



What do residents and tourists 'value' in the Wet Tropics World Heritage Area?

Project 12.3

¹*School of Business, JCU*

²*Rainforest Aboriginal Peoples Alliance*

12.3 TEAM:

Robyn Bellafquih²

Michelle Esparon¹

Marina Farr¹

Diane Jarvis¹

Silva Larson¹

Yee Sum (Louisa) Lee¹

Sandra Levers²

Putu Mustika¹

Phil Rist²

Joann Schmider²

Natalie Stoeckl¹,

Gerry Turpin²



Australian Government

Department of the Environment



JAMES COOK
UNIVERSITY
AUSTRALIA



WHAT DID WE HOPE TO LEARN AND WHY?

- The relative 'value' (benefit) of the goods and services provided by the Wet Tropics World Heritage Area (WTWHA) to residents of and visitors to the region

**Tells us about what the WTWHA does to/for the economy
(also provides indication of likely environment/social/economy trade-offs)**

Workshops with key stakeholders to identify:

- A variety of different ecosystem services (use/non-use 'values') for assessment & other goods/services to be compared with
 - Key management issues/problems for assessment
 - Appropriate sampling strategies

Insights used to develop two questionnaires

- Also – testing and comparing different methods for attempting to 'value' non-market good and services

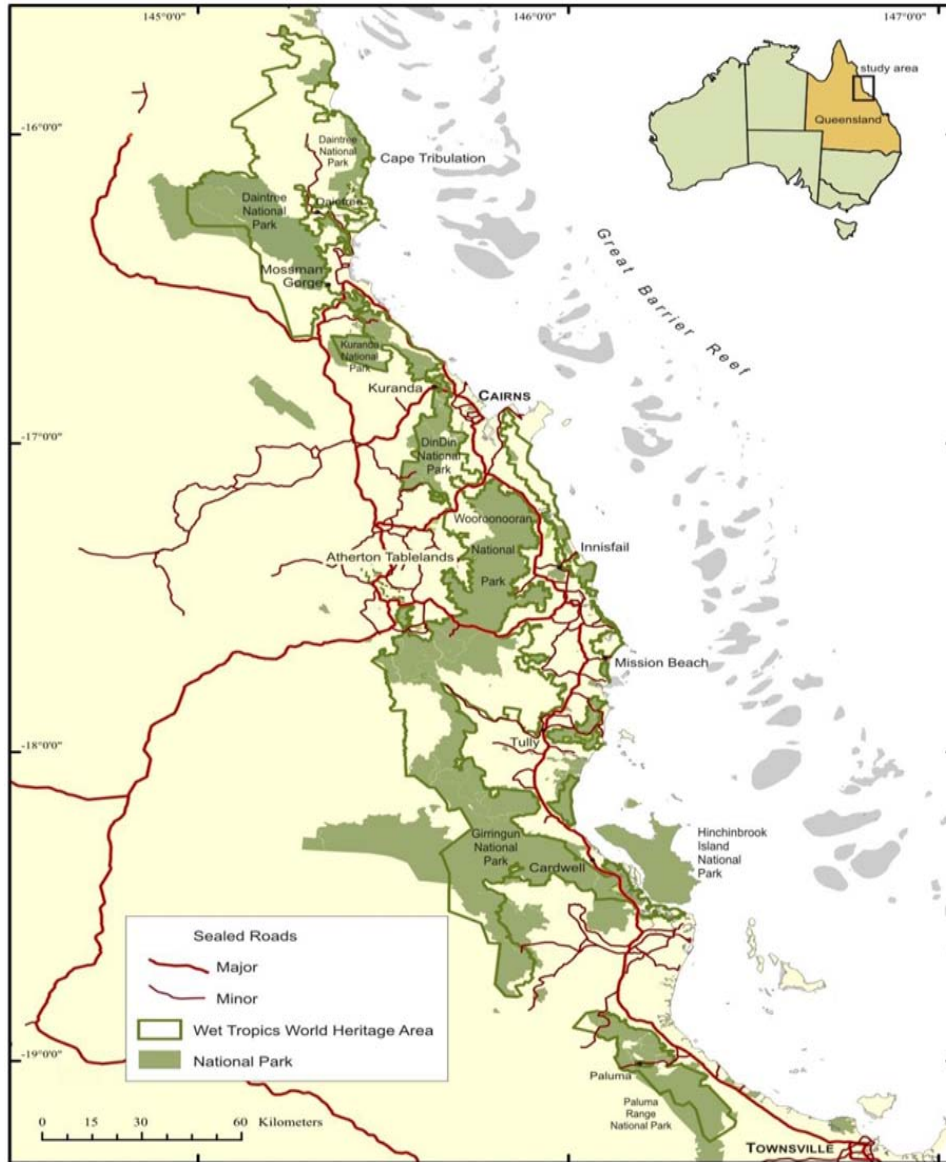
KEY SECTIONS OF THE RESIDENT SURVEY

- Background demographics, activities in the WTWHA
- Importance of and satisfaction with 27 different goods and services (randomized order)
- Satisfaction with life overall
- Impact of 12 different hypothetical “changes” to different goods and services on overall quality of life
- WTP (a) for improvements in water quality; (b) to protect native plants & animals; (c) to maintain undeveloped scenery; (d) to protect the Aboriginal cultural values.

Tourism survey similar; included extra questions to assess expenditure and ‘consumer surplus’



OVERVIEW OF PROJECT DATA



621 from tourists:

- Lagoon
- Domestic terminal
- International terminal

**1167
surveys
in total**

386 mail-out
surveys

160 Rainforest
Aboriginals



KEY INSIGHTS RESIDENTS...

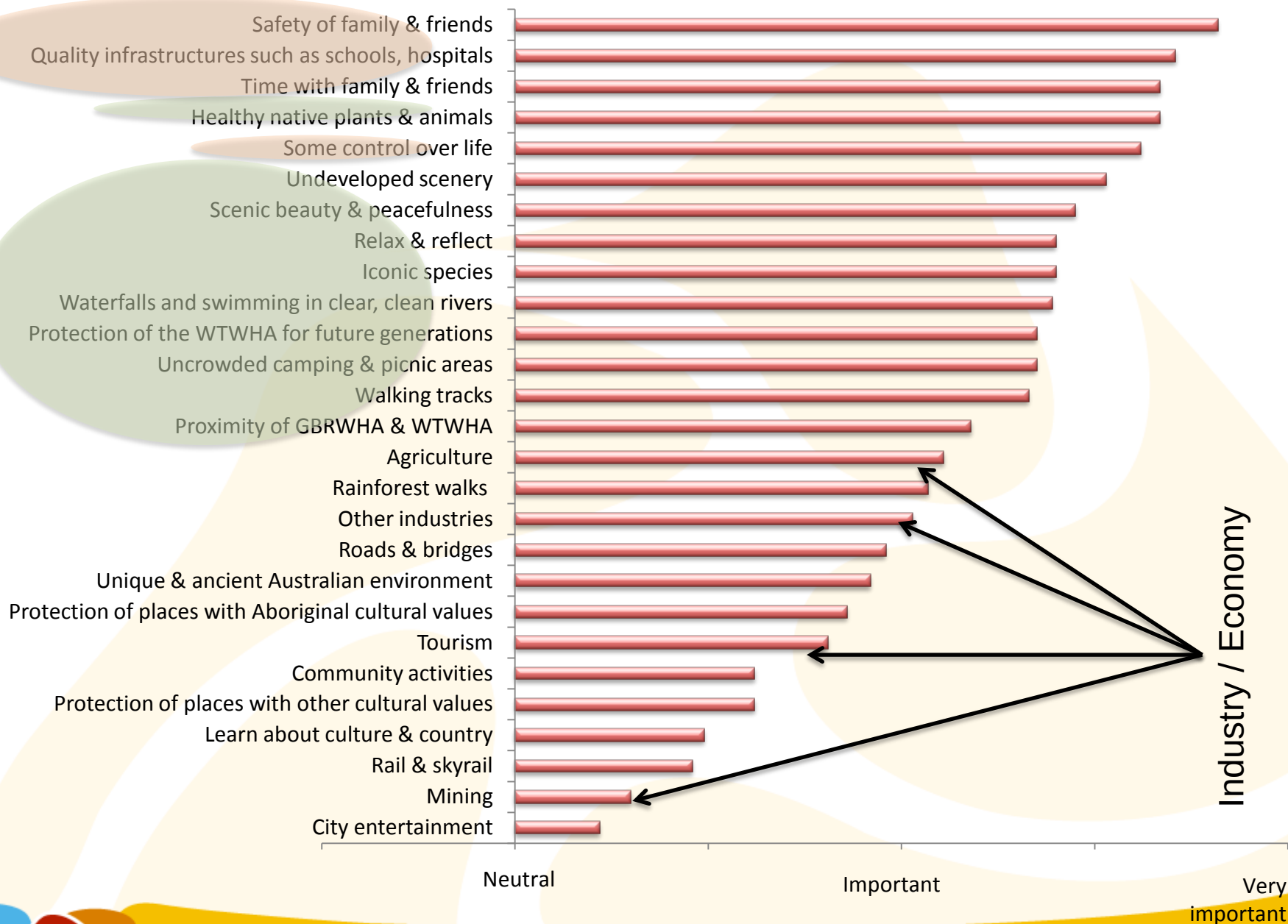


WHICH 'VALUES' ARE MORE IMPORTANT TO OVERALL QUALITY OF LIFE...

- Widespread agreement that the safety of family and friends is the most important contributor
- Intrinsic (environmental) values are more important than other (economic) values

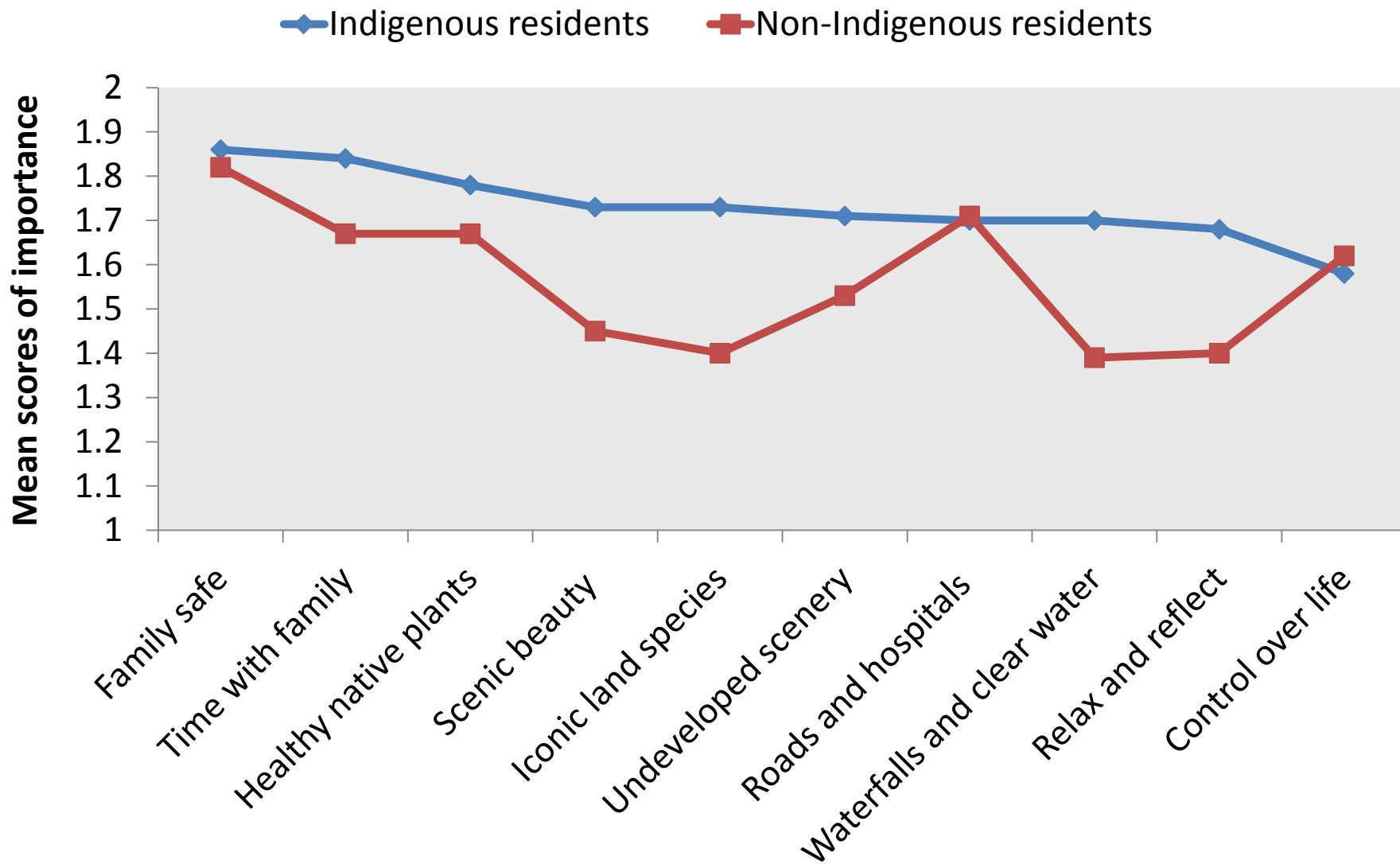


Non-Indigenous: Importance of values to overall quality of life





Comparison of the top 10 most important 'values'



SIMILAR 'VALUES'...

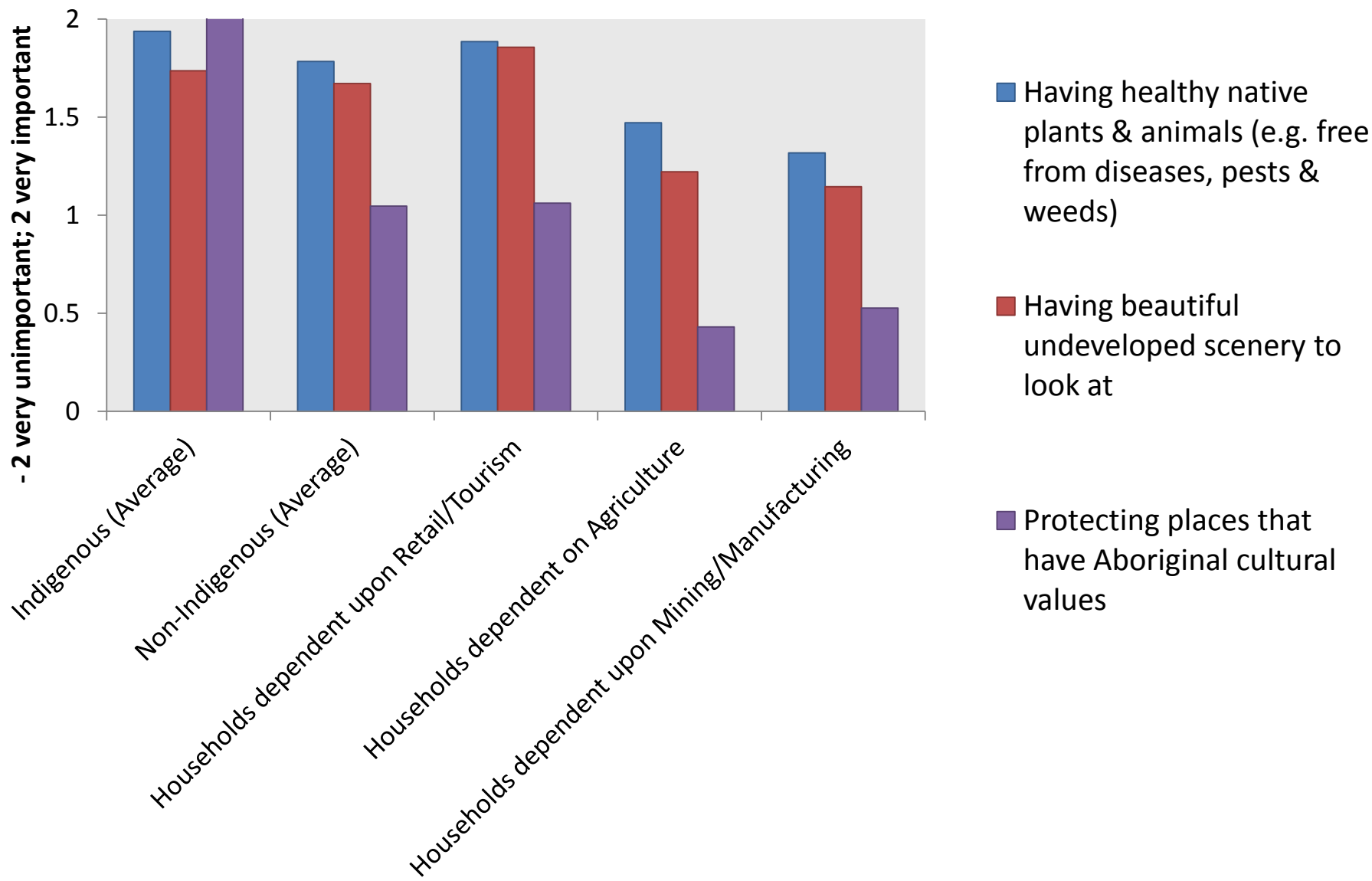
- Responses indicate recognition (even if only implicit) of important inter-relationships between values, evidenced in
 - analysis of correlation coefficients
 - principal component analysis

SOCIETY	ENVIRONMENT		ACCESS TO NATURE	CULTURE	INDUSTRY	CITY
Average Importance score for the group:						
1.72	1.47		0.97	0.95	0.71	0.15
Friends and family being safe	Undeveloped scenery to look at		Bitumen roads	Hearing from Aboriginals about their culture	Tourism industry	Enjoying city entertainment
Good quality roads and hospitals	Healthy native plants and animals		Walking tracks	Preserving Indigenous culture	Importance of the mining industry	
Spending time with family and friends	Enjoying the scenic beauty and peacefulness		Rail and skyrail	Learning about a unique environment	Importance of agricultural industry	
Having 'some' control of one's life	Preserving for future generations			Protecting other cultures	Importance of other industries	
	Two WHAs side by side			Participating in community activities		
	Being able to relax and reflect					
	Iconic land species					
	Rainforest walks					
	Waterfalls and clear clean rivers					
	Uncrowded camping and picnic areas					
+ QLD born	- Mining & ports	- Income - age	+ Indigenous - Male - Income - Agriculture	- Single		- QLD born - HH size



How much do values differ across sectors? (controlling for income and other factors)

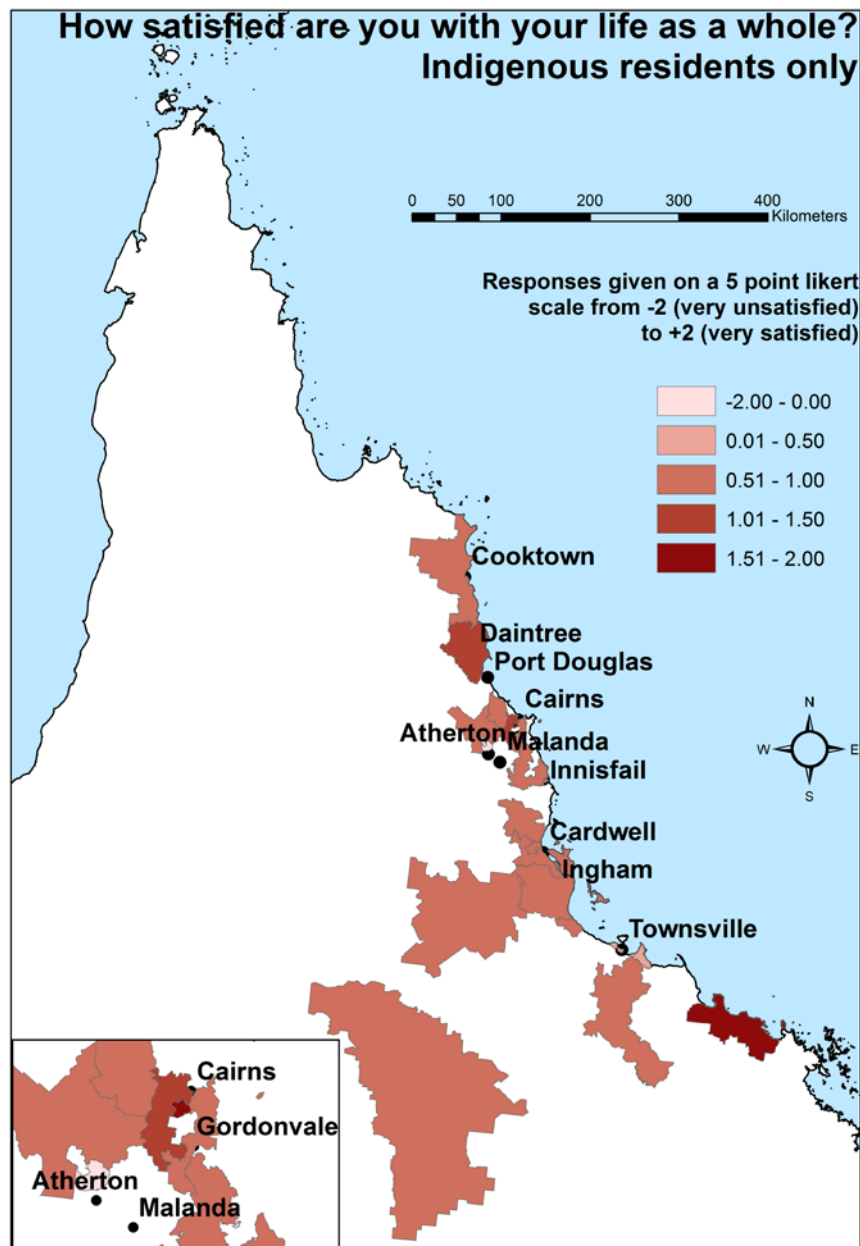
How important are each of the following to your overall quality of life?



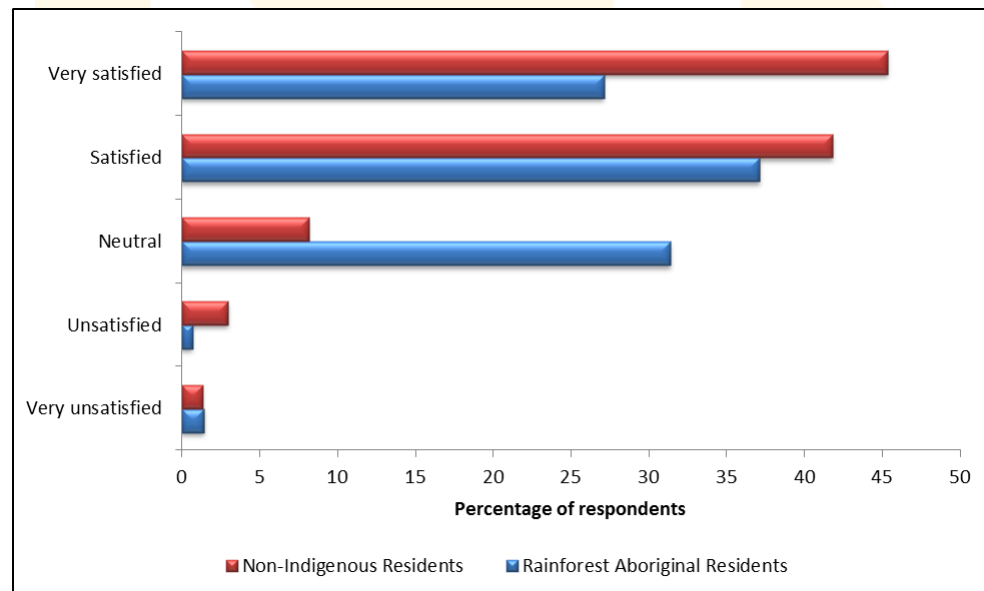


BUT ITS ABOUT MORE THAN JUST 'IMPORTANCE'





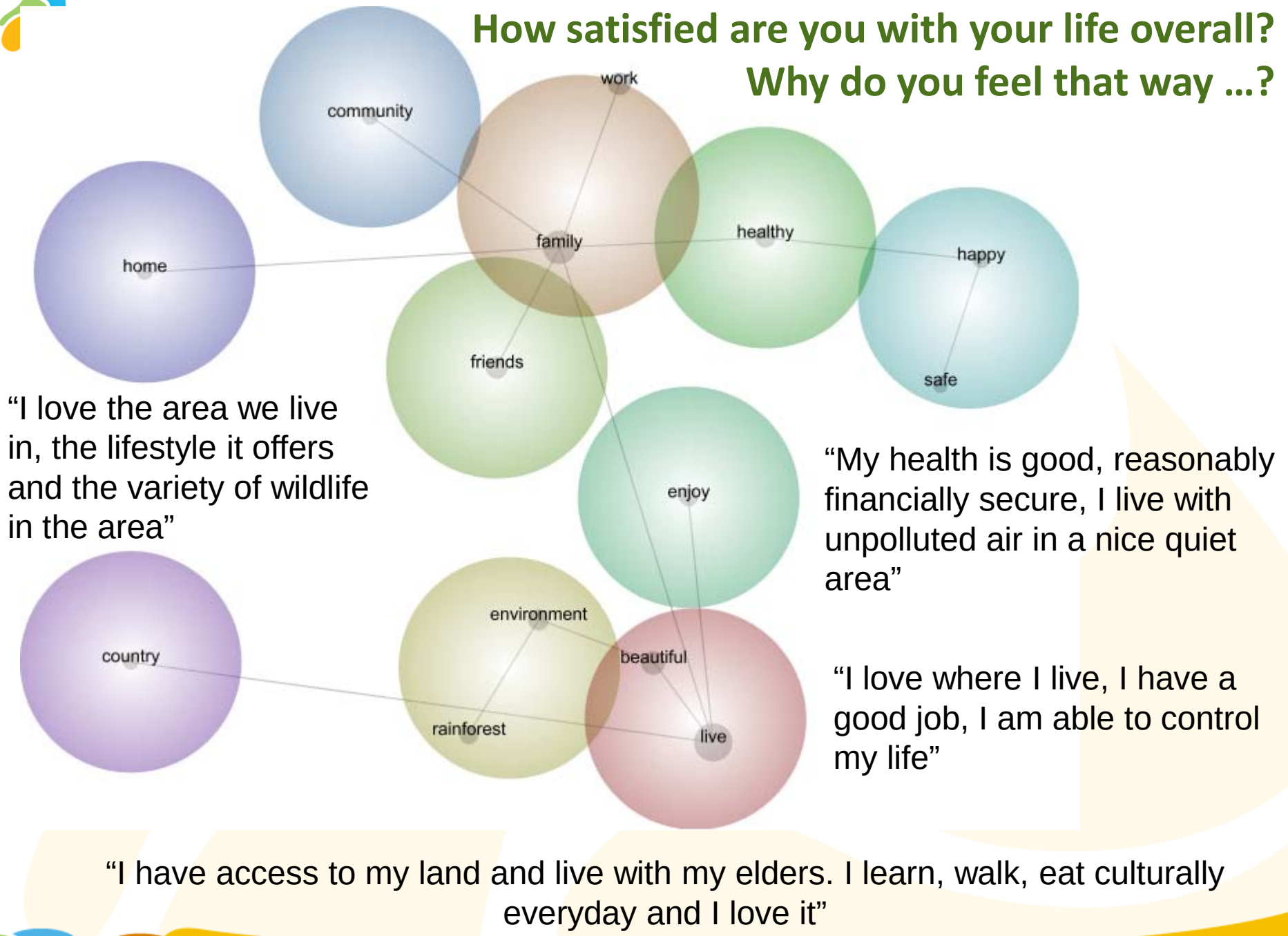
- Most residents indicated satisfactory quality of life
 - Would not move away from the region even if it 'deteriorated'
 - Some variation in responses between Indigenous and non-Indigenous



- Also spatial differences



How satisfied are you with your life overall? Why do you feel that way ...?



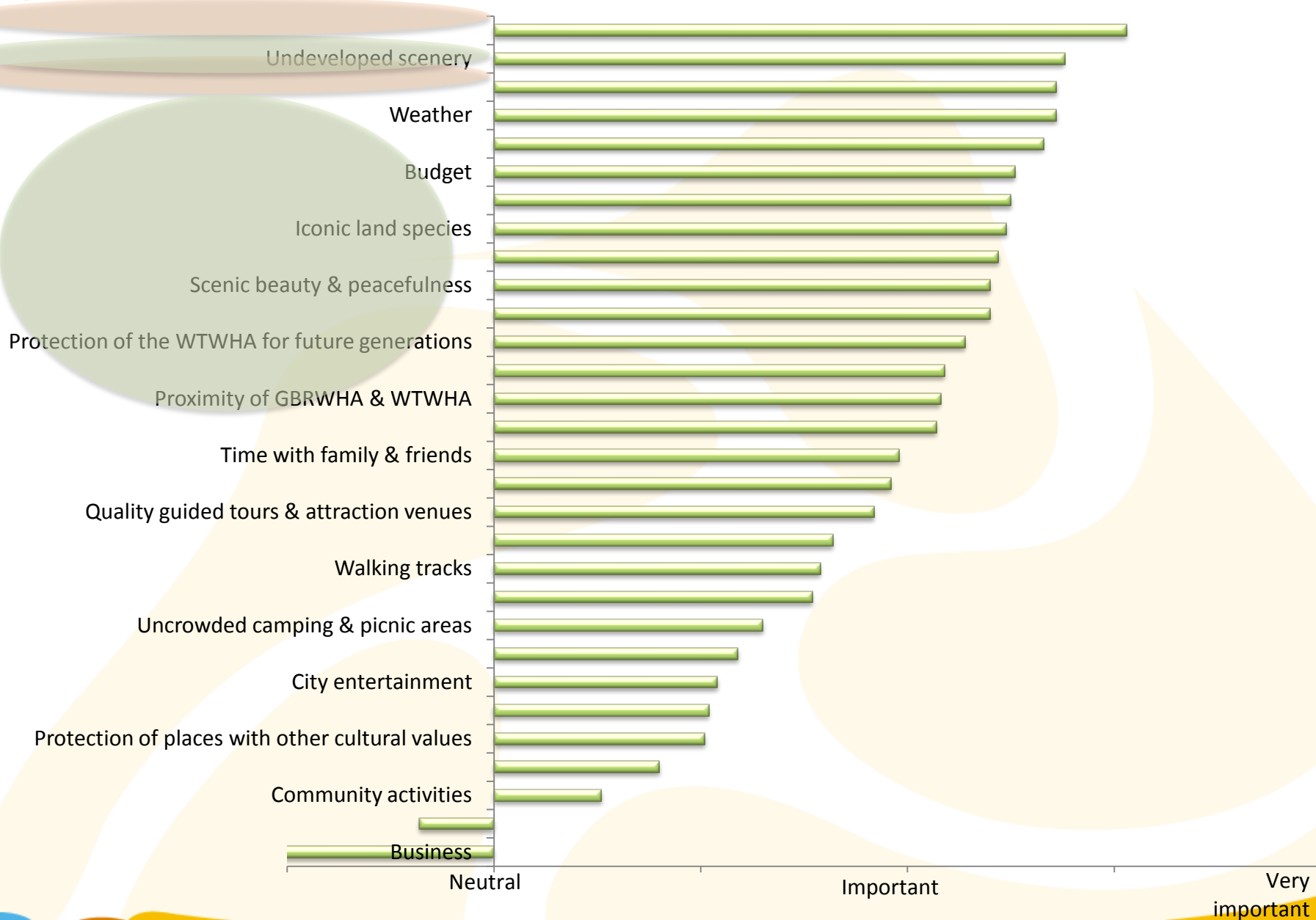


SOME INSIGHTS TOURISTS...





Tourists: Importance as a reason for coming to this part of Australia



NATURE

Enjoying the scenic beauty
and peacefulness

Waterfalls and clear clean
rivers

Iconic land species

Being able to relax and
reflect

Rainforest walks

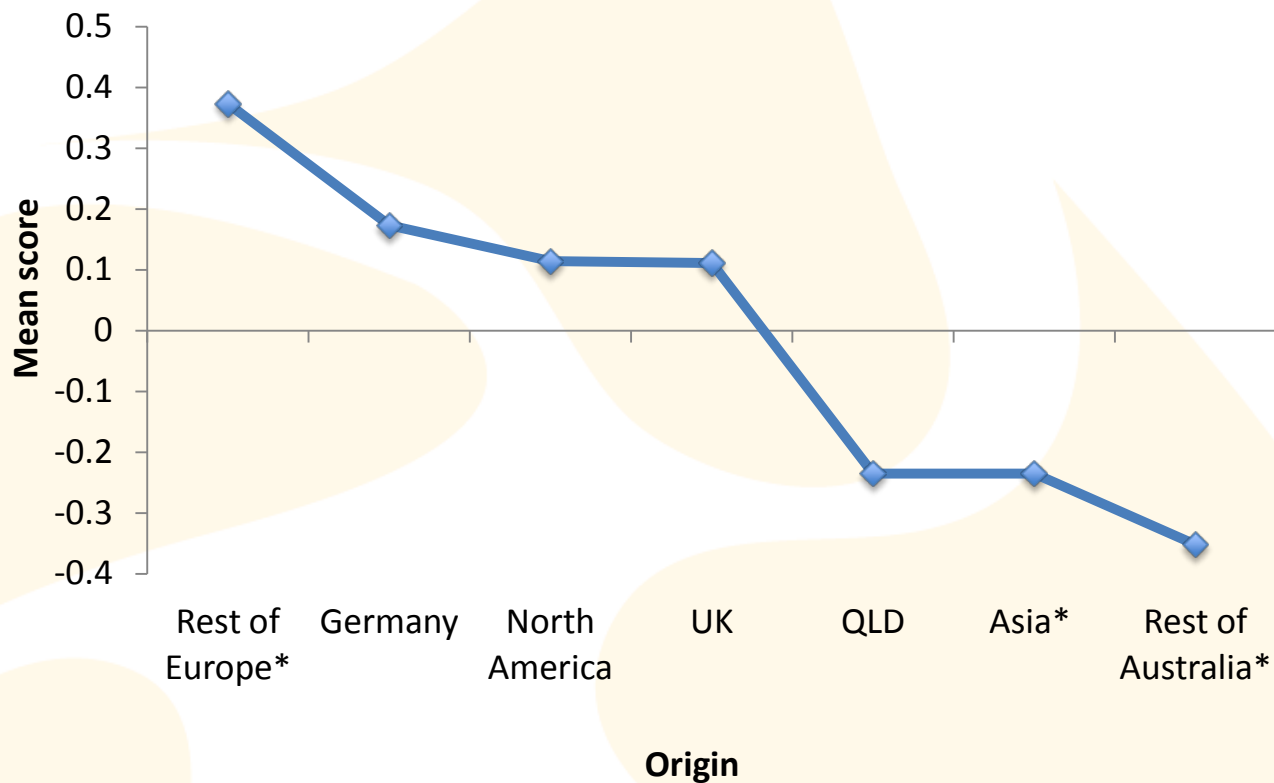
Uncrowded camping and
picnic areas

Weather

Iconic marine species

Learning about a unique
environment

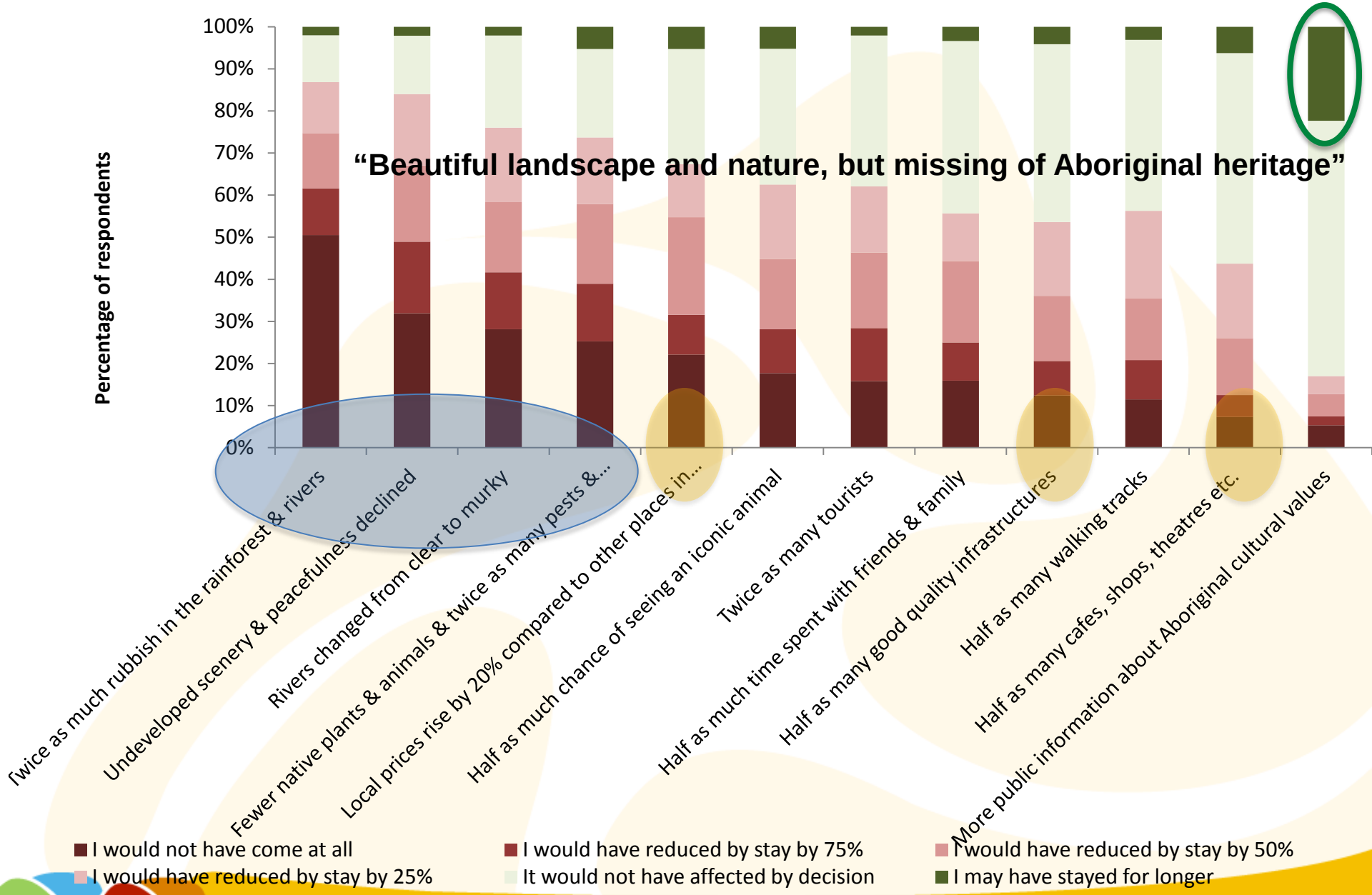
Mean visitor score for Nature



SO HOW WOULD TOURISTS REACT IF THE THINGS THEY VALUE DETERIORATED?



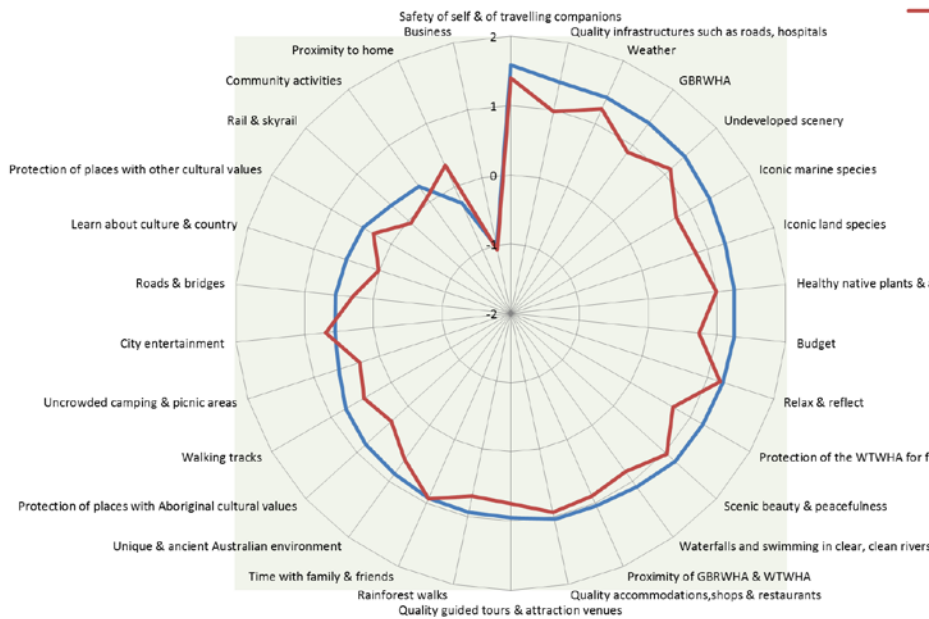
IMPACT OF HYPOTHETICAL CHANGES ON DECISION TO COME TO THE REGION - RAINFOREST



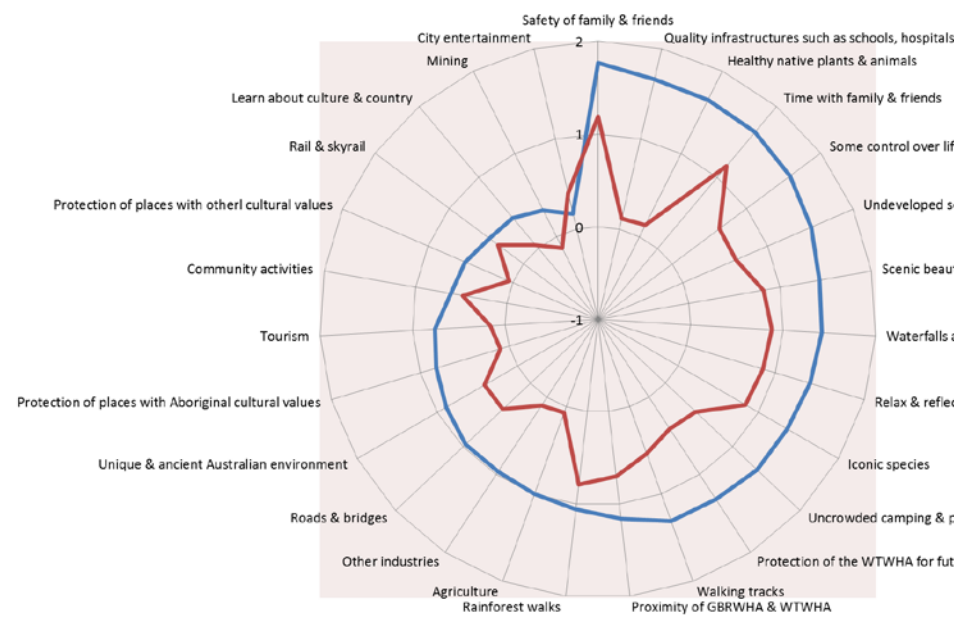


A CLOSER LOOK AT IMPORTANCE & SATISFACTION

Mean importance and satisfaction scores - Tourists



Mean importance and satisfaction scores - Non-Indigenous residents



Tourists

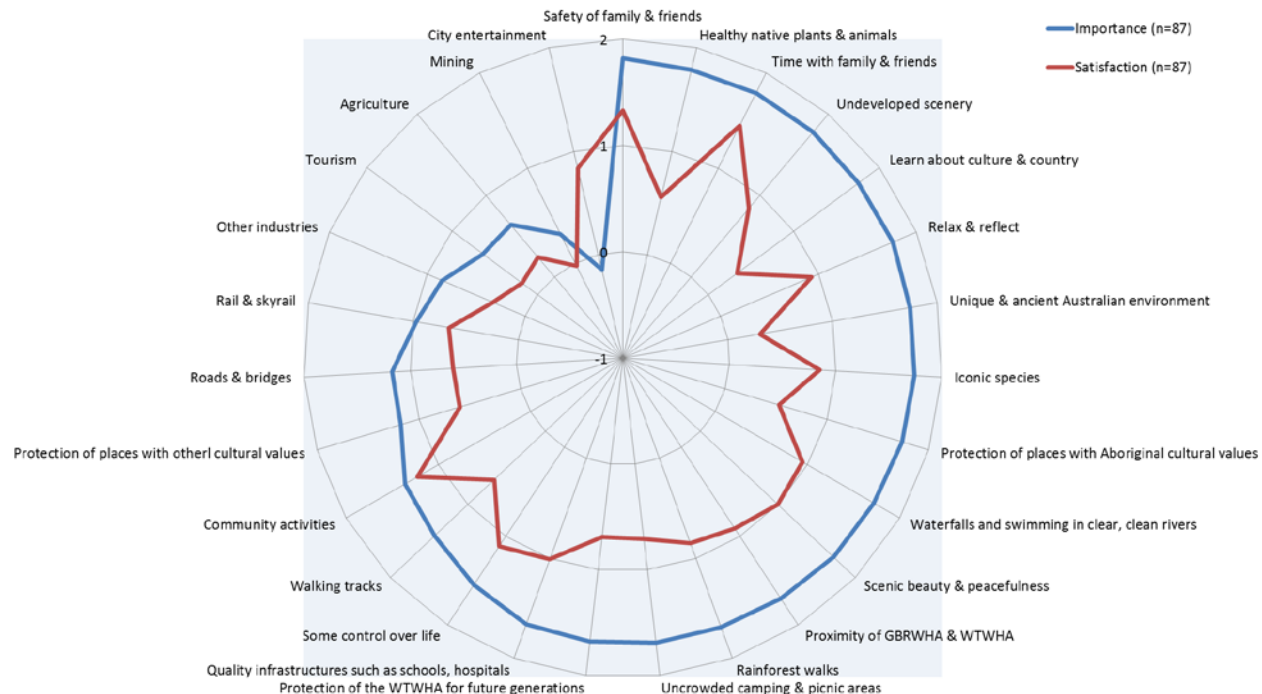
Satisfaction with overall experience: 1.02 (n=578)



Rainforest Aboriginal residents

Satisfaction with life overall: 0.69 (n=140)

Mean importance and satisfaction scores - Indigenous residents



Non-Indigenous residents

Satisfaction with life overall: 1.24 (n=368)

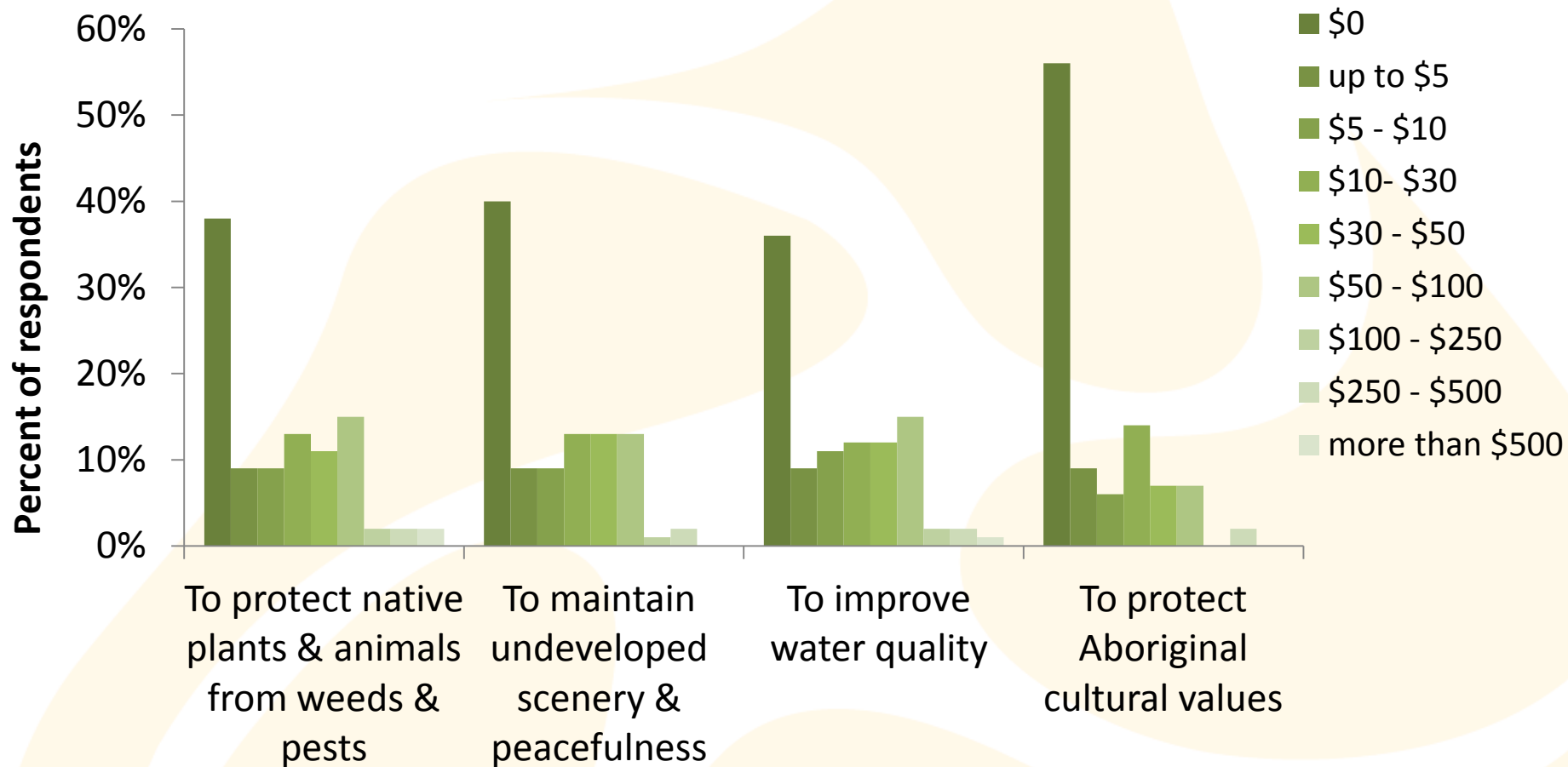


National Environmental
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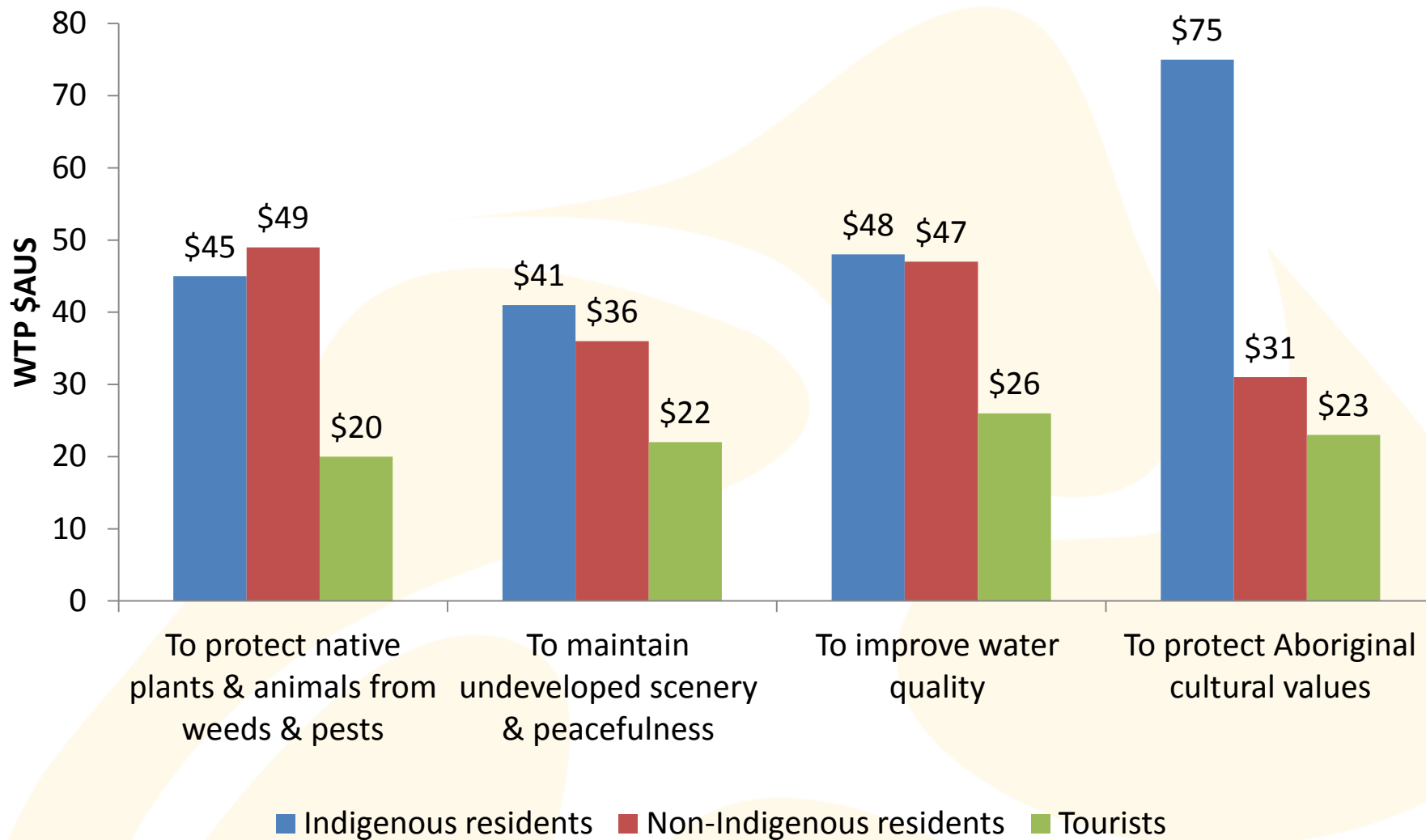
ARE PEOPLE WILLING TO PAY TO HELP PROTECT THE THINGS THEY CLAIM TO VALUE MOST?



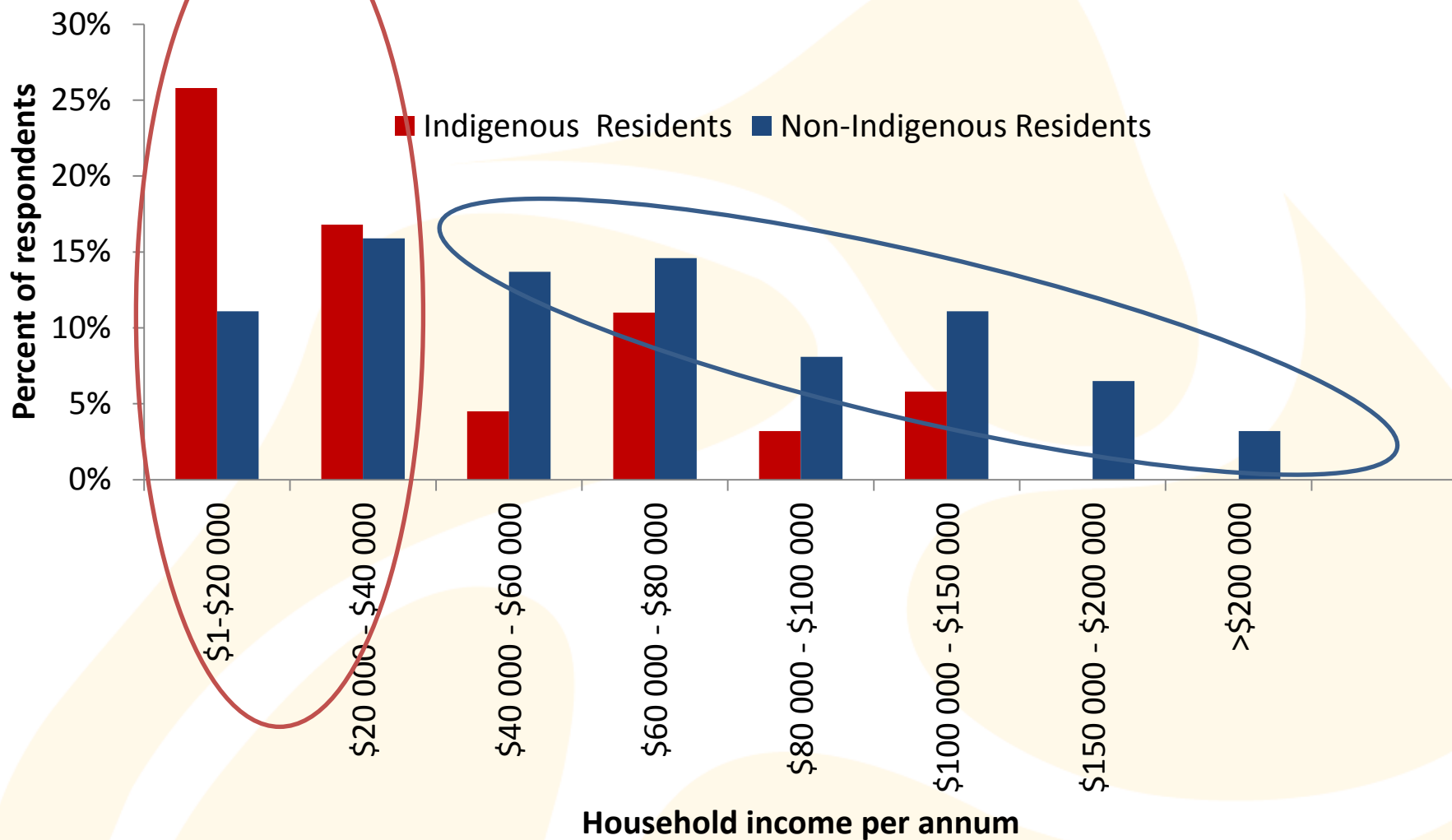
NON-INDIGENOUS RESIDENT WILLINGNESS TO PAY, PER ANNUM...



MEAN WTP RESIDENTS & TOURISTS

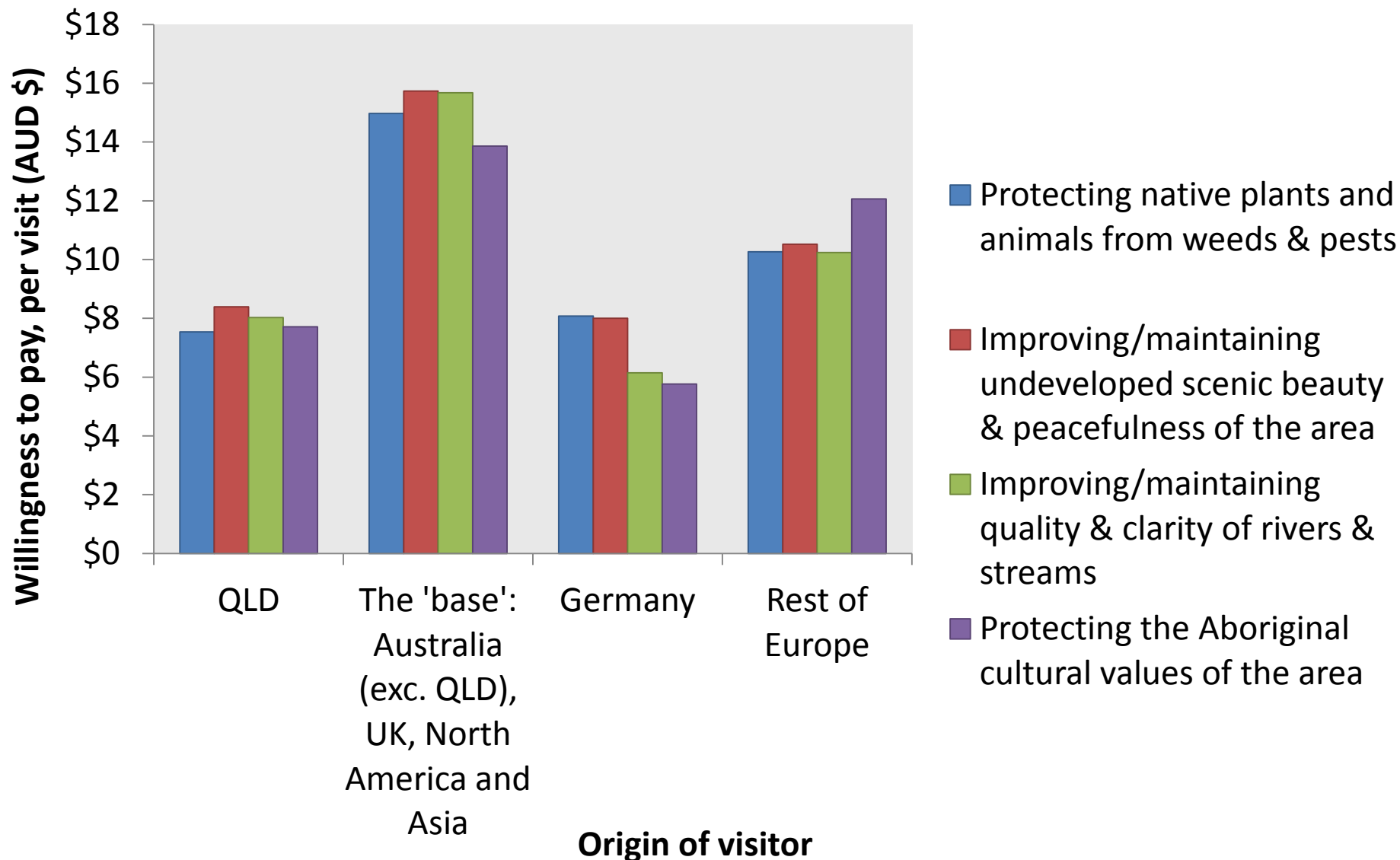


INDIGENOUS AND NON- INDIGENOUS INCOMES COMPARED





Mean WTP by origin – Tourists (controlling for difference in income)



IN SUM

- Grouping of environmental and cultural values suggests symbiotic relationship
- Quality of life/decision to visit depends on multiple things, including, but not limited to:
 - Safety of family & friend/self & travelling companions; culture; environment; economy
- May need to watch the 'gap' between importance and satisfaction relating to
 - environment and Indigenous culture; roads, hospitals, schools and safety
- Potentially vulnerable to some types of change, since people in this region are so reliant upon environment for livelihoods and wellbeing.
 - Higher prices viewed less negatively than environmental degradation.
- If we damage the environment, it may 'bite back'.
 - Likely to also be the case if we degrade or damage culture
 - The 'average' resident/tourist is likely to prefer developments that do not substantially degrade the ecosystem services provided by the WTWHA

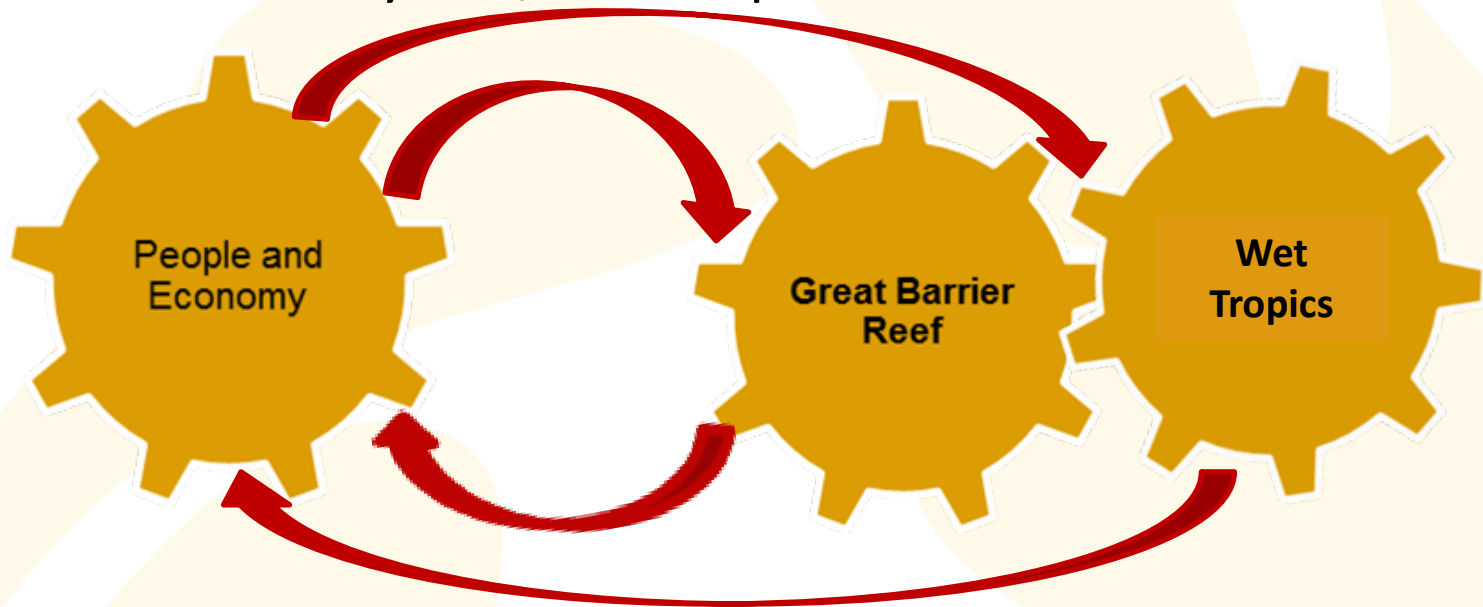
NATURAL AND ECONOMIC SYSTEMS

TRULY DYNAMIC AND INTERLINKED

Changes in the economy affect the environment.

These changes feed back and affect people and economy

Changes in one part of the economy can impact other parts of the economy and/or multiple environments



Social and environmental values are important to people: deterioration thus has a real impact on the economy and on well-being.

THANK YOU COMMENTS, IDEAS AND SUGGESTIONS WELCOME 😊

Project 12.3 (Wet Tropics) contacts

Name: Prof. Natalie Stoeckl
Organisation: James Cook University
Phone: 07 4781 4861
Email: Natalie.Stoeckl@jcu.edu.au

Name: Dr. Michelle Esparon
Organisation: James Cook University
Phone: (07) 4781 6623
Email: Michelle.Esparon@jcu.edu.au