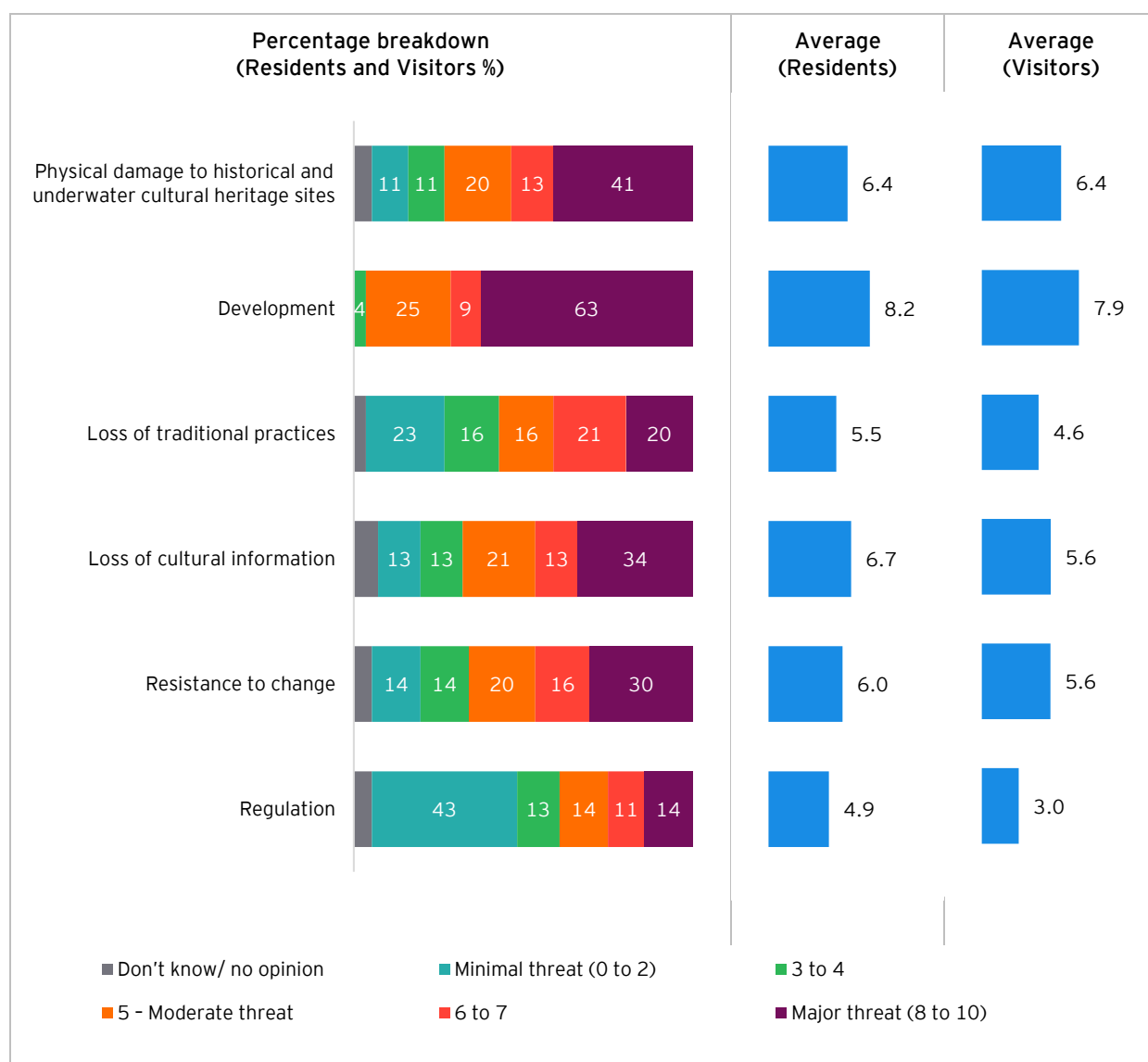
Development of the Lord Howe Island and the Marine Park itself is a key area of concern for both residents and visitors

With almost two-thirds (63%) indicating this is potentially a major threat for the local area. This concern is of equal importance for both residents and visitors.

There is limited concern about regulating the Marine Park and its use

Although, it is important to acknowledge qualitative feedback from residents indicating they would like to be more involved in determining what regulations will be implemented for the Marine Park in future, given how they may be personally affected.

PERCEIVED THREATS TO THE CULTURAL VALUES/ BENEFITS OF LHIMP (Percentage breakdown and averages displayed as a score out of 10 for each perceived threat)



Source: Residents and Visitors survey, n=56, Current and former residents, n=24, Visitors, n=32; Q16. What level of threat do you believe each of the following have for the cultural values/benefits of Lord Howe Island Marine Park? Note that these results are shown in the same order as the representative NSW mainland population results for ease of comparison.

3.4 Analysis of economic values and threats

3.4.1. NSW mainland population

The unique and iconic nature of LHIMP is seen to be a valuable economic benefit for NSW.

7 in 10 members of the mainland NSW community feel that the uniqueness of LHIMP is a highly valuable economic benefit for NSW. This is seen to be empowered by its status as a World Heritage site.

Economic values or benefits should not come at a risk to the uniqueness of the Island

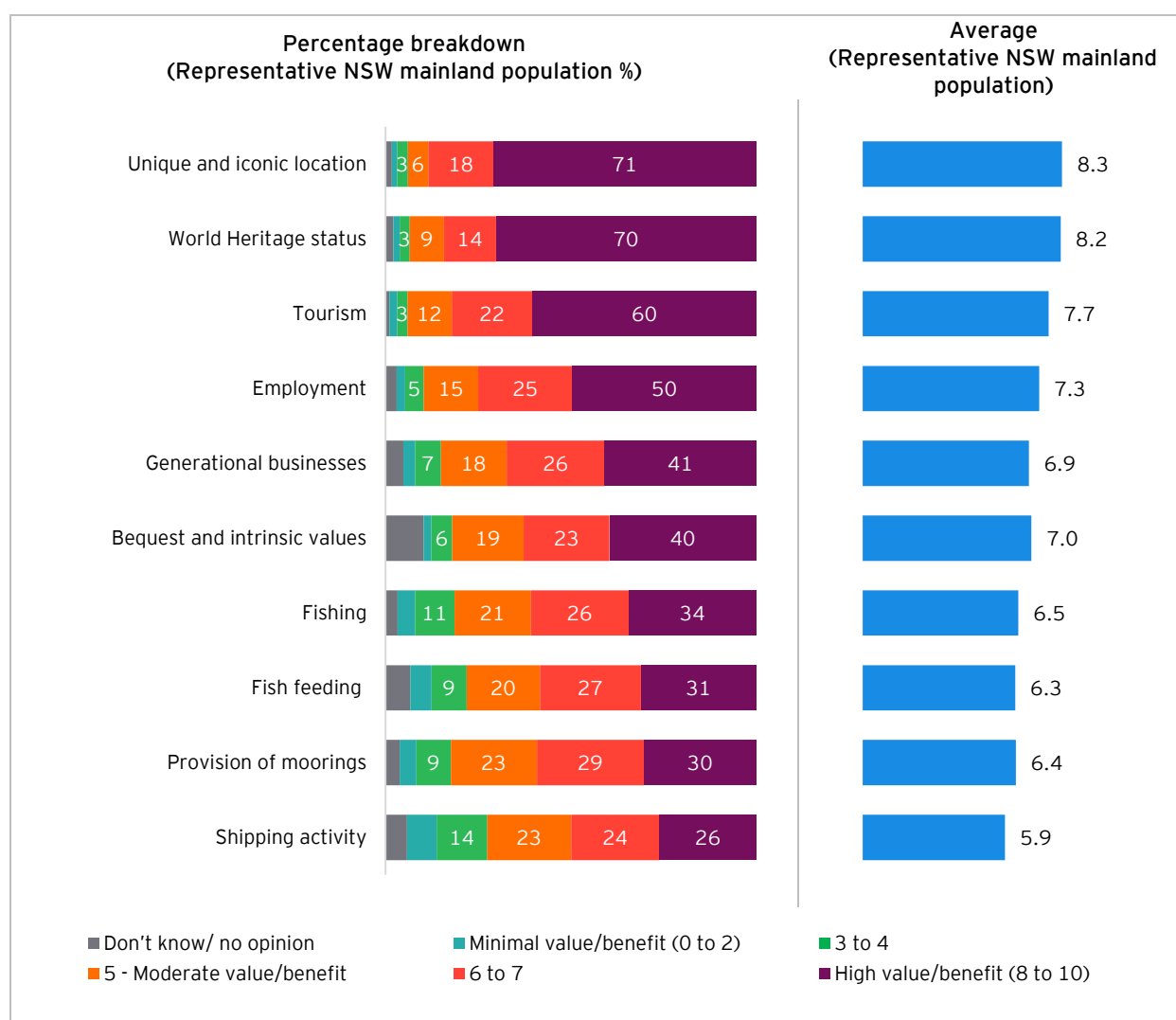
Tourism and employment are viewed as important economic benefits of the LHIMP.

However, open-ended commentary noted that this should only be pursued in tandem with an environmental mindset:

“It is very important to not overly exploit Lord Howe Island for economic purposes and the protection and preservation of the island should be the most important factor in any decisions made with regard to the island because if the island and its fauna and flora are not protected then there is no value to the island.”

- Member of the NSW mainland population

PERCEIVED ECONOMIC VALUES/ BENEFITS OF LHIMP
(Percentage breakdown and averages displayed as a score out of 10 for each value/benefit)



Source: Representative NSW mainland survey, n=1,014; Q18. The following is a list of the values/benefits associated with the economic aspects of Lord Howe Island Marine Park. How valuable to do you believe each of these are?

A loss of World Heritage status is the community's foremost economic concern

The NSW mainland community are keenly aware of the significance of their heritage listing. As such, they appreciate the potential economic impact that the loss of this status might have, with this perceived threat scoring an average of 7.5 out of 10.

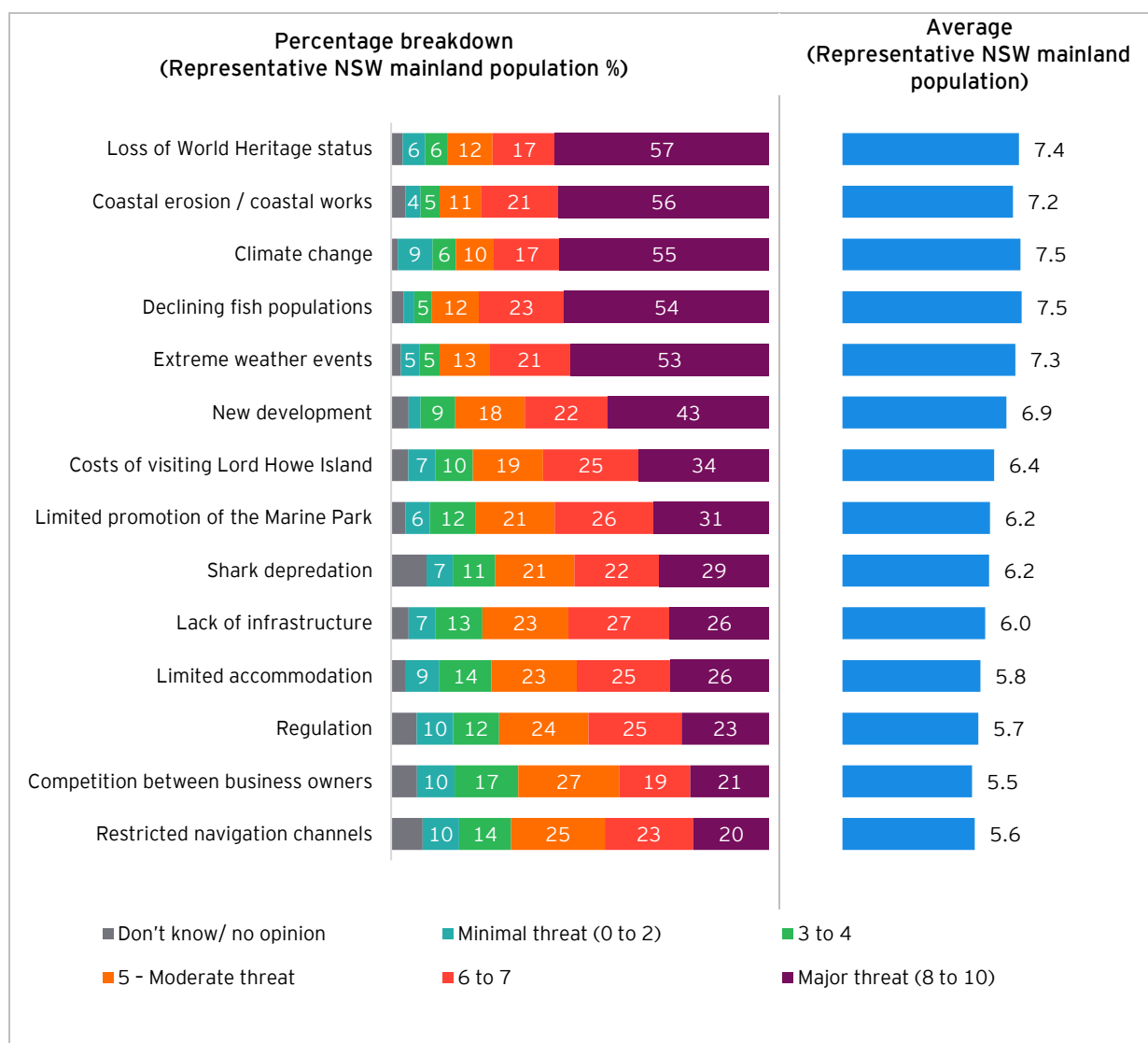
The importance of the natural environment to the economic aspects of the Island is also recognised by the NSW mainland population, with threats such as coastal erosion, climate

change, declining fish populations, and extreme weather events all being viewed by over half as a 'major' threat.

More specific and localised threats are viewed as less likely to threaten the economic values of LHIMP

Around 1 in 10 of the NSW mainland population do not view regulation, competition between business owners and restricted navigation channels as threats, perhaps due to the more specific and less personal nature of these issues.

PERCEIVED THREATS TO THE ECONOMIC VALUES/ BENEFITS OF LHIMP (Percentage breakdown and averages displayed as a score out of 10 for each perceived threat)



Source: Representative NSW mainland survey, n=1,014; Q19. What level of threat do you believe each of the following have for the economic values/benefits of Lord Howe Island Marine Park?

3.4.2. Residents and visitors results

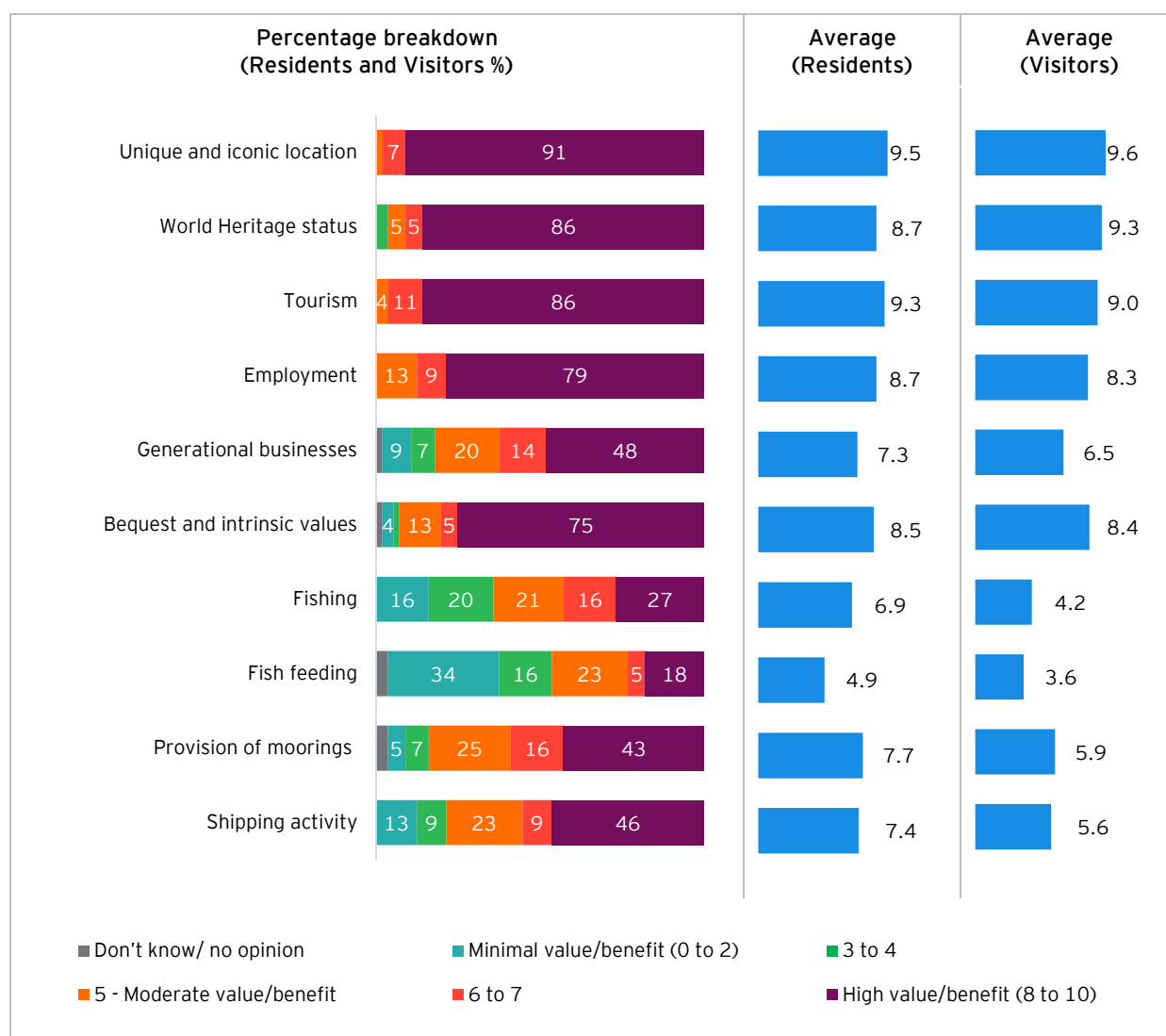
Residents and visitors recognise the economic value offered by the unique and iconic make-up of LHIMP

The World Heritage status of LHIMP is a key component of this, with an overwhelming majority indicating it has substantial benefit/value overall.

Tourism is recognised as having a benefit

Although, from a social and environmental perspective, the caps of visitors is seen to be highly beneficial. It's also important to note that residents recognise the valuable economic contribution tourism has for the island.

PERCEIVED ECONOMIC VALUES/ BENEFITS OF LHIMP
(Percentage breakdown and averages displayed as a score out of 10 for each value/benefit)



Source: Residents and Visitors survey, n=56, Current and former residents, n=24, Visitors, n=32; Q18. The following is a list of the values/benefits associated with the economic aspects of Lord Howe Island Marine Park. How valuable to do you believe each of these are? Note that these results are shown in the same order as the representative NSW mainland population results for ease of comparison.

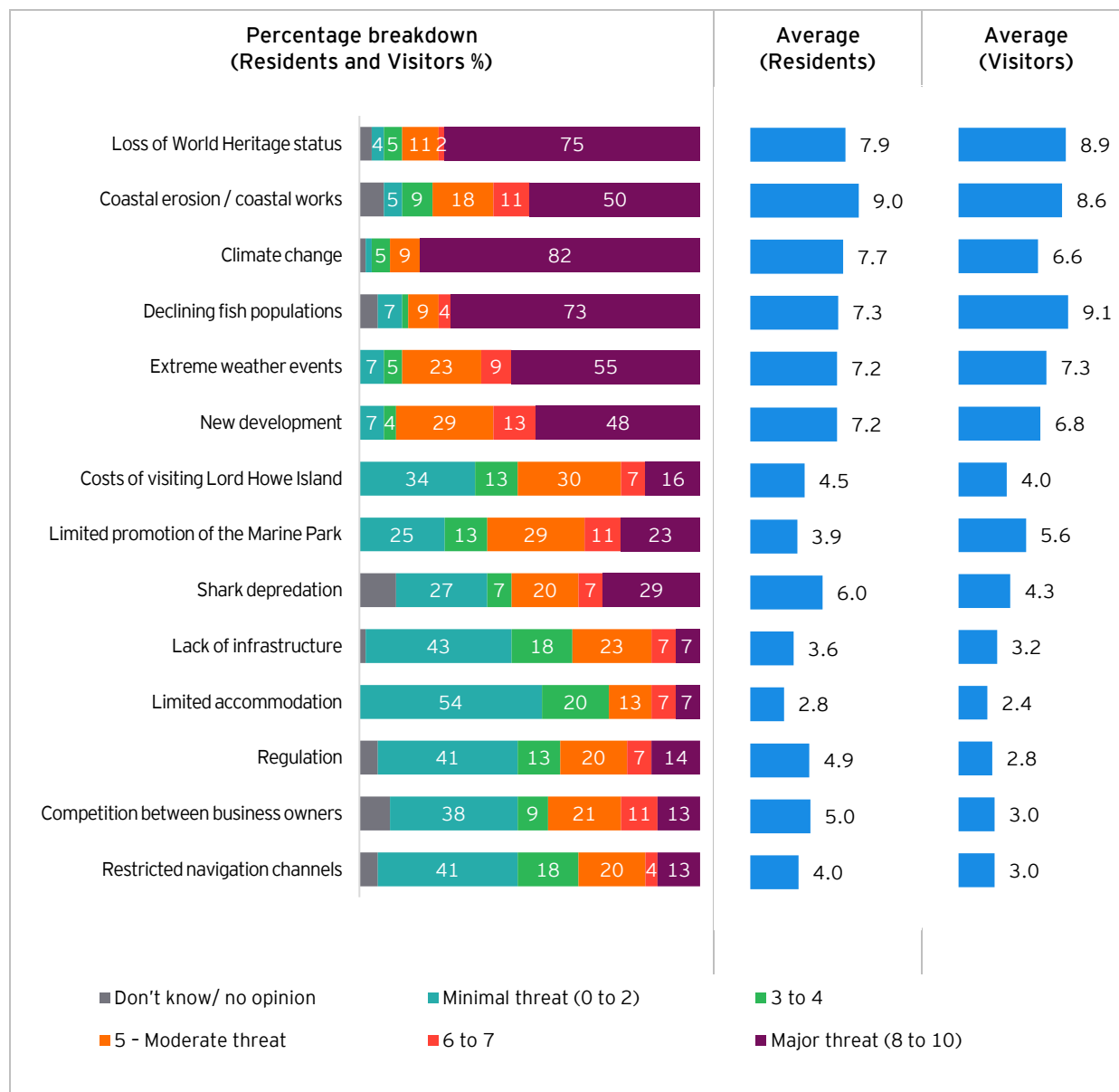
Interestingly, climate change is the largest economic concern for residents and visitors

Highlighting how important local climatic conditions are for businesses on the island.

A loss of the World Heritage status would be highly concerning for most

With three-quarters (75%) indicating this would be a major threat to the economic values of LHIMP.

PERCEIVED THREATS TO THE ECONOMIC VALUES/ BENEFITS OF LHIMP (Percentage breakdown and averages displayed as a score out of 10 for each perceived threat)



Source: Residents and Visitors survey, n=56, Current and former residents, n=24, Visitors, n=32; Q19. What level of threat do you believe each of the following have for the economic values/benefits of Lord Howe Island Marine Park? Note that these results are shown in the same order as the representative NSW mainland population results for ease of comparison.

Appendices

Appendix 1: Cognitive piloting process	42
Appendix 2: References	43
Appendix 3: Descriptions of the values or benefits and identified threats to the values or benefits.....	44
Environmental values or benefits of Lord Howe Island Marine Park	44
Identified threats to environmental values or benefits	46
Social values or benefits of Lord Howe Island Marine Park	48
Identified threats to social values or benefits.....	50
Cultural values or benefits of Lord Howe Island Marine Park	51
Identified threats to cultural values or benefits	52
Economic values or benefits of Lord Howe Island Marine Park.....	53
Identified threats to economic values or benefits	54
Appendix 4: Detailed values or benefits, and identified threats scores by subgroups	55
Environmental values or benefits scores.....	56
Identified threats to environmental values or benefits scores.....	58
Social values or benefits of Lord Howe Island Marine Park scores.....	62
Identified threats to social values or benefits scores	65
Cultural values or benefits of Lord Howe Island Marine Park scores	67
Identified threats to cultural values or benefits scores.....	69
Economic values or benefits of Lord Howe Island Marine Park scores	71
Identified threats to economic values or benefits scores	73

This report has been provided to The Department of Primary Industries (DPI - Fisheries) pursuant to the terms of our engagement agreement dated 22nd June 2023. Our report has been provided for the sole purpose of confirming the factual accuracy of its contents and should not be used or relied on for any other purpose or distributed to any other party outside of The Department of Primary Industries (DPI - Fisheries) without Ernst & Young's prior written consent. No representation, warranty or undertaking is made or liability is accepted by Ernst & Young as to the adequacy, completeness or factual accuracy of the contents of our report. In addition, we disclaim all responsibility to any party for any loss or liability that any party may suffer or incur arising from or relating to or in any way connected with the contents of our report, the provision of our report to any party or the reliance upon our report by any party.

In carrying out our work and preparing our report, Ernst & Young has worked solely on the instructions of The Department of Primary Industries (DPI - Fisheries) and has not taken into account the interests of any other party. Our report has been constructed based on information current as of 18th December 2023 and provided to us by The Department of Primary Industries (DPI - Fisheries) or its advisors. Material events may have occurred since this date which are not reflected in our report.

Appendix 1: Cognitive piloting process

Background

As part of the development and quality management process for the Lord Howe Island Marine Park survey, EY Sweeney have undertaken a phase of cognitive piloting with the survey.

Approach

Cognitive piloting is a systematic approach used to evaluate and refine questionnaires. It aims to identify and rectify any issues related to design, wording, response options, and overall clarity. For this program, the pilot interviews were conducted in one-on-one settings to facilitate open communication and encourage participants to express their opinions freely.

EY Sweeney researchers gave particular attention to issues like response categories that may not suitably capture respondents' choices, ambiguous or jargon-heavy language, and the overall flow and length of the survey instrument.

A total of six pilot sessions were conducted, with each session lasting between 20 and 40 minutes. Feedback from these sessions has been collated in the tables below.

Sample overview:

- ▶ Respondent 1: 35-year-old female living in regional NSW (17 minutes survey duration)
- ▶ Respondent 2: 61-year-old female living in regional NSW (40 minutes survey duration)
- ▶ Respondent 3: 35-year-old male living in metro Sydney (30 minutes duration)
- ▶ Respondent 4: 22-year-old male living in metro Sydney (10 minutes duration)
- ▶ Respondent 5: 48-year-old female living in metro Sydney (20 minutes duration)
- ▶ Respondent 6: 23-year-old male living in metro Sydney (16 minutes duration)

Outcome

Following the feedback, 7 recommendations were developed and changes made to the survey and experience.

Appendix 2: References

1. Harasti D., Przeslawski R., Carlile N., Carroll A., Davis T., Hughes M., Linklater M., Peddemors V., Rees M. & West G. (2022). *Environmental values of the Lord Howe Island Marine Park*. NSW Government.
2. BDO EconSearch. (2023). *Literature Review of social, economic and cultural Information for Lord Howe Island Marine Park: A Report for NSW Department of Primary Industries*.
3. Lord Howe Island Group. (2020). *2020 Conversation Outlook Assessment* [Report].
4. Lord Howe Island Board. (2010). *Strategic Plan for the Lord Howe Island Group World Heritage Property*.
5. Sweeney Research. (2014). *Marine Estate Community Survey* [Final Report].
6. BMT WBM. (2017). *New South Wales Marine Estate Threat and Risk Assessment Report* [Final Report]. NSW Marine Estate Management Authority.
7. NSW Department of Primary Industries. (2021). *NSW Mainland Marine Park Network: Management Plan 2021-2031* [Draft]. NSW Marine Estate Management Authority.
8. Director of National Parks. (2018). *Temperate East Marine Parks Network Management Plan 2018*.
98. UNESCO World Heritage Centre. (n.d.). *Lord Howe Island Group*. <https://whc.unesco.org/en/list/186/>
99. EY Sweeney Research. (2023). *Lord Howe Island Marine Park: Top-line qualitative research report* [Working Paper].

Appendix 3: Descriptions of the values or benefits associated with Lord Howe Island Marine Park and identified threats to the values or benefits

Environmental values or benefits associated with the natural environment of Lord Howe Island Marine Park

Value	Value label shown in online survey	Description shown in survey
Climate ¹	Climate	<p>Long-term patterns of weather and trends in the area. Unique examples of local climatic conditions include:</p> <ul style="list-style-type: none"> ▪ Humid, subtropical conditions ▪ Seasonal variations in wind direction ▪ Local ocean currents host a variety of tropical and temperate species
Water and air quality ^{1,99}	Water and air quality	<p>The degree to which local air and water is suitable or clean enough for humans or the environment. Local water and air conditions have:</p> <ul style="list-style-type: none"> ▪ Minimal pollution, a key benefit for local ecosystems ▪ High underwater visibility ▪ Clear skies most of the year
Characteristics of the ocean ^{1, 99}	Characteristics of the ocean	<p>The physical and chemical properties of the ocean in the Marine Park. This includes:</p> <ul style="list-style-type: none"> ▪ Local currents and sea temperature ▪ High and low tides ▪ Convergence of warm and cool water (East Australian Current and Tasman Front) ▪ Ocean swell
Geology and geomorphology ¹	Geology	<p>The Marine Park contains unique geology including:</p> <ul style="list-style-type: none"> ▪ Intertidal platforms and reefs ▪ Sand and boulder beaches ▪ Other coastal and underwater features (i.e. sea caves, gulches, bommies, fossil 'relic' reefs) ▪ Volcanic basalt deposits and warm water that create optimal conditions for coral reefs ▪ The Lord Howe Island and Balls Pyramid Shelf
Habitats & ecosystems ^{1, 7, 99}	Habitats & ecosystems	<p>The natural communities of animals and plants that reside within the Marine Park. This includes a range of unique systems, such as:</p> <ul style="list-style-type: none"> ▪ Estuarine ecosystems ▪ Intertidal and shallow subtidal ecosystems ▪ Lagoon ecosystems ▪ Shelf ecosystems ▪ Slope ecosystems ▪ Pelagic ecosystems
Corals ¹	Corals	<p>The Marine Park contains one of the southernmost reefs in the world, including unique reef systems in lagoons and subtropical shelves.</p>
Fish ^{1,99}	Fish	<p>The Marine Park supports a highly diverse fish assemblage with 537 coastal species identified to occur in the waters of the Marine Park, such as yellowtail kingfish, doubleheader, bluefish, spangled emperors, scorpionfish/rock cods, trevallies, redfish, wahoo and tunas.</p>

Marine biodiversity ⁹⁹	Marine biodiversity	<p>The diverse range of ocean life located within the Marine Park. This includes:</p> <ul style="list-style-type: none"> ▪ Native and endemic species ▪ Macroalgae ▪ Seagrass ▪ Marine invertebrates ▪ Other macrophytes
Threatened and protected species ^{1,99}	Threatened and protected species	The Marine Park supports a number of threatened and protected species including various fish, sharks, marine mammals, marine reptiles, seabirds and marine plants.
Other significant species ¹	Other significant species ¹	The Marine Park also hosts other significant species which include Galapagos shark, Doubleheader wrasse, McCulloch's anemonefish, and Lord Howe Island abalone.
World Heritage ^{98, 99}	World Heritage	<p>The Marine Park falls within a World Heritage site, which meets the below outstanding universal value criteria for World Heritage listing.</p> <p>Criterion (vii): to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance.</p> <p>Criterion (x): to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.</p>

Identified threats to environmental values or benefits

Threat	Threat label shown in online survey	Description shown in survey
Removing cap on visitors ⁹⁹	Removing cap on visitors	The number of people who are able to visit the Lord Howe Island is no more than ~400pax at any one time which may help reduce human impacts on the Marine Park from over-use.
Climate change ^{1,5,6,7,8,99}	Climate change	The potential impact of climate change to the Marine Park includes threats of extreme events (e.g., severe storm events, marine heat waves, coral bleaching).
Commercial shipping activities ^{1,6,99}	Commercial shipping activities	Commercial shipping activities that use the Marine Park in their operations.
Port use and navigation channels ¹	Port use and navigation channels	Pre-existing channels and ports that are designed for use by boats and other aquatic transport in the Marine Park.
Aquatic biosecurity ¹	Pests, diseases and invasive species	<p>Pests, diseases and invasive species include:</p> <ul style="list-style-type: none"> ▪ Incursion of non-native species and marine pests ▪ Seafood contamination ▪ Aquatic diseases
Fishing ^{1,99}	Impact of fishing	<p>Some of the potential impacts of fishing in the Marine Park, may include:</p> <ul style="list-style-type: none"> ▪ Overharvesting ▪ Incidental catches or injury to non-target species ▪ Shark depredation (complete or partial removal of a hooked fish by a shark before the fish is landed)
Cleaning of fish ¹	Fish cleaning	Discarding fish wastage in local waters and the flow-on impact this can have on shark or other marine species behaviour in the Marine Park.
Collection activities ¹ Aquarium collection ¹	Collection activities	Collecting flora, fauna, and other objects within the Marine Park. These activities may have an impact on ecological balance, including animal population levels.
Recreation and tourism ^{6,7} Photography and filming structures ¹	Recreational activities	<p>Recreational activities undertaken in the Marine Park, such as snorkelling, diving, swimming, kayaking, surfing, general shore use, photography etc.</p> <p>These activities pose certain threats, such as:</p> <ul style="list-style-type: none"> ▪ Wildlife disturbance ▪ Pollution ▪ Habitat destruction
Wildlife interactions ⁶	Habitat and wildlife disturbance	Have the potential to impact the quality of resident and visitor recreational activities/experiences and health benefits.

Vessel-sourced pollution ^{6,99}	Vessel-sourced pollution	<p>Harmful materials and waste introduced in the Marine Park from vessel activity, such as:</p> <ul style="list-style-type: none"> ▪ Rubbish ▪ Fuel and oil spills ▪ Other vessel discharges
Land-based pollution ^{6,99}	Land-based pollution	<p>Harmful materials and waste introduced to the Marine Park from activities on land, such as:</p> <ul style="list-style-type: none"> ▪ Littering and marine debris ▪ Agricultural diffuse or point source run-off ▪ Sewage effluent and septic run-off ▪ Groundwater contamination ▪ Other pollution/contamination ▪ Clearing riparian and adjacent habitat including wetland drainage
Human Extraction ^{5,99}	Extraction of natural resources	<p>The removal, usage or consumption of natural resources can pose threats, such as:</p> <ul style="list-style-type: none"> ▪ Overfishing ▪ Coastal erosion ▪ Ecosystem imbalance
Tourism ⁹⁹	Tourism	<p>Non-residents visiting and engaging with the local Marine Park can pose threats, such as:</p> <ul style="list-style-type: none"> ▪ Pollution ▪ Wildlife disturbance ▪ Habitat destruction
Development (e.g. future airport expansion) ^{3,6,99}	Development	<p>Development of infrastructure and other buildings in the Marine Park, including:</p> <ul style="list-style-type: none"> ▪ Airport expansion ▪ Foreshore and urban development including new infrastructure, such as jetties and slipways ▪ Beach nourishment and grooming ▪ Use of motor vehicles on foreshore ▪ Dredging and clearing navigation channels ▪ Installation of navigation markers
Anchoring/mooring ⁹⁹	Anchoring/mooring	Anchoring/mooring in sensitive marine environments can cause habitat damage and pollution.
Manipulative research activities ¹	Research activities	The potential impact of research from collection activities and manipulative methods, undertaken without best-practice in mind or within sensitive habitats (such as the lagoon), or within sanctuary zones.
Fish feeding ⁹⁹	Impact of fish feeding	Fish feeding can alter the natural behaviour of fish, introduce diseases and cause water pollution.

Social values or benefits associated with the social aspects of Lord Howe Island Marine Park

Value	Value label shown in online survey	Description shown in survey
Ecotourism ⁹⁹	Ecotourism	The Island is known for tourism that is based on sustainable practices with minimal impact on the natural environment. Visitors receive highly personalised tourism experiences from: <ul style="list-style-type: none"> Owner operator businesses with depth and knowledge of the Marine Park Being in close proximity to a range of different activities in the Marine Park
Stewardship ⁹⁹	Stewardship	A positive feeling that locals and the broader community may feel through responsible use and protection of the natural environment within the Marine Park.
Bequeathment ⁹⁹	Something to leave for future generations	A positive feeling that locals and the broader community may feel at the prospect of leaving a pristine Marine Park for future generations to enjoy.
Appreciation (non-use) ⁹⁹	Existence and scenic amenity	A positive feeling that individuals and the broader community may have, knowing that the Marine Park exists even if they never visit or use the Marine Park.
Connection with nature ⁹⁹	Connection with nature	The social benefit residents and visitors receive as a result of the aesthetic beauty and accessibility of the Marine Park. Being able to reconnect with nature in the Marine Park, including: <ul style="list-style-type: none"> Encounters with native and endemic wildlife not found elsewhere Experiencing marine habitats and ecosystems Fish feeding
Opportunities for exploration ⁹⁹	Opportunities for recreation and exploration	The Marine Park provides a wide range of exploration opportunities: <ul style="list-style-type: none"> Coastal and intertidal walks Water sports and swimming Diving and snorkelling
Climate ⁹⁹	Local climate and weather conditions	Local wind and water conditions create an environment that allows locals and visitors to engage in a range of leisure activities in the Marine Park.
Recreational fishing ⁹⁹	Recreational fishing	Recreational fishing is a social activity in the Marine Park as well as a source of healthy food and sustenance for local residents.
Safety ⁹⁹	Safety	The Marine Park includes many safe, sheltered, and accessible waters and coastlines with minimal safety incidents or injuries reported or observed.
Scientific research and citizen science ⁹⁹	Scientific research and citizen science	The Marine Park is a hub for scientific research, both by residents and institutions. This includes: <ul style="list-style-type: none"> Scientific research and exploration of the Marine Park Research contributions from residents and visitors
Physical and mental health and wellbeing ^{2, 99} Mental wellbeing and mindfulness ⁹⁹	Physical and mental health and wellbeing	Residents and visitors have reported the Marine Park provides physical and mental health and wellbeing benefits, including: <ul style="list-style-type: none"> Sense of escape from modern life Mindfulness/meditative opportunities Recreational opportunities
Disengagement from technology ⁹⁹	Limited availability of digital technology	Limited use and availability of technology and telecommunications enables social cohesion and increased connection with the natural environment of the Marine Park.
Education ^{2, 99}	Education	The Marine Park provides rich opportunities for education about the connection and conservation of the marine environment in several ways. Including the occurrence of natural environmental

		values, accessibility of the marine environment, and opportunity for scientific engagement through the local museum, scientific institutions, and citizen science.
Island identity and community ^{2, 99}	Island identity and community	<p>Residents of the island have reported they feel a strong sense of community and identity associated with the Marine Park. Examples of this include:</p> <ul style="list-style-type: none"> ▪ Access to local waterways that tourists and businesses do not have ▪ Community events and activities linked to the Marine Park ▪ A feeling of stewardship within the community ▪ Many residents work in industries directly related to the Marine Park
Pride ^{2, 99}	Pride	A general feeling of pride among residents, visitors, and the broader NSW community at the global recognition of the Marine Park (as a World Heritage site).
Provision of healthy food ²	Fresh seafood	The ability to source fresh healthy food for the community provides a sense of self-sufficiency for residents.

Identified threats to social values or benefits

Threat	Threat label shown in online survey	Description shown in survey
Wildlife interactions ⁶	Habitat and wildlife disturbance	Have the potential to impact the quality of resident and visitor recreational activities/experiences and health benefits.
Loss or decline of marine industries ⁶	Loss or decline of marine industries	The loss or decline of marine industries due to resource use conflicts, such as competition with other sectors and regulatory pressure.
Limitations to research activities ⁹⁹	Limitations to research activities	<p>Limitations to research activities include:</p> <ul style="list-style-type: none"> ▪ Lack of funding ▪ Limited accommodation at research station ▪ Lack of recognition for citizen science ▪ Lack of open communication of research results
Regulation ⁹⁹	Regulation	Regulations that govern the different uses of the Marine Park (e.g. fishing activities, designation of sanctuary zones) may have the potential to cause the loss of historical fishing practices or locations, from any changes to zoning or management.
Fishing ⁹⁹	Potential impact of fishing	<p>The potential impact of fishing activities in the Marine Park, including:</p> <ul style="list-style-type: none"> ▪ Overharvesting ▪ Accidental catches ▪ Injury of marine species ▪ Shark depredation (complete or partial removal of a hooked fish by a shark before the fish is landed) ▪ Non-compliance with catch size and bag limits
Loss of World Heritage status ²	Loss of World Heritage status	Potential to impact local and mainland residents' and visitors' sense of pride in the unique nature of the Marine Park.
Resource use or access conflict ²	Resource use or user conflict	Conflict between different types of recreational use can also occur.
Aquatic biosecurity ¹	Pests, diseases and invasive species	<p>Pests, diseases and invasive species include:</p> <ul style="list-style-type: none"> ▪ Incursion of non-native species and marine pests ▪ Seafood contamination ▪ Aquatic diseases
Coastal erosion / coastal works ²	Coastal erosion / coastal works	Potential to impact the safety and accessibility of beaches for recreational use and organised community events and reduce scenic amenity.

Cultural values or benefits associated with the cultural aspects of Lord Howe Island Marine Park

Value	Value label shown in online survey	Description shown in survey
History of island settlement ²	History of island settlement	Lord Howe Island has a rich history of island settlement, with the local community established in 1834 and largely driven by the needs of whaling and sealing ships operating in the waters of the Pacific, who used the island as a refuge from the open ocean.
Maritime heritage ²	Maritime heritage	The Marine Park is host to rich maritime heritage, including: <ul style="list-style-type: none"> ▪ Locations named after settlement and maritime aspects ▪ Multiple known shipwrecks ▪ Flying boat service
Traditions and lifestyle ^{2, 99}	Traditions and lifestyle	Local traditions and lifestyle practices that celebrate the history of the Lord Howe Island settlement, including: <ul style="list-style-type: none"> ▪ Various fishing practices and history of self-sufficiency ▪ Songs and stories specific to the island ▪ Buildings and locations specific to marine traditions and lifestyles ▪ Connection to the ocean and weather systems as a part of the cultural identity and way-of-life
History of scientific investigation ^{2, 99}	History of scientific investigation	The Island has a rich history of scientific investigation, including: <ul style="list-style-type: none"> ▪ First known collection of fish local to Lord Howe Island made by naturalists aboard HMS Herald in 1853 ▪ Associations with external research institutions and universities ▪ Recognition of scientific investigation on the island through the McCulloch obelisk
Focus on sustainability and eco-centrism ⁹⁹	Focus on sustainability and eco-centrism	There is a strong focus on sustainability and eco-tourism within the Lord Howe Island community, including: <ul style="list-style-type: none"> ▪ Values, beliefs and practices to manage the Marine Park centred around the natural world and its preservation ▪ Strong sense of community and shared identity among islanders and visitors ▪ Respect for the Marine Park ▪ Collective action for Marine Park's preservation for future generations
Iconic/symbolic animals ⁹⁹	Iconic/symbolic animals	Iconic animals are considered by the community to symbolise the island and Marine Park, (e.g. the Lord Howe Island butterflyfish, double header wrasse, Galapagos shark or McCulloch's anemonefish).

Identified threats to cultural values or benefits

Threat	Threat label shown in online survey	Description shown in survey
Physical damage to historical sites ²	Physical damage to historical and underwater cultural heritage sites	Changes to historically significant aspects of the Marine Park may affect the community's heritage and culture (e.g. various ship and flying boat wrecks lie in the Marine Park).
Loss of traditional practices ⁹⁹	Loss of traditional practices	The loss of traditional practices, methods, knowledge, work ethic and values passed down through generations could affect the island's unique culture.
Regulation ^{7, 99}	Regulation	Regulations designed to manage interactions with the Marine Park may impact cultural activities, historical fishing sites or underwater cultural heritage sites, from any changes to zoning or management.
Development ^{2,7,99} Development ^{2,7,99} (e.g., introduction of telecommunication providers)	Development	Development on the Marine Park and the surrounding environment (such as proposed airport runway extensions, foreshore/urban development, improved telecommunications) may impact the Island's unique culture.
Loss of information & knowledge (e.g., scientific collections) ⁹⁹ Loss of information & knowledge (e.g. knowledge about cultural heritage) ⁹⁹	Loss of cultural information	This loss of scientific, cultural and historical information about the Marine Park and its community.
Resistance to change ⁹⁹	Resistance to change	Resistance among local residents to changing of their traditional way of life. Has the potential to limit modernisation or the introduction of technology, Marine Park activities or new business practices.

Economic values or benefits associated with the economic aspects of Lord Howe Island Marine Park

Value	Value label shown in online survey	Description shown in survey
Ecotourism ^{1, 2, 5, 6, 8, 99}	Tourism	<p>The economic benefits obtained by tourists visiting the Marine Park, some examples of economic contributors may include:</p> <ul style="list-style-type: none"> ▪ Guided tours ▪ Freight charter ▪ Hosting visiting private vessels ▪ Tourist accommodation on the island
Employment ^{2,99}	Employment	<p>Employment on the island, driven through sectors that interact with the Marine Park. This may include:</p> <ul style="list-style-type: none"> ▪ Marine Park management ▪ Tourism operations ▪ Hospitality ▪ Provision of, or market of seafood for island consumption ▪ Internships ▪ Scientific research ▪ Special activities (such as wildlife photography, filmmaking)
Unique and iconic location ^{2,99}	Unique and iconic location	<p>The unique and iconic location of the Marine Park creates intrigue and demand for visitors/tourists. This includes:</p> <ul style="list-style-type: none"> ▪ Spectacular and scenic landscape ▪ Outstanding underwater vistas
World Heritage status ⁹⁹	World Heritage status	<p>The only NSW Marine Park to fall within World Heritage listed area under the United Nations' World Heritage Convention in recognition of its superlative natural phenomena and its rich terrestrial and marine biodiversity.</p>
Fish feeding ⁹⁹	Fish feeding	<p>Fish feeding is a paid for, iconic, activity available on the island.</p>
Moorings ⁹⁹	Provision of moorings (sites where people can tie up their boats to access key locations)	<p>Support tourism by providing access to key snorkelling and coral viewing locations for commercial tour operators and private vessels.</p>
Generational businesses ⁹⁹	Generational businesses	<p>The continuation of long-standing businesses through passing of knowledge and business practices across generations.</p>
Shipping activity ⁹⁹	Shipping activity	<p>Shipping activity enables the importation of food and goods for residents and tourists from the mainland.</p>
Fishing ⁹⁹	Fishing	<p>Fishing includes recreational fishing opportunities and the provision of, or market of seafood for island consumption and the local tourism market.</p>
Bequest and intrinsic values ²	Bequest and intrinsic values	<p>Non-market and non-use values associated with the marine park such as:</p> <ul style="list-style-type: none"> ▪ The value the marine park has in itself independent of human use. ▪ Passing the marine park onto future generations for them to know and experience.

Identified threats to economic values or benefits

Threat	Threat label shown in online survey	Description shown in survey
Lack of infrastructure ^{2,3,4,99}	Lack of infrastructure	A lack of infrastructure (e.g. small airport and aging commercial airline fleet) that may affect accessibility for visitors and connection to the mainland (traveling, access to goods).
New development ^{2,5,7,99}	New development	<p>New developments (such as increased anchoring/mooring spots, navigation, and entrance infrastructure) have the potential to pose threats, such as:</p> <ul style="list-style-type: none"> ▪ Decrease the scenic amenity of the Marine Park ▪ Impact the eco-tourism status for the Island and Marine Park ▪ Impact recreational and tourism activities
Coastal erosion / coastal works ²	Coastal erosion / coastal works	Potential to impact the safety and accessibility of beaches for recreational use and organised community events and reduce scenic amenity.
High cost of visiting the Lord Howe Island ^{2,99}	Costs of visiting Lord Howe Island	The high cost of visiting Lord Howe Island and caps on tourist numbers may impact the local economy.
Limited promotion of the Marine Park ⁹⁹	Limited promotion of the Marine Park	Limited promotion of the Lord Howe Island Marine Park may impact economic outcomes.
Loss of World Heritage status ²	Loss of World Heritage status	A notable endorsement of the value of the Marine Park, the potential loss of World Heritage status could lead to economic changes, such as a downturn in tourism.
Competition ^{2,6,7,99}	Competition between business owners	Competition between business owners may create unequal income opportunities due to limited resources and may impact traditional business practices.
Regulation ⁹⁹	Regulation	Regulations around different uses of the Marine Park - creating unequal opportunities and impacts on incomes/livelihoods, from any changes to zoning or management.
Shark depredation ⁹⁹	Shark depredation	The impact of sharks consuming hooked fish either completely or partially before the fish is landed and damage or loss of fishing gear in the process.
Limited accommodation ⁹⁹	Limited accommodation	Limited accommodation on the island for staff, tourists, and researchers.
Coral growth ⁹⁹ (potential to restrict access)	Restricted navigation channels	The economic impact of restricted navigation channels if not properly maintained for vessels and shipping activity (including maintenance of coral growth in the channel).
Declining fish population ⁹⁹	Declining fish populations	Declining fish populations, and decline in the abundance of species, may have economic impacts through a reduction in visitors/researchers, who are interested in fish species.
Extreme weather events ²	Extreme weather events	May threaten economic values, given that most commercial operations in the Marine Park are vessel-based tours and weather limits the number of trips available for visitors.
Climate change ^{1,5,6,7,8,99}	Climate change	The potential impact of climate change to the Marine Park includes threats of extreme events (e.g., severe storm events, marine heat waves, coral bleaching), which impact economic values.

Appendix 4:

Detailed values or benefits, and identified threats scores by subgroups

Environmental values or benefits associated with the natural environment of Lord Howe Island Marine Park scores (Averages displayed as a score out of 10)

		Gender		Age						Region				
Value	Average	Female	Male	18-24	25-34	35-44	45-54	55-64	65+	Sydney	West NSW	Central and North Coast NSW	South NSW	Aboriginal and Torres Strait Islanders
	n=977	n=492	n=483	n=111	n=159	n=157	n=177	n=174	n=199	n=503	n=81	n=278	n=109	n=52
Water and air quality	8.7	8.7	8.6	8.5	8.6	8.7	8.7	8.6	8.8	8.6	9.2	8.8	8.5	8.5
Corals	8.7	8.8	8.6	8.4	8.5	8.6	8.8	8.9	8.9	8.6	9.1	8.9	8.5	8.4
Habitats & ecosystems	8.7	8.8	8.5	8.5	8.5	8.7	8.8	8.7	8.9	8.5	9.0	8.9	8.8	8.4
Marine biodiversity	8.6	8.8	8.5	8.4	8.4	8.6	8.7	8.6	8.9	8.5	9.0	8.7	8.7	8.0
Threatened and protected species	8.6	8.8	8.5	8.4	8.6	8.6	8.8	8.6	8.8	8.6	9.1	8.8	8.4	8.5
Fish	8.5	8.5	8.5	8.0	8.1	8.4	8.6	8.6	8.9	8.4	9.0	8.7	8.4	8.4
World Heritage	8.4	8.4	8.3	8.0	8.1	8.3	8.4	8.5	8.6	8.4	8.8	8.2	8.2	8.2
Other significant species	8.3	8.4	8.1	8.1	8.0	8.4	8.3	8.4	8.5	8.2	8.9	8.4	8.3	8.3
Characteristics of the ocean	8.1	8.3	7.9	7.8	8.2	8.2	8.1	8.0	8.4	8.0	8.7	8.3	8.1	8.4
Climate	7.9	8.2	7.7	7.8	8.1	8.2	8.0	7.7	7.8	8.0	8.1	8.0	7.4	7.8
Geology	7.9	8.1	7.7	7.7	7.6	8.0	8.0	7.9	8.1	7.8	8.6	8.0	7.7	7.8

Q9. The following is a list of the values/benefits associated with the natural environment of Lord Howe Island Marine Park. How valuable to do you believe each of these are?
 West NSW: Central West, Far West and Orana, and New England North. Central and North Coast NSW: Central Coast, Hunter and Newcastle, and North Coast. South NSW: Illawarra-Southern Highlands-Shoalhaven, Riverina-Murray, South East and Tablelands.

Value	Average	SYDNEY (multiple, inc. Blue Mountains)	Central West, Far West and Orana	New England North West	Central Coast	Hunter and Newcastle	North Coast	Illawarra- Southern Highlands- Shoalhaven	Riverina- Murray	South East and Tablelands
	n=971	n=503	n=66	n=15*	n=45*	n=115	n=118	n=39*	n=23*	n=47*
Water and air quality	8.7	8.6	9.2		8.0	8.8	9.2	8.6		9.1
Corals	8.7	8.6	9.2		8.2	8.8	9.3	8.6		8.9
Habitats & ecosystems	8.7	8.5	9.1		8.5	8.8	9.2	8.8		8.9
Marine biodiversity	8.6	8.5	9.0		8.2	8.5	9.1	8.6		8.9
Threatened and protected species	8.6	8.6	9.0		8.3	8.8	9.0	8.3		8.8
Fish	8.5	8.4	9.0		8.1	8.7	8.9	8.5		8.7
World Heritage	8.3	8.4	8.7		7.6	8.1	8.6	8.0		8.5
Other significant species	8.3	8.2	8.9		7.9	8.2	8.7	8.1		8.6
Characteristics of the ocean	8.1	8.0	8.5		7.6	8.2	8.7	8.0		8.4
Climate	7.9	8.0	8.2		7.2	8.0	8.4	7.6		8.1
Geology	7.9	7.8	8.5		7.1	8.0	8.3	7.8		8.0

Q9. The following is a list of the values/benefits associated with the natural environment of Lord Howe Island Marine Park. How valuable to do you believe each of these are? *Low sample size, results should be interpreted with caution. Results not shown where sample size is <30.

Identified threats to environmental values or benefits scores (Averages displayed as a score out of 10)

Threat	Average	Gender		Age						Region				Aboriginal and Torres Strait Islanders
		Female	Male	18-24	25-34	35-44	45-54	55-64	65+	Sydney	West NSW	Central and North Coast NSW	South NSW	
	n=888	n=431	n=455	n=104	n=150	n=144	n=158	n=162	n=170	n=462	n=73	n=252	n=96	n=51
Pests, diseases and invasive species	8.1	8.2	8.1	7.6	7.9	8.2	8.3	8.2	8.4	8.0	8.8	8.4	7.8	8.4
Extraction of natural resources	7.9	8.0	7.9	7.6	7.9	7.7	7.9	7.9	8.2	8.0	8.4	7.7	7.6	7.9
Climate change	7.4	7.8	7.0	7.6	7.9	7.5	7.7	7.3	6.7	7.5	7.4	7.4	6.7	7.6
Land-based pollution	7.7	7.9	7.5	7.8	7.8	7.6	7.6	7.6	7.7	7.7	8.4	7.6	7.6	8.1
Vessel-sourced pollution	7.7	8.0	7.5	7.4	7.8	7.6	7.7	7.8	8.0	7.8	7.8	7.7	7.6	8.1
Habitat and wildlife disturbance	7.6	7.8	7.4	7.4	7.6	7.5	7.7	7.8	7.7	7.6	8.2	7.5	7.7	7.9
Commercial shipping activities	7.4	7.6	7.3	7.3	7.2	7.5	7.6	7.8	7.3	7.5	7.9	7.1	7.3	7.5
Development	7.4	7.6	7.2	6.9	7.2	7.2	7.5	7.6	7.7	7.3	8.0	7.4	7.3	7.5
Impact of fishing	7.0	7.2	6.8	6.7	7.4	7.1	7.0	7.0	6.9	7.1	7.2	6.6	7.2	7.2
Removing cap on visitors	7.1	7.1	7.0	6.5	6.9	6.8	7.3	7.2	7.4	7.0	7.4	7.2	7.1	7.3
Impact of fish feeding	6.3	6.7	6.0	6.5	6.5	6.4	6.2	6.3	6.1	6.5	6.4	5.9	6.4	6.3
Collection activities	6.5	6.7	6.3	6.4	6.5	6.2	6.6	6.5	6.7	6.6	6.7	6.3	6.4	6.1

Anchoring/ mooring	6.5	6.8	6.2	6.5	6.7	6.7	6.5	6.4	6.3	6.6	6.6	6.4	6.3	6.4
Tourism	6.3	6.4	6.2	6.3	6.6	6.2	6.3	6.3	6.2	6.4	7.0	6.1	6.2	6.6
Port use and navigation channels	6.4	6.6	6.1	6.1	6.4	6.5	6.6	6.3	6.3	6.5	6.9	6.1	6.0	6.6
Recreational activities	6.2	6.4	6.0	6.1	6.4	6.1	6.2	6.0	6.2	6.3	6.8	5.8	6.0	6.7
Fish cleaning	6.1	6.3	5.8	6.3	6.6	6.2	6.1	5.7	5.6	6.3	6.7	5.5	5.7	6.2
Research activities	4.8	5.2	4.4	4.9	5.2	5.0	4.7	4.4	4.5	5.0	5.3	4.3	4.6	5.3

Q10. What level of threat do you believe each of the following have for the environmental values/benefits of Lord Howe Island Marine Park?
 West NSW: Central West, Far West and Orana, and New England North. Central and North Coast NSW: Central Coast, Hunter and Newcastle, and North Coast. South NSW: Illawarra-Southern Highlands-Shoalhaven, Riverina-Murray, South East and Tablelands.

Threat	Average	SYDNEY (multiple, inc. Blue Mountains)	Central West, Far West and Orana	New England North West	Central Coast	Hunter and Newcastle	North Coast	Illawarra- Southern Highlands- Shoalhaven	Riverina- Murray	South East and Tablelands
	n=883	n=462	n=58	n=15*	n=42*	n=99	n=111	n=34*	n=20*	n=42*
Pests, diseases and invasive species	8.1	8.0	8.9		8.0	8.4	8.6	7.6		8.6
Extraction of natural resources	7.9	8.0	8.5		7.8	7.8	7.7	8.0		7.8
Climate change	7.4	7.5	7.7		7.1	7.6	7.3	6.4		8.1
Land-based pollution	7.7	7.7	8.3		7.4	7.8	7.6	7.8		7.5
Vessel-sourced pollution	7.7	7.8	8.0		7.6	7.7	7.8	7.6		8.2
Habitat and wildlife disturbance	7.6	7.6	8.2		7.2	7.9	7.4	7.6		8.3
Commercial shipping activities	7.4	7.5	8.0		7.3	7.5	6.8	7.4		7.5
Development	7.4	7.3	8.0		7.5	7.3	7.4	7.5		7.1
Impact of fishing	7.0	7.1	7.5		6.6	6.8	6.5	7.1		7.8
Removing cap on visitors	7.0	7.0	7.4		6.8	7.1	7.4	6.9		7.5
Impact of fish feeding	6.3	6.5	6.8		6.1	6.5	5.3	6.9		6.7
Collection activities	6.5	6.6	6.7		6.2	6.5	6.2	6.8		7.0
Anchoring/mooring	6.5	6.6	6.7		6.4	6.4	6.3	6.5		6.9

Tourism	6.3	6.4	6.6	6.5	6.3	5.8	6.7	6.0
Port use and navigation channels	6.4	6.5	6.9	6.1	6.6	5.8	6.4	6.3
Recreational activities	6.2	6.3	7.1	5.9	6.4	5.4	6.0	6.1
Fish cleaning	6.1	6.3	7.1	5.3	6.0	5.1	5.5	5.8
Research activities	4.8	5.0	5.5	4.2	5.2	3.7	5.1	3.8

Q10. What level of threat do you believe each of the following have for the environmental values/benefits of Lord Howe Island Marine Park? *Low sample size, results should be interpreted with caution. Results not shown where sample size is <30.

Social values or benefits associated with the social aspects of Lord Howe Island Marine Park scores (Averages displayed as a score out of 10)

		Gender		Age						Region				
Value	Average	Female	Male	18-24	25-34	35-44	45-54	55-64	65+	Sydney	West NSW	Central and North Coast NSW	South NSW	Aboriginal and Torres Strait Islanders
	n=899	n=446	n=451	n=104	n=148	n=142	n=168	n=167	n=170	n=466	n=73	n=255	n=99	n=51
Something to leave for future generations	8.6	8.6	8.6	8.2	8.4	8.5	8.4	8.5	9.2	8.5	8.8	8.7	8.8	8.1
Connection with nature	8.5	8.6	8.4	7.9	8.4	8.3	8.5	8.5	8.9	8.4	8.7	8.6	8.5	8.7
Safety	8.0	8.3	7.7	7.9	8.2	8.1	7.6	7.9	8.2	8.0	8.4	8.0	7.8	8.6
Island identity and community	7.9	8.2	7.7	8.0	7.9	7.7	7.9	7.6	8.5	7.9	8.2	7.9	7.9	8.0
Existence and scenic amenity	7.9	7.8	7.9	7.3	7.7	7.8	7.8	7.9	8.4	7.8	8.2	7.9	7.9	7.6
Physical and mental health and wellbeing	7.9	8.0	7.7	7.8	8.3	7.9	7.6	7.7	7.8	7.9	8.2	7.9	7.5	7.9
Education	7.8	8.0	7.7	7.7	8.0	7.8	7.6	7.6	8.1	7.8	8.3	7.7	8.0	7.9
Opportunities for recreation and exploration	7.7	7.7	7.6	7.4	7.6	7.7	7.6	7.6	7.9	7.6	8.0	7.8	7.5	7.4
Local climate and weather conditions	7.6	7.8	7.4	7.2	7.8	7.6	7.5	7.3	7.7	7.6	7.9	7.5	7.2	8.1
Ecotourism	7.7	7.7	7.6	7.1	7.5	7.8	7.9	7.4	8.1	7.7	8.0	7.6	7.6	7.4
Scientific research and citizen science	7.7	7.7	7.7	7.2	7.5	7.6	7.7	7.7	8.2	7.6	7.9	7.7	7.8	7.9
Pride	7.4	7.5	7.3	6.7	7.3	7.0	7.3	7.4	8.0	7.2	7.9	7.6	7.4	7.7

Fresh seafood	7.3	7.3	7.3	6.7	6.9	7.1	7.3	7.5	7.9	7.3	8.0	7.2	7.3	7.4
Stewardship	7.2	7.3	7.2	6.9	7.0	7.4	7.0	7.2	7.8	7.2	7.6	7.2	7.3	6.7
Recreational fishing	6.2	5.9	6.4	6.2	6.1	6.0	6.4	6.1	6.2	6.2	6.5	6.2	6.0	6.5
Limited availability of digital technology	6.0	6.1	5.9	5.7	6.3	6.0	6.1	5.9	5.8	6.0	6.6	6.0	5.7	6.7

Q12. The following is a list of the values/benefits associated with the social aspects of Lord Howe Island Marine Park. How valuable to do you believe each of these are?
 West NSW: Central West, Far West and Orana, and New England North. Central and North Coast NSW: Central Coast, Hunter and Newcastle, and North Coast. South NSW: Illawarra-Southern Highlands-Shoalhaven, Riverina-Murray, South East and Tablelands.

Value	Average	SYDNEY (multiple, inc. Blue Mountains)	Central West, Far West and Orana	New England North West	Central Coast	Hunter and Newcastle	North Coast	Illawarra- Southern Highlands- Shoalhaven	Riverina- Murray	South East and Tablelands
	n=893	n=466	n=58	n=15*	n=40*	n=105	n=110	n=33*	n=22*	n=44*
Something to leave for future generations	8.6	8.5	8.7		8.5	8.5	8.9	8.6		9.1
Connection with nature	8.5	8.4	8.7		8.2	8.5	8.9	8.4		8.9
Safety	8.0	8.0	8.2		7.7	8.0	8.2	7.9		7.4
Island identity and community	7.9	7.9	8.5		7.7	8.0	7.8	7.8		7.7
Existence and scenic amenity	7.9	7.8	8.1		7.6	7.8	8.2	7.8		8.1
Physical and mental health and wellbeing	7.8	7.9	8.2		7.5	7.7	8.2	7.4		7.7
Education	7.8	7.8	8.1		7.5	7.6	7.8	7.7		8.4
Opportunities for recreation and exploration	7.7	7.6	7.8		7.7	7.6	8.0	7.5		7.4
Local climate and weather conditions	7.6	7.6	8.3		7.2	7.5	7.7	7.7		6.8
Ecotourism	7.7	7.7	8.1		7.5	7.4	7.9	7.5		7.9
Scientific research and citizen science	7.7	7.6	7.6		7.9	7.5	7.8	7.7		8.2
Pride	7.4	7.2	7.8		7.6	7.6	7.6	7.4		6.9
Fresh seafood	7.3	7.3	7.9		7.0	7.2	7.3	7.9		6.7
Stewardship	7.2	7.2	7.4		6.8	6.9	7.6	7.2		7.8
Recreational fishing	6.2	6.2	6.5		6.2	6.4	6.0	6.4		5.2
Limited availability of digital technology	6.0	6.0	6.0		5.9	5.8	6.2	5.3		6.4

Q12. The following is a list of the values/benefits associated with the social aspects of Lord Howe Island Marine Park. How valuable to do you believe each of these are? *Low sample size, results should be interpreted with caution. Results not shown where sample size is <30.

Identified threats to social values or benefits scores (Averages displayed as a score out of 10)

		Gender		Age						Region				
Threat	Average	Female	Male	18-24	25-34	35-44	45-54	55-64	65+	Sydney	West NSW	Central and North Coast NSW	South NSW	Aboriginal and Torres Strait Islanders
	n=940	n=463	n=475	n=111	n=159	n=144	n=174	n=170	n=182	n=493	n=74	n=264	n=104	n=52
Pests, diseases and invasive species	8.2	8.2	8.1	7.7	7.8	7.9	8.3	8.4	8.6	8.0	8.7	8.3	8.1	8.4
Habitat and wildlife disturbance	7.9	8.0	7.7	7.7	7.9	7.6	8.0	7.9	8.1	7.9	8.5	7.8	7.7	8.0
Coastal erosion / coastal works	7.6	7.9	7.4	7.5	7.6	7.4	7.7	7.7	7.8	7.6	8.2	7.5	7.7	7.9
Loss of World Heritage status	7.5	7.8	7.2	7.0	7.4	7.5	7.7	7.5	7.6	7.5	8.0	7.3	7.2	7.8
Potential impact of fishing	7.1	7.3	6.9	6.9	7.2	7.0	7.2	7.2	7.0	7.1	7.4	7.1	7.1	7.1
Loss or decline of marine industries	6.9	7.2	6.6	6.7	7.2	6.7	7.1	6.4	7.0	6.9	7.0	6.7	7.0	7.4
Resource use or user conflict	6.8	6.9	6.7	6.6	6.9	6.8	6.9	6.6	6.6	6.8	6.9	6.8	6.4	7.0
Limitations to research activities	6.4	6.6	6.2	6.5	6.7	6.3	6.6	6.0	6.3	6.3	7.2	6.4	6.1	6.7
Regulation	5.8	6.1	5.4	6.0	6.2	5.7	5.9	5.4	5.4	5.9	6.2	5.6	5.2	6.1

Q13. What level of threat do you believe each of the following have for the social values/benefits of Lord Howe Island Marine Park?

West NSW: Central West, Far West and Orana, and New England North. Central and North Coast NSW: Central Coast, Hunter and Newcastle, and North Coast. South NSW: Illawarra-Southern Highlands-Shoalhaven, Riverina-Murray, South East and Tablelands.

Threat	Average	SYDNEY (multiple, inc. Blue Mountains)	Central West, Far West and Orana	New England North West	Central Coast	Hunter and Newcastle	North Coast	Illawarra- Southern Highlands- Shoalhaven	Riverina- Murray	South East and Tablelands
	n=935	n=493	n=59	n=15*	n=43*	n=109	n=112	n=36*	n=23*	n=45*
Pests, diseases and invasive species	8.1	8.0	8.6		7.5	8.5	8.5	7.6		8.9
Habitat and wildlife disturbance	7.9	7.9	8.4		7.6	8.0	7.8	7.6		8.0
Coastal erosion / coastal works	7.6	7.6	8.3		7.2	7.7	7.4	8.1		8.1
Loss of World Heritage status	7.5	7.5	7.9		7.2	7.2	7.5	6.7		8.1
Potential impact of fishing	7.1	7.1	7.6		6.8	7.2	7.1	7.0		7.7
Loss or decline of marine industries	6.9	6.9	7.2		6.8	7.0	6.5	7.3		6.9
Resource use or user conflict	6.8	6.8	7.0		6.6	7.1	6.7	6.4		6.8
Limitations to research activities	6.4	6.3	7.1		6.2	6.8	6.2	6.2		6.8
Regulation	5.8	5.9	6.5		6.0	6.1	5.2	5.4		5.3

Q13. What level of threat do you believe each of the following have for the social values/benefits of Lord Howe Island Marine Park? *Low sample size, results should be interpreted with caution. Results not shown where sample size is <30.

Cultural values or benefits associated with the cultural aspects of Lord Howe Island Marine Park scores (Averages displayed as a score out of 10)

		Gender		Age						Region				
Value	Average	Female	Male	18-24	25-34	35-44	45-54	55-64	65+	Sydney	West NSW	Central and North Coast NSW	South NSW	Aboriginal and Torres Strait Islanders
	n=1023	n=519	n=502	n=118	n=162	n=160	n=190	n=179	n=214	n=534	n=83	n=289	n=110	n=55
Iconic/symbolic animals	8.1	8.2	8.0	7.6	8.2	8.0	8.1	7.9	8.5	8.0	8.3	8.1	8.2	8.0
Focus on sustainability and eco-centrism	8.0	8.2	7.9	7.5	7.9	8.2	8.1	7.9	8.3	8.0	8.4	8.0	7.9	7.9
Maritime heritage	7.8	8.0	7.7	7.3	7.6	7.9	7.8	7.5	8.4	7.8	8.0	7.8	7.8	7.9
History of island settlement	7.5	7.7	7.3	7.2	7.3	7.5	7.4	7.3	8.2	7.5	8.0	7.5	7.5	7.5
Traditions and lifestyle	7.6	7.9	7.4	7.5	7.6	7.6	7.6	7.2	8.1	7.6	8.0	7.7	7.5	7.9
History of scientific investigation	7.5	7.6	7.3	7.1	7.3	7.6	7.2	7.2	8.1	7.4	7.6	7.4	7.8	7.6

Q15. The following is a list of the values/benefits associated with the cultural aspects of Lord Howe Island Marine Park. How valuable to do you believe each of these are?

West NSW: Central West, Far West and Orana, and New England North. Central and North Coast NSW: Central Coast, Hunter and Newcastle, and North Coast. South NSW: Illawarra-Southern Highlands-Shoalhaven, Riverina-Murray, South East and Tablelands.

Value	Average	SYDNEY (multiple, inc. Blue Mountains)	Central West, Far West and Orana	New England North West	Central Coast	Hunter and Newcastle	North Coast	Illawarra- Southern Highlands- Shoalhaven	Riverina- Murray	South East and Tablelands
	n=1016	n=534	n=68	n=15*	n=50*	n=119	n=120	n=40*	n=22*	n=48*
Iconic/symbolic animals	8.1	8.0	8.4		7.5	8.0	8.4	8.4		8.3
Focus on sustainability and eco-centrism	8.0	8.0	8.4		7.5	7.8	8.4	7.6		8.5
Maritime heritage	7.8	7.8	8.1		7.7	7.7	7.9	8.1		7.4
History of island settlement	7.5	7.5	8.0		7.4	7.7	7.4	7.5		7.5
Traditions and lifestyle	7.6	7.6	8.0		7.6	7.9	7.6	7.8		7.1
History of scientific investigation	7.5	7.4	7.3		7.0	7.4	7.6	7.9		7.8

Q15. The following is a list of the values/benefits associated with the cultural aspects of Lord Howe Island Marine Park. How valuable to do you believe each of these are? *Low sample size, results should be interpreted with caution. Results not shown where sample size is <30.

Identified threats to cultural values or benefits scores (Averages displayed as a score out of 10)

		Gender		Age						Region				
Threat	Average	Female	Male	18-24	25-34	35-44	45-54	55-64	65+	Sydney	West NSW	Central and North Coast NSW	South NSW	Aboriginal and Torres Strait Islanders
	n=961	n=473	n=486	n=118	n=155	n=151	n=175	n=173	n=189	n=508	n=72	n=274	n=102	n=54
Physical damage to historical and underwater cultural heritage sites	7.7	7.9	7.5	7.5	7.9	7.7	7.4	7.6	7.9	7.7	8.4	7.6	7.7	8.3
Development	7.4	7.5	7.4	6.8	7.4	7.2	7.4	7.7	7.8	7.3	7.9	7.5	7.5	7.7
Loss of traditional practices	6.9	7.2	6.6	7.1	7.5	6.7	6.8	6.6	6.8	6.9	7.7	6.6	6.8	8.3
Loss of cultural information	6.9	7.1	6.7	7.2	7.3	6.6	7.0	6.6	6.8	6.9	7.8	6.9	6.5	7.6
Resistance to change	5.9	6.1	5.8	6.2	6.1	6.1	6.2	5.4	5.7	6.0	6.5	5.8	5.8	6.2
Regulation	5.7	6.0	5.5	6.2	6.2	5.8	6.0	5.1	5.3	5.8	6.2	5.6	5.5	6.7

Q16. What level of threat do you believe each of the following have for the cultural values/benefits of Lord Howe Island Marine Park?

West NSW: Central West, Far West and Orana, and New England North. Central and North Coast NSW: Central Coast, Hunter and Newcastle, and North Coast. South NSW: Illawarra-Southern Highlands-Shoalhaven, Riverina-Murray, South East and Tablelands.

Threat	Average	SYDNEY (multiple, inc. Blue Mountains)	Central West, Far West and Orana	New England North West	Central Coast	Hunter and Newcastle	North Coast	Illawarra- Southern Highlands- Shoalhaven	Riverina- Murray	South East and Tablelands
	n=956	n=508	n=57	n=15*	n=43*	n=116	n=115	n=37*	n=21*	n=44*
Physical damage to historical and underwater cultural heritage sites	7.7	7.7	8.2		7.5	7.8	7.4	7.5		8.2
Development	7.4	7.3	7.7		7.5	7.2	7.8	7.9		7.5
Loss of traditional practices	6.9	6.9	7.7		6.8	7.0	6.3	7.0		6.9
Loss of cultural information	6.9	6.9	7.7		6.9	7.0	6.7	6.4		6.9
Resistance to change	5.9	6.0	6.2		5.9	5.7	5.8	6.0		6.1
Regulation	5.7	5.8	6.4		6.0	6.0	5.1	5.7		5.5

Q16. What level of threat do you believe each of the following have for the cultural values/benefits of Lord Howe Island Marine Park? *Low sample size, results should be interpreted with caution. Results not shown where sample size is <30.

Economic values or benefits associated with the economic aspects of Lord Howe Island Marine Park scores (Averages displayed as a score out of 10)

		Gender		Age						Region				
Value	Average	Female	Male	18-24	25-34	35-44	45-54	55-64	65+	Sydney	West NSW	Central and North Coast NSW	South NSW	Aboriginal and Torres Strait Islanders
	n=906	n=440	n=464	n=110	n=148	n=144	n=167	n=163	n=174	n=476	n=74	n=254	n=96	n=47*
Unique and iconic location	8.3	8.4	8.3	7.9	8.3	8.1	8.5	8.3	8.7	8.3	8.5	8.5	8.1	8.1
World Heritage status	8.3	8.4	8.1	7.5	8.1	8.1	8.4	8.3	8.8	8.2	8.8	8.2	8.1	8.0
Tourism	7.8	7.8	7.8	7.2	7.8	7.7	7.7	7.9	8.1	7.8	7.7	7.9	7.5	7.4
Employment	7.4	7.6	7.2	7.3	7.5	7.5	7.2	7.1	7.6	7.3	7.6	7.6	7.4	7.4
Bequest and intrinsic values	7.1	7.2	7.0	7.0	7.2	7.1	6.8	6.9	7.4	7.0	7.3	7.1	7.1	7.1
Generational businesses	6.9	7.1	6.7	6.8	7.1	6.7	6.7	6.6	7.3	6.9	7.2	7.0	6.7	7.1
Fishing	6.4	6.3	6.5	6.3	6.4	6.3	6.3	6.2	6.8	6.3	6.8	6.5	6.8	6.7
Provision of moorings (sites where people can tie up their boats to access key locations)	6.4	6.4	6.3	6.3	6.7	6.5	6.2	6.2	6.4	6.4	6.3	6.5	6.1	6.5
Fish feeding	6.2	6.2	6.2	6.4	6.1	6.5	6.2	5.6	6.4	6.3	6.4	6.0	6.1	6.6
Shipping activity	5.9	6.1	5.7	6.1	6.2	6.1	5.7	5.7	5.8	6.0	5.8	6.0	5.4	6.0

Q18. The following is a list of the values/benefits associated with the economic aspects of Lord Howe Island Marine Park. How valuable to do you believe each of these are? *Low sample size, results should be interpreted with caution. Results not shown where sample size is <50 West NSW: Central West, Far West and Orana, and New England North. Central and North Coast NSW: Central Coast, Hunter and Newcastle, and North Coast. South NSW: Illawarra-Southern Highlands-Shoalhaven, Riverina-Murray, South East and Tablelands.

Value	Average	SYDNEY (multiple, inc. Blue Mountains)	Central West, Far West and Orana	New England North West	Central Coast	Hunter and Newcastle	North Coast	Illawarra- Southern Highlands- Shoalhaven	Riverina- Murray	South East and Tablelands
	n=900	n=476	n=59	n=15*	n=45*	n=99	n=110	n=32*	n=19*	n=45*
Unique and iconic location	8.3	8.3	8.6		8.2	8.4	8.7	8.0		8.5
World Heritage status	8.3	8.2	8.9		8.3	8.1	8.3	7.9		8.6
Tourism	7.8	7.8	8.0		7.9	7.8	8.1	7.7		7.6
Employment	7.4	7.3	8.0		7.4	7.6	7.6	7.3		7.2
Bequest and intrinsic values	7.1	7.0	7.2		6.9	6.9	7.4	7.2		7.2
Generational businesses	6.9	6.9	7.1		7.1	7.1	6.8	6.6		6.9
Fishing	6.4	6.3	6.9		6.4	6.7	6.4	7.2		5.7
Provision of moorings (sites where people can tie up their boats to access key locations)	6.4	6.4	6.5		6.1	6.6	6.7	6.1		5.6
Fish feeding	6.2	6.3	6.6		6.1	6.4	5.7	6.5		5.5
Shipping activity	5.9	6.0	5.9		5.4	5.9	6.2	5.9		5.6

Q18. The following is a list of the values/benefits associated with the economic aspects of Lord Howe Island Marine Park. How valuable to do you believe each of these are? *Low sample size, results should be interpreted with caution. Results not shown where sample size is <30.

Identified threats to economic values or benefits scores (Averages displayed as a score out of 10)

		Gender		Age						Region				
Threat	Average	Female	Male	18-24	25-34	35-44	45-54	55-64	65+	Sydney	West NSW	Central and North Coast NSW	South NSW	Aboriginal and Torres Strait Islanders
	n=867	n=421	n=445	n=98	n=149	n=136	n=157	n=160	n=167	n=441	n=70	n=259	n=93	n=51
Loss of World Heritage status	7.5	7.5	7.4	7.1	7.3	7.3	7.7	7.5	7.8	7.5	8.3	7.6	7.0	7.7
Climate change	7.3	7.7	6.8	7.5	7.6	7.4	7.5	7.2	6.7	7.4	7.3	7.2	6.7	7.1
Coastal erosion / coastal works	7.5	7.7	7.3	7.5	7.4	7.5	7.4	7.5	7.5	7.5	7.7	7.5	7.0	8.0
Declining fish populations	7.6	7.7	7.5	7.2	7.5	7.6	7.8	7.3	7.8	7.6	7.9	7.5	7.6	7.5
Extreme weather events	7.3	7.7	6.9	7.1	7.6	7.3	7.3	7.2	7.1	7.4	7.2	7.2	6.8	7.9
New development	6.9	7.0	6.8	6.2	6.6	6.8	7.2	7.2	7.2	6.8	7.3	7.0	7.2	7.4
Costs of visiting Lord Howe Island	6.3	6.4	6.1	6.3	6.4	6.4	6.4	6.0	6.0	6.4	6.1	6.1	6.4	6.8
Limited promotion of the Marine Park	6.1	6.3	6.0	6.0	6.4	6.1	6.3	5.7	6.1	6.2	6.2	6.0	6.1	6.5
Shark depredation	6.1	6.3	5.9	6.4	6.4	6.5	6.0	5.5	5.9	6.2	6.4	6.0	6.2	6.7
Lack of infrastructure	5.9	6.0	5.7	6.1	6.3	5.9	5.9	5.6	5.5	6.1	5.8	5.7	5.3	6.7
Limited accommodation	5.6	5.6	5.7	6.2	6.1	5.5	5.8	5.3	5.2	5.8	6.0	5.3	5.5	6.4
Regulation	5.6	5.9	5.4	6.1	5.9	5.8	5.8	5.2	5.1	5.7	5.8	5.6	5.4	6.5
Competition between business owners	5.4	5.6	5.2	5.8	5.8	5.8	5.3	5.1	4.8	5.6	5.5	5.2	4.9	6.5
Restricted navigation channels	5.5	5.8	5.1	5.9	6.0	5.5	5.6	4.9	4.9	5.6	5.6	5.3	5.1	6.3

Q19. What level of threat do you believe each of the following have for the economic values/benefits of Lord Howe Island Marine Park?

West NSW: Central West, Far West and Orana, and New England North. Central and North Coast NSW: Central Coast, Hunter and Newcastle, and North Coast. South NSW: Illawarra-Southern Highlands-Shoalhaven, Riverina-Murray, South East and Tablelands.

Threat	Average	SYDNEY (multiple, inc. Blue Mountains)	Central West, Far West and Orana	New England North West	Central Coast	Hunter and Newcastle	North Coast	Illawarra- Southern Highlands- Shoalhaven	Riverina- Murray	South East and Tablelands
	n=863	n=441	n=56	n=14*	n=42*	n=105	n=112	n=30*	n=21*	n=42*
Loss of World Heritage status	7.5	7.5	8.2		7.4	7.2	7.9	6.7		8.1
Climate change	7.2	7.4	7.5		7.0	7.3	7.2	6.8		8.0
Coastal erosion / coastal works	7.5	7.5	7.8		7.5	7.6	7.4	6.9		7.6
Declining fish populations	7.6	7.6	8.0		6.8	7.5	7.7	7.5		8.2
Extreme weather events	7.3	7.4	7.5		6.8	7.4	7.2	6.8		7.7
New development	6.9	6.8	7.4		7.0	7.0	7.1	7.8		6.9
Costs of visiting Lord Howe Island	6.3	6.4	6.6		6.5	6.7	5.6	6.8		5.8
Limited promotion of the Marine Park	6.2	6.2	6.5		6.0	6.5	5.5	5.7		6.5
Shark depredation	6.1	6.2	6.6		5.6	6.5	5.7	6.1		6.1
Lack of infrastructure	5.9	6.1	5.8		6.2	6.3	5.0	5.0		5.4
Limited accommodation	5.7	5.8	6.1		6.0	5.9	4.5	5.6		4.8
Regulation	5.6	5.7	6.0		5.7	6.1	5.2	5.9		5.1
Competition between business owners	5.4	5.6	6.2		5.4	5.4	5.0	5.2		4.9
Restricted navigation channels	5.5	5.6	6.1		5.4	5.9	4.7	5.3		5.1

Q19. What level of threat do you believe each of the following have for the economic values/benefits of Lord Howe Island Marine Park? *Low sample size, results should be interpreted with caution. Results not shown where sample size is <30.

EY | Assurance | Tax | Transactions | Consulting

About EY

EY is a global leader in assurance, tax, transaction and consulting services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over.

We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organisation, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organisation, please visit ey.com.

© 2024 Ernst & Young, Australia. All Rights Reserved. Liability limited by a scheme approved under Professional Standards Legislation.

ED None

eysweeney.com.au