



EARTHCHECK

MAGNETIC ISLAND PROJECT SURVEY RESULTS

The following pages outlines the project survey results that were conducted to inform the sustainability audit, options analysis and project options development. The survey allowed the different stakeholders (residents and businesses) to provide focused answers and quantitative data about life on the island.

The open-ended survey question results have been transcribed verbatim to provide an accurate record of the survey responses.



Q1: What stakeholder group best corresponds to you?

ANSWER CHOICES	RESPONSES	
Resident	86.51%	186
Business / Organisation	12.56%	27
Transport provider	0.93%	2
TOTAL		215

**Please note that one Transport provider was a testing response conducted by EarthCheck. Therefore, the total amount of respondents is 214.*

RESIDENTS

Q2: Please select the number of people who live in your household:

ANSWER CHOICES	RESPONSES	
1-2	66.37%	75
2-4	29.20%	33
4-6	3.54%	4
6+	0.88%	1
TOTAL		113

Q3: How many months of the year is your house unoccupied?

ANSWER CHOICES	RESPONSES	
0 to 3 months	56.64%	64
3 to 6 months	4.42%	5
6 to 9 months	5.31%	6
9 to 12 months	33.63%	38
TOTAL		113



Q4: What is the makeup of your house?

	1	2	3	4	5 OR MORE	N/A	TOTAL	WEIGHTED AVERAGE
Rooms	5.31% 6	10.62% 12	29.20% 33	21.24% 24	32.74% 37	0.88% 1	113	3.66
Kitchens	86.73% 98	11.50% 13	0.88% 1	0.00% 0	0.00% 0	0.88% 1	113	1.13
Bathrooms	40.00% 44	49.09% 54	9.09% 10	0.91% 1	0.00% 0	0.91% 1	110	1.71
Living Areas	61.61% 69	29.46% 33	6.25% 7	1.79% 2	0.00% 0	0.89% 1	112	1.48
Garage (car spaces)	53.77% 57	21.70% 23	1.89% 2	3.77% 4	0.94% 1	17.92% 19	106	1.49

#	OTHER (PLEASE SPECIFY)
1	Verandahs x 3
2	4.5 hectares of prime land
3	Cars Under house
4	shed and deck
5	It is 3 units 2 x 2 Bdr and 1 x 1 Bdr not currently let out as we are renovating will keep one for us and the other 2 will be holiday let
6	Laundry
7	Car port
8	VERANDAH
9	we live on a boat
10	large verandah
11	verandahs
12	verandah
13	2 toilets
14	Shed
15	Study, and under house workshop/storage area.
16	pool, small sheds
17	Note - not yet built!
18	swimming pool
19	outdoor patio and deck
20	Outdoor iving area, seperate WC
21	3 bedrooms, front and rear covered verandahs
22	Bedroom
23	laundry



Q5: Do you actively and regularly participate in Island community events, associations or groups such as the local sporting club or Church?

ANSWER CHOICES	RESPONSES	
Yes	69.64%	78
No	30.36%	34
TOTAL		112

#	IF YES, PLEASE PROVIDE DETAILS:
1	MICDA; MINCA;
2	School activities
3	Aquapella choir Arcadia weeding group Magnetic island. Art group
4	Men's Shed, Rotary
5	HSB Rural Fire Brigade- Retired secretary after 6yrs for health reasons. MI Men's Shed- Retired secretary/ treasurer afte 6yrs for health reasons (still treasurer).
6	Musos' Club, MICDA, MIRRA,
7	Choir, ses, bootcamp, micda, minca
8	SES, Volly Firey, Vollenteer forvany event.
9	RSL dinner/markets Stagedoor Theatre Various markets
10	I am the Secretary for the Magnetic Island Magpies Junior AFL Club
11	MICDA, MINCA, community choir (Aquapella), outriggering, boot camp
12	RSL, Lions Club, Social group
13	Committee member of Magnetic Island Nature Care Assoc. Member of MI Community Development Assoc. Former President MI Musos Club. Involved with MI Zero Waste group
14	Bowls club
15	Tourism related activities,
16	Magnetic Island History and Craft Centre including Magnetic Museum Arcadia Coastcare
17	Outrigger
18	Museum duty,Craft group, Mahjong by the beach,member of MINCA
19	United Church, MI Craft Group, U3A, MI Care, SES, Mens Shed
20	QFES, MIRRA
21	Zero waste
22	Ses, fire and rescue, TMI
23	Zero Waste, Church Playgroup
24	Active wildlife carer and artist
25	Boot Camp, Yoga, Choir
26	Provide musical entertainment at the RSL and Horseshoe Bay Markets
27	Go to occasional events
28	MINCA OUTRIGGERS CLUB
29	School, Church, History and Craft, friendship group,
30	Wildlife care



31	Surf club
32	Outrigging Club, Arcadia Coast Care, MINCA, MICDA, MIRRA, RSL, Acquapella Choir, Mindfulness group
33	MINCA Member
34	MINCA, zero waste, Micda
35	Attend U3A vocal group President Magnetic Jazz Assoc., co-ordinator of the Great Tropical Jazz Festival for 22 years Presenter triple t radio.
36	Surf Life Savers
37	Life member of Magnetic Island Musicians Club
38	MINCA, MICDA and many others
39	Most open community events except church. Also on the committee of the MI Jazz Association
40	Dance classes, Yoga.
41	Markets, local fundraisers, cleanups etc
42	Outrigging Club, Magnetic Island Nature Care, Art exhibitions & workshops.
43	We keep abreast of most local groups
44	Mirra book club
45	Museum volunteer, turtle watch volunteer Ambassador for island as taxi driver
46	Aquapella Choir. MICDA
47	Art Group, Golf Club, Retail Asst
48	MI Bowls Club, Catholic Church
49	aquapella
50	Men's Shed; Book Club
51	Landcare, Labour Party Girl Guides
52	MINCA MICDA
53	Work at vinnies, secretary MIRRA, school events
54	AFL, Swimming, markets, community events
55	Most
56	RSL part catering business part volunteer
57	MICDA Community Development Association, festivals, events, etc.
58	Volunteer community groups: weed group; Acadia coast care; school; kindy; Art group; Choir; outriggers environmental
59	MINCA, community forums
60	Singing group, U3A (activite retiree groups), church, Mens shed, mobile library
61	Member of Magnetic Island Community Development Association Inc (MICDA), Member of MICDA Executive Committee, Chair of MICDA Heritage Infrastructure and Planning Working Group; Life member of Magnetic Island Nature Care Association Inc. Member of Magnetic Island Museum Founding member of Magnetic Island National Park Volunteers (weeding and pest control MI National Park) Member and teacher on Magnetic Island U3A
62	P&C - primarily the kitchen garden at the school. Also participate in weeding days with MINCA (Magnetic Island Nature Care Association).
63	About to move to the Island. Plan to be involved with MINCA, race week and marina, golf club and yoga.



64	Magnetic Island Community Care, Golf Club, Boot Camp
65	MICDA
66	Church, bowls, special events
67	Member of MICDA
68	choir, outrigger paddling, yoga, cookbook club, MINCA (Magnetic Island Nature Conservation Association)
69	MI Jazz Association
70	French conversation group; RSL Friday nights; annual events of various kinds
71	Craft, sports, choir
72	Zero Waste, Musos, MICDA, MINCDA.

Q6: Do you participate in any initiatives with other Islands to share learnings and leverage off collective knowledge?

ANSWER CHOICES	RESPONSES	
Yes	20.91%	23
No	79.09%	87
TOTAL		110

#	IF YES, PLEASE PROVIDE DETAILS:
1	Australian Small Islands Forum; Bank of Ideas, (Peter Kenyon)
2	Social networks
3	Always networking
4	Mosaic workshop Will be attending meditation & Tai Chi when I'm able
5	Residents and ratepayers meetings Mens Shed
6	Tourism related activities,
7	Norfolk Island. Visit every 12 months
8	Envirobank
9	TMI (tourism magnetic island)
10	Keep up with friends relating to conditions on the island
11	Minca Facebook groups zero waste
12	Mira
13	I used to when I was working - only recently retired
14	Work as part of MICDA to help with community development
15	Macleay Island community groups and coastcare.
16	Zero Waste, MINCA, MINCDA
17	meetings of political party
18	MICDA
19	Introduce me Magnetic Island, I thought, was rather unique having a unique existence that has slowly evolved.



20	O waste . Alison bees koalas. Rangers weeds. M.i.s.school .
21	MICDA
22	This is bureaucrat-speak - don't know what you mean.
23	U3A, Spanish language
24	I also live on Waihee Island in NZ, where I am involved in many community projects, including sustainable community and tourism, and communicate regularly with Salt Spring Island in Canada around sustainability development.
25	Meetings, U3A

Q7: What do you think are the most important issues facing your Island community in terms of sustainability and resilience?

#	RESPONSES
1	<p>Resilience: The greatest asset of this community over the last century has been the overwhelming sense of community spirit and cohesion when facing adversity / natural disaster eg cyclones. This is demonstrated by the response to Cyclone Yasi where instantly adjoining families were helping each other, and when TCC refused to include Magnetic Island in the Council led "volunteers for a community clean-up" the Island promptly organised its own with a magnificent number of volunteers who all "volunteered" to work over three weekends, not just the designated one. A key lesson in the above is the need to keep strong community cohesion. I have always argued that the lack of garden fences (which is also exceptionally good for our ground-nesting birds) has played a strong role in 'looking out for one's neighbour" in a positive sense. For instance, an elderly gentleman who lived alone and was very deaf had children, as a lark (no harm was intended), take his mobility scooter and were happily driving it up and down his long drive – the activity was spotted by a neighbour who apprehended the children, and the scooter was returned. No fences gave the visibility. By whatever means, that "working together in a crisis" and "knowing ones neighbours" (even if you don't happen to like them!) needs to be maintained with an increasing and more fluid population. Environmental sustainability: If the integrity of the Island as an integral part of the GBR WHA is to be maintained, then a strong emphasis on what happens with lowland vegetation, private gardens, Council land, empty blocks etc must be maintained and owners, renters and authorities understanding the importance of using dry tropics species (for water conservation) and species that are preferably local natives, but definitely will not propagate as weeds into the National Park. It is not until a bright Poinciana tree pops up half way up a National Parks hill, that it becomes apparent to many people that they are, in fact a menace! Dogs and cats. The attitude of most islanders is that their pet could never cause a problem, day or night. Night cameras previously set up by an Island based environmental scientist (Eric Vanderduys) well demonstrated the havoc of cats, and Dr Ali Bee at the koala rehabilitation facility will attest to the scourge of roaming dogs (as will many others who have been chased, menaced or bitten.) Any suggestion of grandfathering the current cat population, produces howls of outrage; and insisting dogs to not roam (as is required by TCC local laws) is no longer enforced as the Island no longer has its own Island-based control officer (Formerly Steve Melvin) Economic Sustainability Tourism has always been the Island's economic mainstay. It is vital that this is monitored so that the island does not become the victim of its' own success, be trashed in the process and no longer a desirable destination. What sort of tourism is a question that must be asked, answered and then enforced. In recent years (last 20) all tourism surveys have shown that it is the laid-back, environmental aspects of the Island that are its main attractor (eg several bush walks will always yield a wild koala up a tree) and ways must be found to carefully nurture behaviours and business types that are in harmony with that, and if necessary support this with local regulation. Gentrification of neighbourhoods (so they resemble Annandale) must be resisted or the Island loses all the character that is part of the core charm. Social Sustainability. Maintaining a fully functioning P- 6 primary school, a Queensland Health public clinic, the Credit Union, Post Office, support for the elderly to remain in their own homes for as long as possible, activities to encourage socialisation of teenagers, are all key aspects of maintaining, enriching, and supporting a vibrant socially engaged community. This is much expanded in the two community plans prepared by Peter Kenyon, (Bank of Ideas) and while these date back some 19 years, nevertheless contain fundamentally sound and pertinent observations.</p>



2	Cyclonic storms and sea level rise
3	Solar power initiatives Water supply sustainability Road maintenance Emergency services National park -care Health services Aged care services
4	The amount/number and size of vehicles on the island has dramatically increased over the last few years. This has a number of issues including damage to infrastructure and it increased safety concerns.
5	Rubbish Employment Cost of living
6	Stop all cats coming and limit type/ number of dogs per family on MI. All cats and dogs must be desexed and microchips.
7	Ocean rise, coral viability, power generation
8	Degradation of local reefs and water quality through dredge spoil
9	Over population. People take more than they give!
10	Solar power Roads
11	Being proactive about self sufficiency, such as solar power on a larger scale.
12	Employment
13	Buses are too big and dangerous - should convert to smaller buses; Lack of in-home aged and end-of-life care forcing residents to town to die; reliance on grid delivered power despite significant solar installations; too many septic systems contaminating groundwater (as capacity of sewage system is for new development rather than fixing impact of existing systems); weeds; poor catchment management; too many cars; uncontrolled domestic animals
14	Poor main roads
15	Effects of tourism on the wildlife and environment of National Park and beach areas. Population growth with new building in Horseshoe Bay.
16	Long term security of water and power, capacity to grow food here, lack of a multi-purpose cyclone shelter/ community centre
17	Keeping the marine environment as pristine as possible as so many north Queenslanders rely on it.
18	Water & Power
19	Climate Change is the biggest challenge to this community and globally
20	Development & tourism
21	Too much development,rubbish,loss of habitat,lack of ability of authorities to see the Island as unique when making decisions
22	Work for stability and accommodation
23	Beach Erosion, Cyclones
24	Services on the island, value for rates, road conditions, growth
25	Limiting the number of cars on the island .
26	Limiting the number of cars on the island .
27	The Island is turning into a "big city suburb", and losing its tropical island feel. "Big city people" are bringing their "big city ideas" here, and not considering, or respecting, the Islands flora or fauna, when building houses and fences.
28	No proper recycling station, eg: dump station all gets crushed instead of giving chance of second life.
29	Facilities and equipment for emergency services such as ses rural fires and fire and rescue



30	- waste management - transportation
31	adaption to climate change.
32	Limited planning guidelines that do not take unique blocks of land into a better planning framework
33	Water, roads, bushfire preparedness, Freight costs
34	keeping the number of residents and visitors low, keep buildings low height developers out introduce a 50km speed limit in built up areas
35	Having the right type of development that fits in with the environmental attributes and attractions on the island I.e. low key, low environmental impact
36	Easy access to recycling.
37	Solar power, zero waste, sea pollution
38	Control of tourism numbers. Plastic and one off use items pollution. Climate change.
39	Parking at the ferry terminal..... too many cars
40	Too many cars.
41	To many greenies
42	Better feedback tariffs for solar power
43	Too many vehicles, specifically rental cars (particularly large 4 wheel drives) and large busses, feral cats, dogs being walked and let off leash in inappropriate places (like the marine park at Geoffrey Bay), invasive plants.
44	1. Pressure on the infrastructure from too many people. 2. New residents coming to the Island and clearing the native vegetation which impacts wildlife habitat and natural heritage values. 3. Too many vehicles - some restrictions such as those in place on Lord Howe Is are worth considering. Decimation of the local wildlife- rock wallabies, Curlews, possums, owls and echidnas. Speed limits need to be reduced and enforced. 4. Plastic rubbish - continued use of plastic water bottles with no alternatives such as Water stations for refilling and plastic drink containers. 5. Cat and dog management on the Island. Locals and tourists do not keep their animals contained. Dogs are unleashed and wandering and cats are out a night decimating our native ground dwelling birds, small animals and lizards. 6. Animal management policies need to be introduced, resourced and enforced. There should be no cats on the Island
45	Reducing carbon emissions and over reliance from services from the mainland
46	Tourism escalating and ensuing problems to do with waste, degradation of roads and walking paths. Lack of community mindedness and lack of participation in community knowledge awareness building events. Rubbish removal and bins for use in public areas.
47	Over developing the island and using old vehicles and technology that impact greatly on the environment
48	More road repairs required. Cleaning of creeks prior to wet season, would ease the extent of flooding. Thankful for the back-burning carried out recently, but believe too many areas were lit at the same time, it could have been a disaster & the smoke was a health hazard.
49	broken glass, from bottles left on the beaches
50	More effective and economic transport and parking to and from the mainland.
51	Rubbish , erosion of beaches, roads (extremely poor condition), poor signage of national park walking tracks to get people of the the roads especially over the Horseshoe Bay hill. Utilising solar power generated to power the island rather than rely on supply from Townsville.
52	The high cost to commute to the main land I think residents shout be issued with a residents card and all business on the Island should offer permanent discounts say 10-15 percent of the cost of everything



53	Over burdening of basic infrastructure with tourism eg:roads. Plans to use National Park for a car park needs serious review. Waste management for locals and also the impact of tourists. Comprehensive back burn and management plans with all stakeholders on board and Community consultation and education. I could go on....
54	We need to encourage more use of solar power, increased use of recycled water, free dump shop where someone's rubbish is some else's treasure, maybe desalination plant, maybe a community market garden which would need to be fully fenced to protect from hungry animals, encourage planting of productive fruit trees of produce can be shared amongst community. Caring for elderly neighbours should be part and parcel of living on the islandbaby sitting clubs for young families without relatives nearby...encourage involvement in wide range of community based activities of which we already have many....show the world that we can live in paradise and tree gently on the earth. Continue to be an inclusive caring community....an end of life hostel facility would prevent us all from having to leave our island home when the time comes for us to depart our mortal body.
55	Energy, Water and Internet
56	The impacts of climate change on the environment, including impacts of more frequent and severe storms, and their impacts on people and the natural environment. Over population and unsustainable increases in tourist numbers, particularly with regard to transport impacts and the increased use of private vehicles and rental cars.
57	State of the roads and footpaths in the domestic streets
58	Being strategic around managing traffic - for example in a semi closed island environment why aren't we advocating for electric vehicles including hire vehicles and the island's buses.
59	WATER EROSION ON BEACHES RUBBISH
60	Population growth & high population turnover resulting in a high proportion of residents not understanding the environment they've come to live in or what's required (including of them) to protect and improve it
61	Lack of knowledge regarding recycling and general facts about the environment and climate change
62	Balance between the desire for strong tourism economy and the need to preserve conservation value of the island and surrounding waters. Development of port of Townsville desirable for economic security but damaging to the marine environment.
63	Energy efficiency, waste management, water catchment.
64	feral and domestic animal impacts on our wildlife
65	power generation, water, waste management, transport, food security
66	Reliance on water and power from the mainland
67	Preserving the environment
68	Beach erosion Increasing turbidity in cleveland bay
69	Transport costs, lack of action to resolve appalling roads to Radical Bay & West Point. (Two important destinatins on Magnetic island) Solar power off grid, water collection &destruction of feral cats & agile Wallabies
70	People that think the longer you have lived hear the more you are entitled to have a say in how the island is " managed "
71	Poor internet connectivity, reliance on one cable for electricity supply from the grid, poor standard of road and street surfaces, esp. HSB Road.
72	Care Homes for the Aged/ Infirm
73	Transport Costs related to transport difficulties (island)



74	Corporate businesses taking over pretty much everything in the economy and affecting the social structure of the island without contributing to the economy. All the profits from these businesses go "offshore" from the island.
75	Climate change
76	Heat Drought Sea level rise
77	Better, more resilient infrastructure
78	Water usage and run off
79	To keep its natural status regardless of the economic climate in and about it.
80	Tourism
81	Energy, Water, Waste, Transport, Food and Infrastructure
82	Waste management and Transportation
83	Protecting the reef, wildlife and flora. Also managing eco tourism to ensure carbon print is reduced,
84	planning & transport
85	<p>Environment, erosion - destroyed the beaches. Need to stack the sand up to protect the trees. Takes away from attraction of the island which may eventually affect the visitors returning. Horse Shoe Bay - comes a critical point when there are too many tourists - over loved. Limited parking. over the last few years - think it's linked to Lonely Planet which has put Magnetic Island on their list. Road going down to Radical Bay (Juniper's land) - road has deteriorated. No one wants to own it or do anything about it. Feels like everyone is passing the buck. Those bays are part of the attraction so it needs to be managed in a sustainable way. Access, toilets (controlled way other wise it will be trashed). Pristine Bays (naturally beautiful). Dont want them to be developed or it needs to be developed so that there's still access and not overdeveloped. Cant take Moke's down there. Koala track up to the fortes - Council have put up signage along the walk but noticing recently that the foot traffic has increased alot. Parking lot is being extended up there as well. Plan for more walking tracks - island would benefit from this as people love to do it. Wilderness and wildlife government officials resources are stretched and it's noticable as it's not being put into maintenacnce. People who are visitors to us - the island is spoilt by the huge buses on the road. Wonderful service as it meets every ferry. Cant go back to open air buses but the buses are so full and are too huge for the roads. Want buses that are half the size (twice as many bus drivers though) but it would help the roads not to be so noisy and the buses are huge and when you go over the hills its a shock. Lost the character it used to have. Convienient but not in keeping with the curly roads. Used to have a separate bus for the backpackers. Lots of backpackers come from all over the world (we love them). Some bus drivers are wonderful but one or two are an "embarrassment" and rude to the backpackers (too much money or no money). BUs system can be confusing, especially for the first time. Under pressure as they have to stick to their times. Some of them are grumpy and impatient. Need someone at the ferry terminal to help when people arrive. Idea to reduce the speed limit on the island from 60 to 50km/h - what are they gunning for? Lord Howe island is 40km/h. Lord Howe Island is limited to 500 tourists at a time. Control the number of people on island - maybe look at doing this here? People have talked about putting in a bridge from Townsville to Magnetic Island. Feel sorry for some business owners that spring up at parts of the island. After a year they closed because they arent viable. Change over of businesses. Rents are too high? too many shops for the population? Lots of little ones that dont survive. We need the tourists (cruise ships are coming in to Townsville), more and more visitors come in. need a critical mass to support those shops. Need to have the right balance.</p>
86	<p>I am not aware of any community awareness of or commitment to deal with these issues. To date waste management is being addressed independent of a sustainability/resilience agenda . Reactive action on environmental matters is aimed to achieve environmental sustainability. Resilience capacity is strong in response to extreme weather events but this is not perceived a such - is just the way the community operates. Commitment and effectiveness of emergency services is very high, including volunteers in SES and regional fire service. Under pressure this is a very caring community. Outside of the emergency services, the important issues for sustainability and resilience to my knowledge have not been identified are not talked about and there is not any action plan fore these. That is the issue.</p>



87	Recycling.energy.better drains. Smaller buses speed restriction. An environment for show casing everything our island offers and showing all the action group that help keep our island in a natural condition. The general tourism and community groups. A place to store and make fundraising and sort and fix things that assist the action groups endeavour. Educate people tourist and school groups.
88	Coastal erosion, storm surge, cyclone damage, coral bleaching (phase shift of reefal communities). Also groundwater (freshwater) in the longer term - lots of bores being drilled over the past few years which is currently unregulated nor monitored. All of the island waste is removed from the island. We can do much better with waste management, particularly reusing, repurposing materials. Food waste going to landfill is a big issue. We should be harnessing this precious resource and setting up community composting initiatives - such a bio-digest (such as those established at JCU in Townsville).
89	over-population, tourism, pollution
90	Energy, transport and limited space (for visitors)
91	Lack of jobs, income and education. The Island economy is too dependent on tourism and it is erratic. The workers tend to be low paid and with minimal education. In recent times the Island has attracted a feral population, that is - rough people who have little respect for others. This is not meant to be a sly comment on welfare recipients. Ferals are from all socio-economic classes. They are rough, ill-mannered and untrustworthy.
92	Energy generation and storage, water conservation, waste management, increasing visitor pressures on the natural environment
93	waste disposal (e.g. not enough avenues for recycling & adequately re-using items that needlessly end up in land fill); litter/pollution on beaches & waterways; too many cars; too much land clearing for urban expansion and light industry
94	over- and inappropriate development
95	Sustainable population growth
96	Ensuring more people continue to make Magnetic Island their home and job opportunities are available for people of a working age. Job opportunities don't have to be physically located here, if the internet was faster and more reliable, it would open the door for more remote working opportunities.
97	Water wastefulness; planting of exotic species; beach erosion
98	Rubbish and transport
99	Inappropriate development with little regard to existing or planned infrastructure , port expansion and dredging of the channel impacting silt and sedimentation of Island beaches which will impact local coral, little recognition from local government of the importance of the diversity and natural assets of the Island on tourism income for the region, increased tourism on the Island without taking into account the impact on the islands natural assets.

Q8: Do you encounter any environmental or plant/animal issues on the Island? E.g. Insects invading homes or salt corrosion

ANSWER CHOICES	RESPONSES	
Yes	77.48%	86
No	22.52%	25
TOTAL		111



#	IF YES, PLEASE DESCRIBE THESE ISSUES:
1	Salt corrosion for any building that is subject to the prevailing winds is a fact of life. However, with the new building materials available, this can be mitigated in new-builds or renovations. This does involve designers and builders (and those paying the construction costs) to think beyond the traditional building square, something of which there is very little evidence on the Island at present...! Mosquitos can be uncomfortable in the west season, appropriate planting adjacent to property can do much to mitigate their unpleasantness, as can the use of screening.
2	Invasive weeds
3	Rust
4	Erosion of top soil due to poor road infrastructure
5	See above question
6	Qp&w unable to keep up with required track maintenance caused through increasing number of people walking or cycling that tracks. Swathes of Singapore daisy and mother in law tongue in empty house blocks and Creek Banks. Native animals constantly at risk through uncontrolled and unleashed dogs and cats
7	Salt corrosion on tapware & fans
8	The wallaby population is out of control in Horseshoe Bay, destroying the public parkland/oval.
9	Uncontrolled domestic animals especially wandering cats. Other feral animals such as cane toads, and Indian Mynas. It should be possible to eradicate and manage these pests on an island.
10	Feral cats and agile kangaroos
11	Salt corrosion, nothing more than you'd expect in an island environment. Mosquitos, flies and sandflies. Again, expected in this environment. A small portion of tourists either don't know or don't care about lighting bonfires, driving on beaches, leaving litter around. Responsible pet ownership is an issue. Many cats are let roam at night and lots of people allow their dogs off leash in public areas.
12	Dogs of leash are a chronic problem particularly on beaches. Domestic and feral cats killing wildlife, invasive plant species (lists well documented), cane toads, non-native to Magnetic Island wallabies growing in large numbers and spreading from Horseshoe Bay.
13	Hotter temperatures are giving Island residents plants and wildlife new challenges of survival eg water shortages Heat stress
14	Salt corrosion
15	The wallabies that are feral to the Island that are destroying the environment and have bred to huge numbers
16	Lack of Green Waste Collection, Termites, Mould in Wet Season
17	Derek cats and issues with dogs
18	Derek cats and issues with dogs
19	There is a big trend recently towards building 2m high timber paling fences around housing properties. These fences prevent fauna, such as Curlews, Orange Footed Scrub Fowels, Echidnas etc from foraging widely as they were used to doing. These animals and birds only exist on the flat land of the island, and can not simply be moved up into the islands high slopes. As high fences increase, these animals will lose environment and die out.
20	Flying ants only in season
21	- overrun with wallaby (HSB)
22	I live an outdoor lifestyle. I live on an island with 75% national park so accept living with wildlife and natural environment. I manage any impacts
23	Dumping of rubbish and feral cats
24	Mould during wet, white ant prevention ongoing, death adder awareness



25	The place is full of weeds e.g. lantana, snake weed, rubber vine
26	Dogs off leashes are an issue attacking wildlife
27	Some introduced plant species taking over natural areas such as moth in laws tongue
28	Too many domestic animals harming wild life.
29	Invasive weeds Crown of thorns starfish Uncontrolled pets cats
30	Cockroaches
31	Insects but only sometimes.
32	Have an issue with rats and mice, the only salt issue comes with living across the road from the water and I expected that.
33	Feral cats (big numbers) and invasive plants, foreshore erosion and clumsy attempts to prevent this.
34	Yes. We have a number of species of termites on the Island. Only 2,affect houses and require preventative treatment.
35	Dredge spoil washing up to shore Plastics and pollution washing up to shore
36	Termite and ant infestation
37	Weeds are very persistent as are the mozzies and flies
38	Normal in the tropics.
39	Wallaroos in Horseshoe Bay have eaten all my garden as I am not fenced
40	Lantana, coral vine is all through the national parks. Salt corrosion is always an issue living close to the sea
41	Ants
42	Salt/termites are always an issue: Cars, door handles, gates, fencing, houses, furniture.
43	Salt corrosion s inevitable when living on an island. We have fully screened our verandahs and outdoor living areas to minimise insect invasion as well as possum and wallabies wanting to share with us. Even snakes occasions like to visit. Usual problems with ants and cockroaches.
44	Ants , Mosquitoes, Possums, Some salt corrosion
45	Invasive weeds are a significant problem across the island. Land clearing on private blocks of land including the removal of significant trees.
46	Little tiny ants invading the dry food cupboards
47	Noisy, smelly diesel buses. Weed invasion. Ensuring no spillage of materials from the Kelly St cement/concrete production site.
48	FLYING ANTS AFTER RAIN TOADS TERMITES NATURE STRIP AT FRONT OF HOUSE - ERODED AND UNEVEN
49	Weeds and non-native plants escaping into the bush. Feral cats are a huge problem
50	Salt corrosion on vehicles
51	Cats attacking wildlife. We are cat lovers, however we feel that given MI is mostly national park we have a responsibility & that a strategy to make the island cat free needs to be created.
52	some of our steel supports have rust
53	uncontrolled cats & dogs, weeds,
54	Invasive weeds such as Sansevieria, Mother of millions, Lantana, Singapore daisy.
55	Termites
56	Termites



57	Sea mist..
58	IDIOTIC burning of bush on large scale
59	Weed infestations; ant and termite damage
60	Salt corrosion of house foundations
61	Weed infestations of Sisal plant (<i>Agave sisalana</i>), mother-in-law's tongue (<i>Sansevieria trifasciata</i> , Traveller's palm (<i>Ravenala madagascariensis</i>) and others. Also, the introduction of Agile wallabies (<i>Macropus agilis</i>) onto the island over a decade ago had resulted in a huge population explosion of them in Horseshoe Bay where they out-compete the native Allied Rock wallabies (<i>Petrogale assimilis</i>) and are a traffic hazard, causing accidents and sadly resulting in much suffering on the part of the wallabies themselves.
62	Recent controlled burn was a disaster and lacked community consultation
63	termites
64	March flies, sand flies, wallabies and possums eating the vegetables, people dumping roosters in the mangroves
65	Wallaroos digging up the football ground
66	Too many to answer to! But that is the very environment that we must learn to exist in. In all my years here and looking back the only real problems have been caused by Man and generally because of an economic reasoning rather than a "Natural whole of area" and "Future" sensible reasoning.
67	Not serious. Quite manageable. Termites, ants, mosquitoes, midges.
68	Ants, Geckos, cockroaches, flies, mildew when it rains for days
69	Salt corrosion is normal if you live near the sea. It particularly affects anything made of iron or metals.
70	salt corrosion, feral animals, weeds
71	We're not fenced but have a lot of wallabys come in to the garden. Cant let Grandchildren play on the grass because of the poo. Dont want to fence the yard.
72	* Threats to island's World Heritage environmental values from Development proposals, infrastructure development and Council planning policies * Negative impact on coral and seagrass/benthic communities in waters surrounding MI from increasing sedimentation from maintenance dredging of channels of Townsville Port *Weed infestation/pests in MI National Park and of course the urbanised lowlands, although volunteer action is only authorized in the National Park; * Erosion impact on island bays eg Nelly Bay, Geoffrey Bay, Horseshoe Bay * damage to native fauna and bird life from both domestic pets and feral dogs and cats; *damage to native fauna and bird life from traffic - high road kill *impact on the island's natural World Heritage environment from overuse eg 4 wheel driving, camping and fires on beaches
73	Weeds in the parks and beaches
74	Feral cats are a large problem. Domestic cats should not be allowed outside. Canetoads are also an issue but in theory should be able to eradicate given there are no permanent water bodies on the island. Salt corrosion is an issue and often causes rust.
75	Noise from entertainment venues, party houses and leaf blowers. Increasing amount of waste (mainly plastic) washing up on beaches, and being left by tourists. Dredge spoil washing up on beaches, covering coral etc. Road traffic noise and speed. Native animal road kill.
76	Weed infestation; feral animals (agile wallabies, cats)
77	termites, feral humans
78	Cane toads, weeds in garden, water rate predation on aquaponics, possum/wallaby predation of my food plants, salt corrosion



79	lots of weeds on the island - often garden escapees - e.g. Singapore daisy, Mother in Law's tongue. Feral cats cause havoc with native animals; unmanaged dogs roam into national parks and bushland attacking native animals; toads are common
80	(Many) Feral cats in the Park & on Crown Land (Many feral plants on road verges and at the end of any seasonal water course
81	Just rust really.
82	Neighbours feeding native birds and animals; beach erosion in Nelly Bay
83	Termites, rust, hairy caterpillars
84	A great big bamboo clump in the creek behind my property

Q9: Please select which of the following features your house has:

ANSWER CHOICES	RESPONSES	
A/C unit	75.00%	84
Dishwasher	59.82%	67
Washing machine	96.43%	108
Dryer	54.46%	61
Television	91.07%	102
PV panels (solar power)	39.29%	44
PV panels with battery	7.14%	8
Solar hot water	24.11%	27
Gas hot water	21.43%	24
Electricity hot water	57.14%	64
Water tank/storage	15.18%	17
Efficient lighting	75.89%	85
Energy efficient appliances (energy star)	71.43%	80
Water efficient appliances	45.54%	51
Diesel generator	12.50%	14
Wind energy	0.89%	1
Passive design	59.82%	67
Insulation	59.82%	67
Electric vehicle charger	0.89%	1
Please specify if other or if you have multiple of any of these choices	15.18%	17
Total Respondents: 112		



#	PLEASE SPECIFY IF OTHER OR IF YOU HAVE MULTIPLE OF ANY OF THESE CHOICES
1	Petrol generator for post-cyclones only.
2	Bore water for garden irrigation and filling pool.
3	We are about to install solar - had to replace the roof first; plus we have a small petrol generator for temporary power loss
4	I rent so have no control over appliances and systems in the house
5	Shortly will have them all
6	Swimming pool
7	Electric hot water is just a back-up to the solar.
8	Bore water used for garden pool etc.
9	Pool pump but it has 8 stars for energy efficiency
10	Petrol generator
11	2 TVs and Four computers
12	Two electric bikes.
13	water efficient - timed irrigation (not drip system). Neutral with electricity costs. Shading from trees, veranders and shading, light coloured roof. .
14	Just one
15	Note - this is a planned house - to be built soon
16	ceiling fans, swimming pool
17	The body corp does not allow solar panels, which is profoundly annoying

Q10: In general, how old is most of your large electrical equipment?

ANSWER CHOICES	RESPONSES	
>1 year	5.36%	6
2-4 years	44.64%	50
5+ years	33.04%	37
10+ years	11.61%	13
I don't know	5.36%	6
TOTAL		112

Q11: What would make you invest in sustainability/energy efficient features in your house?

#	RESPONSES
1	Knowing that there are reliable maintenance tradesmen on the Island.
2	Will do as part of renovations. Need time and money
3	Government initiatives - supporting solar
4	Financial affordable
5	Cheaper to purchase to implement or incentives



6	I do now
7	Climate change, lower costs
8	Larger income
9	Cost reduction although I do look at efficiency too.
10	Affordability
11	Price
12	Affordability of appliances
13	Efficient and effective battery storage for solar power.
14	Reducing reliance on coal power, saving \$
15	Waiting for battery prices to come down before purchasing
16	Rebates
17	Work opportunities
18	Government Grants
19	Price, value
20	Financially viable, within means
21	Financially viable, within means
22	Price of items.
23	Subsidy, reward system eg not used all your power, get discounted on your bill
24	Higher eco rating appliances
25	- If I owned my house I would have a larger investment, but I try to buy energy efficient appliances.
26	I took full advantage of the solar cities program subsidies and green loan. Helping people with lower incomes afford these options is always good.
27	Solar power independent, with wind generation back up and gas for cooking and heating water
28	Improved subsidies
29	financial assistance
30	Subsidies
31	Rebates on solar panels
32	Better solar subsidy and better rate for solar power made. Sharing solar power with a grid of neighbours
33	Price reduction through community bulk buying.
34	Rebate
35	Have solar
36	Getting a better deal for power if we install Solar currently the returns fro Ergon Energy are terrible and is no incentive to pay to install it. I have heard they need to install another cable across from the mainland to handle demand, surely a better deal on feedback tariffs is a more sensible option.
37	Good returns on investment. waiting for cheaper batteries
38	A return of the Government subsidies
39	I am renter so it's not affordable and there are no incentives for renters
40	Suitable energy efficient appliances available when the old ones wear out.



41	As it is a rented house the infrastructure would belong to the owner. New appliances in the future I will be very careful in their energy rating and sustainability
42	Government assistance....I'm a pensioner.
43	thinking about it in the future
44	affordable safe solar, (better rebate)
45	Cost
46	To live a cleaner life, less waste - reduce carbon footprint
47	money
48	Cheaper electricity
49	Rebate incentives or a lotto win
50	Government subsidies help and make sense because it means we don't need to rely on the grid.
51	Efficiency and Price (possible rebate)
52	Government subsidies to lower the cost. A meaningful federal energy policy.
53	I rent
54	Subsidies and incentives
55	ACCESS TO FUNDS
56	Only those that a renter would invest in
57	Low cost
58	Reasonable "pay back" period. We spent approximately \$15,000 on solar power and water infrastructure and anticipate that this will cover our energy needs for the future
59	We are in the process of selling our current house & rebuilding, creating a space that's 'off the grid' with solar, water catchment etc. We'll have connection to grid for backup purposes only.
60	cost
61	the government seriously committing to reducing the effects of climate change. I have already done what I can.
62	environmental concerns and cost
63	Promotions by government and reputable organisations
64	\$ saving
65	Already have it..no power available
66	cost and mean return
67	Already have done so.
68	Cost effectiveness.
69	Nothing
70	Grant
71	Lower cost
72	When old ones bread down.
73	More information. Fewer trees for solar panels but this would heat the house, so prefer the trees and low power usage



74	lower electricity charges
75	I already have
76	Cost
77	The word "Make" says it all when you increase the prices of energy which forced me to supplement with solar. Solar farms are ok but individual PV systems are already causing safety issues with fire and falls from the roof and electrocution by having so many people exposed to the electricity. We have community police, schools, hospitals and should have community power generation. Investment in more efficient power generation like using the Earth's magnetic field to assist in generation etc. Singapore also uses scraps to feed the boilers and has scrubbers on the chimneys????????? why not use coal with scrubbers???? I don't know the science behind scrubbers.
78	Free Installation of Solar and Battery with reduced electricity charge cost but only from a Community based Generator/Retailer so the small profits go back to support other community initiatives
79	Spare cash
80	we are constantly addressing issues and work hard at cutting down on use.
81	Cost
82	Changed all of the lights to LEDs - result of the solar initiatives. BioCycle (dont use the STP system). Compost waste and mulch all the palm leaves. Just come in and take the mulch (it's free).
83	Investing on an ongoing basis - waiting on reduction in price of storage battery. Intent is to purchase an electric scooter and in time, if not overtaken by technological public transport development, and electric or hybrid car. Already have invested in a solar powered DC pool pump
84	Cost
85	yes always
86	The right balance between sustainability and usability.
87	Demonstrated benefit, both financial and environmental
88	N/a already invested
89	We would have invested in solar panels if it had been a fair deal and not simply taking over our roof structure for the financial benefit of the energy company.
90	affordability, easy of purchase (delivery to home), I will as the old appliances die, more information on wind power generation, ability to operate off grid, affordable battery storage
91	Lower electricity bills; heavy subsidies for efficiencies
92	increased energy costs
93	House is a rental. All I will invest in is appliances
94	Time - we've only just moved here and will eventually get round to upgrading to more efficient options.
95	Permission from the body corp; govt subsidy
96	I am going to increase the number of solar panels I have with a view to being battery ready.



Q12: What would motivate you to reduce energy use and emissions? Please select any that apply:

ANSWER CHOICES	RESPONSES	
Reduced bills	80.37%	86
Reduced environmental pollution	70.09%	75
More efficient appliances	58.88%	63
Community led education and awareness program	29.91%	32
Government grants or subsidies	70.09%	75
Not important to me	2.80%	3
Total Respondents: 107		

#	OTHER (PLEASE SPECIFY)
1	Knowing that there are reliable maintenance tradesmen on the Island.
2	Additional providers to provide competition and choice.
3	Better connected safe shared bike and walking paths
4	I have tried when building to make my house as sustainable as possible
5	Jobs that support this move
6	\$25000.00 to connect to power that is 100 meter and two poles!
7	Better feedback tariffs for solar power
8	Working in harmony with nature to harness water, energy, food production etc.
9	I think it is the other way.... the horse has bolted present day economics, compared to the 1960's say we can afford airconditioners were as in the 60's & 70's we were flat out being extravagant with ceiling fans. More efficient power generation is what is needed. I don't think solar is the answer but might be an interim.
10	Community owned Power generation and retailing
11	It is critical to educate people on how best to make their carbon print on the island. This gives them the ownership of their actions and motivates people to share their knowledge. eg zero waste.
12	Bills are already reduced. Water is kept within the allowed limit. Not much else they can do really.
13	Already done
14	Community power storage and micro grids
15	Longevity of appliances (less inbuilt obsolescence)
16	I already do everything possible to conserve energy, e.g. never use the aircon, full LED conversion, etc
17	Efficient and sustainable public transport



Q13: Approximately how much do you pay for electricity every year?

#	RESPONSES
1	\$600
2	1500
3	\$800
4	\$1200
5	\$2000
6	\$4,000
7	1200
8	1600
9	\$900ish
10	\$1500
11	\$2500
12	Nothing due to solar panels and govt rebate
13	\$2000
14	\$400 plus
15	\$1000
16	\$900
17	\$1000
18	800
19	1200
20	\$500
21	Na
22	\$1000
23	\$0 included in my rent, (\$1300p/a)
24	2500 dollars
25	2500 dollars
26	\$500
27	1200
28	3000
29	1600
30	1000
31	Normally \$1000.00
32	\$1200
33	1000
34	\$2400
35	\$1200
36	\$600



37	\$50
38	\$1000
39	800
40	Not much as we have solar panels
41	2500
42	1000
43	\$2000
44	3500
45	\$500 or less
46	\$2000
47	1400
48	\$800
49	\$2900
50	\$1,500
51	1500
52	2000
53	Less than \$1500
54	\$1400.00
55	800
56	1400
57	\$350.00
58	\$1,000
59	\$2,000
60	less than \$1,000
61	Too much, my last major summer bill was \$680.00 though I have moved to a better cooler house. I have health issues and I am on chemotherapy.
62	\$1,400
63	\$1,400.00
64	about \$1200
65	Too much
66	0
67	\$1000-\$1200
68	1600
69	\$1000
70	\$2200.0 this also covers work equipment such as 3 phase kilns
71	Not sure
72	\$ 1600
73	Nil..but amatize solar battery \$500pa
74	1500



75	\$1200 per year but recently installed PV with battery- yet to receive an account for usage since its installation.
76	\$1200
77	\$1,100.00
78	\$1200
79	around \$1200.00
80	\$3500
81	\$360
82	\$600
83	\$2500
84	\$2000.00
85	\$700
86	\$4000
87	\$800
88	nothing we generate it
89	\$1,300
90	\$0
91	0
92	\$ 6000
93	\$800
94	\$1750
95	1000-1200
96	1200
97	\$1200 per annum
98	\$1200
99	1200
100	Not sure
101	\$600
102	\$150-
103	\$1200

Q14: Do you consider energy efficiency ratings when purchasing new equipment/appliances?

ANSWER CHOICES	RESPONSES	
Yes	96.40%	107
No	3.60%	4
TOTAL		111



Q15: Do you have a pool or jacuzzi?

ANSWER CHOICES	RESPONSES	
Yes	36.94%	41
No	63.06%	70
TOTAL		111

Q16: Do you share any energy generation equipment with your neighbours? E.g. generators or batteries

ANSWER CHOICES	RESPONSES	
Yes	3.64%	4
No	96.36%	106
TOTAL		110

#	IF YES, PLEASE DESCRIBE:
1	Rental complex
2	if we have a mojour weather event our generator is big enouh to help most of our neighbors out
3	generator in times of power outages.
4	IT IS ILLEGAL!!!!!!!

Q17: Are you aware of or do you participate in any incentive schemes that encourage energy efficiency?

ANSWER CHOICES	RESPONSES	
Yes	25.23%	27
No	74.77%	80
TOTAL		107

#	IF YES, PLEASE DESCRIBE:
1	We have a shared pool between several households on a body corporate piece of land
2	Feed in tariff for solar energy.
3	Solar rebate from govt for energy produced with solar panels
4	payback from solar array
5	solar
6	Recently put solar panels on roof
7	Recently put solar panels on roof
8	just signed up to TCC water wise program



9	Ergon payment plan/ solar energy
10	Solar
11	Solar
12	Solar Cities Scheme, Energy Audit, Water Wise - was very hard to access TCC incentives from the Island
13	Lighting & water saving devices
14	Subsidies for battery solar
15	solar power, water wise-saver packages
16	Remote fuel subsidy to top up batteries
17	I understand this to answer the question
18	We participated in the Solar Cities program but not much more we can do now.
19	On principle alone, actively participated in rooftop solar generation as part of Solar Cities Scheme roll out on MI by Ergon and TCC.
20	Magnetic Island Solar City initiative .
21	I'm aware of them but unable to participate due to body corp rules
22	Solar city

Q18: Approximately how much rubbish do you generate every week?

ANSWER CHOICES	RESPONSES	
More than one wheelie bin	4.46%	5
One wheelie bin	24.11%	27
Half wheelie bin or less	71.43%	80
TOTAL		112

Q19: Do you recycle items such as plastic, paper and glass?

ANSWER CHOICES	RESPONSES	
Yes	96.43%	108
No	1.79%	2
If not, please provide details	1.79%	2
TOTAL		112

#	IF NOT, PLEASE PROVIDE DETAILS
1	Not since drink container scheme.
2	don't have much



Q20: Do you compost kitchen scraps?

ANSWER CHOICES	RESPONSES	
Yes	72.32%	81
No	27.68%	31
TOTAL		112

Q21: Do you use Council facilities (waste transfer station) to dispose of your rubbish?

ANSWER CHOICES	RESPONSES	
Yes	90.00%	99
No	10.00%	11
TOTAL		110

#	IF NOT, DO YOU ARRANGE FOR YOUR OWN RUBBISH TO BE TRANSPORTED OFF ISLAND AND HOW MUCH DOES THIS COST?
1	all our domestic rubbish is collected weekly by the council. larger items are taken to the mainland when using the barge to go to town
2	I DON'T USUALLY HAVE ANY EXTRA RUBBISH. I USED THE KERBSIDE PICK UP EACH YEAR FOR ANY LARGER/SURPLUS ITEMS AND THE GREEN WASTE FACILITY WEEKLY FOR PALM FRONDS.
3	No
4	that's an ambiguous question - we have regular bin service. Did you mean do you use a transfer station when you have EXTRA rubbish?
5	Use the tip every now and then - dont have a trailers. We had a car that we used on the island and the fire brigade used it to practice it on.
6	Only council waste pickup or major event clean-up (e.g. cyclone or the rubbish from essential building work for which we pay extra to the tradesperson to remove the rubbish) - we compost kitchen and garden waste.

Q22: Are you aware of or do you participate in any incentive schemes that encourage waste reduction?

ANSWER CHOICES	RESPONSES	
Yes	44.04%	48
No	55.96%	61
TOTAL		109

#	IF YES, PLEASE DESCRIBE:
1	Redcycle
2	Containers for change
3	zero waste



4	Lids 4 Kids, Envirobank
5	10c return on bottles and cans etc
6	Containers for change
7	Collect bottles for charitydishwasher
8	Zero Waste centre
9	10cent plan
10	Bottle recycling at school
11	Can and bottle recycling
12	Zero waste
13	Container refunds and soft plastics
14	Use oportubities to recycle soft plastics, batteries, green waste, deposit containers etc
15	Zero waste Magnetic Island
16	Soft plastic recycling, can and bottle recycling
17	Zero waste collection of recyclables
18	redcycling
19	I collect waste products for upcycle art projects.
20	Recycling of bottles and cans
21	envirobank, terracycle, zero waste
22	cash from recycled cans goes to state school fund
23	Collect alum cans
24	Use TCC pick up dsys
25	Zero Waste Magnetic
26	We have two Recycle wheelies as my Dialysis creates lots of plastic waste.
27	Waste watchers, recycling
28	Bottle transfer stations
29	Drink containers, batteries, printer cartridges, soft plastics collections.
30	MICDA Zero Waste group on the Island
31	Im actively involved in Zerowaste on the island
32	Green waste into general waste - not green waste collection. 1 wheelie bin a week of general waste but half of it would be green waste. Then a yellow top recycling bin goes out every fortnight but not always full. Dont participate in the container scheme as they dont drink that sort of stuff.
33	recently introduced Container Refund Scheme - containers for refund donated to MI Bowls Club
34	O waste
35	I compost excess kitchen waste generated in our street.
36	Containers for change
37	container deposit scheme
38	not aware of any
39	Envirobank, Terracycle,
40	can recycling



41	Soft plastics recycle at Fish n Fueln
42	Aware of them but don't participate becoss I already have minimal waste
43	Zero waste, containers for change, battery recycling
44	Redcycle, Envirobank

Q23: What are your main water consuming activities? (E.g. gardening, showers, laundry, washing, etc.)
Please describe

#	RESPONSES
1	NOT gardening, just general household activities in a careful household
2	Showers, laundry.
3	Garden
4	As above
5	Shower Laundry Dishwasher Gardens
6	Laundr9
7	Showers, laundry, kitchen, garden
8	Washing, showers, garden watering
9	Gardening, washing up, laundry
10	Showers Washing Sprinkling garden Washing car Washing house
11	Showers Garden
12	Garden
13	showers, laundry. We don't water the garden (dry tropics)
14	Pool gardening wash laundry
15	Laundry, Gardening, Showers, Dishwashing
16	gardening, laundry, showers, toilet and dish washer
17	We are always aware of our water consumption and try not to waste it.
18	All above mentioned
19	Laundry, showers, dish washing
20	Dishwasher, shower, laundry, limited timed sprinklers
21	Washing machine and watering plants and yard
22	Showers, laundry and gardening
23	Pool, showers, garden
24	Gardening, showers laundry
25	Gardening, showers laundry
26	Gardening, showers, laundry, washing, etc.
27	Laundry, dishes and shower
28	Showers laundry
29	garden, bathing, washing, dishes, cleaning



30	Gardening probably. I use very little water as possible as have planted natives.
31	House hold
32	Showers, washing, laundry, dishwasher, garden reticulation
33	shower laundry
34	Gardens
35	dishwasher
36	Showers laundry and garden
37	gardening
38	Showers laundry toilet
39	Shower, laundry and washing (hand wash) as dishwasher broken
40	household activities
41	Showers toilets laundry irrigation
42	Washing
43	Gardening, showers laundry
44	Pool, washing and showers
45	Showers, laundry, dish washing, some watering
46	Household - showers, laundry
47	Showers
48	Showering, laundry, gardening
49	Showers, laundry and small amount on the garden
50	Showers, Laundry, washing, drinking, cooking. Garden is mainly watered from the bore.
51	normal household water usage
52	all of the above
53	Personal hygiene, laundry, garden
54	laundry & showers
55	gardening
56	All of the above and topping up the pool occasionally
57	We use recycled washing water on the gardens (buckets) we have dedicated drinking water tank take short showers and no dishwasher.
58	All of the above
59	Household use (showers, toilet laundry etc), minimal gardening
60	Shower laundry washing garden
61	gardening, showers, laundry
62	GATHER FULL LOADS FOR WASHING MACHINE USE COLD WATER FOR WASHING WATER GARDEN AS PER COUNCIL REGULATIONS SHORT SHOWERS TOILET FLUSHING - WATER SAVING BUTTONS
63	showers, laundry, washing
64	Household - washing, showers, laundry
65	Gardening
66	Showers, laundry, kitchen & garden



67	showers and laundry
68	laundry, shower, garden
69	laundry
70	Garden washing
71	Toilet shower
72	Washing, showers garden
73	garden
74	Showers, laundry, garden
75	Showers, Laundry,
76	All of above
77	gardening, showering, pool, laundry
78	Gardening
79	All of the above
80	i person house so most used on garden
81	domestic
82	Showers Washing Gardening
83	Laundry, showers, dishes
84	Garden, Laundry
85	Showers and baths.
86	Showers, Laundry, drinking
87	All of the above.
88	shower water goes into a store and we pump weekly onto garden. We also put grey water from washing machine onto the garden
89	showers, laundry, gardening
90	Gardening and laundry.
91	showers, laundry, occasional pool top up, very little on gardening - ,mostly use tank water with watering can
92	Showers baths washing dishes and clothes watering plants don't do grass
93	showers, laundry, swimming pool top up, garden
94	Showers, laundry, washing, toilet flushing, some minor irrigation
95	gardens
96	showers, laundry, dishwashing, some gardening but we are small users
97	Greywater re-use on the garden, aquaponics for food production, hand watering
98	gardening, showers, dishwasher, laundry
99	domestic uses
100	showers, laundry, washing
101	Showers and laundry
102	Normal minimal household water use; I mulch heavily and minimise lawn.
103	Showers and laundry
104	washing, laundry, showers, garden



Q24: Do you utilise rainwater capture at your property?

ANSWER CHOICES	RESPONSES	
Yes	18.02%	20
No	81.98%	91
TOTAL		111

Q25: Do you have any water saving appliances or features? Please select all that apply

ANSWER CHOICES	RESPONSES	
Dual flush toilets	91.67%	88
Low flow showerheads	66.67%	64
Low flow taps	29.17%	28
Efficient garden sprinklers	47.92%	46
Total Respondents: 96		

#	OTHER (PLEASE SPECIFY)
1	Bore water
2	Electronic irrigation set for evenings
3	Low volume toilet cisterns
4	we have our own well on the property and use it for all garden watering
5	I don't have water sprinklers
6	Not sure of irrigation as live in apartment complex
7	We don't water the garden
8	We have a composting toilet- so no water is used for flushing. We fill our well from rainwater tanks to increase its capacity. We use this as much as possible to water gardens. We are very water conscious- short showers etc
9	no sprinkler just using the hose
10	Some taps are low flow. I have ordered the efficient garden sprinklers through Council incentive but have yet to organise collection and transport to Island
11	BUCKETS WHEN IT RAINS
12	Wicking garden beds which stop evaporation and direct water to beneath the soil
13	low flow soaker hose
14	Use roof water 100 percentage
15	no hot water except in shower and this instantaneous HW
16	Bore and storage tank for garden and outdoor use
17	Natural garden requiring minimal water.
18	Bore water for garden



19	Do have sprinklers that go to individual plants, nothing else though. No insecticides.
20	We have also build swales in our garden to capture rain in the wet season.
21	Not yet decided - but definitely will not have grass to water.
22	Own bore for garden use
23	Strong conservation values, so I minimise water use e.g. 2 min showers, reuse shower and sin water on garden

Q26: Do you consider water efficiency ratings when purchasing new equipment/appliances?

ANSWER CHOICES	RESPONSES	
Yes	85.59%	95
No	14.41%	16
TOTAL		111

Q27: Do you maintain household piping to prevent the impacts of rust or salt corrosion?

ANSWER CHOICES	RESPONSES	
Yes	34.26%	37
No	65.74%	71
TOTAL		108

#	IF YES, HOW OFTEN?
1	Continuously. Not difficult to hear the water meter ticking when nothing is running
2	6 mthly
3	As required
4	As required
5	pipes are now all pvc
6	I regularly observe piping and fittings. Atleast monthly.
7	Not yet but noticed it needs work and we have only had the property less than a year
8	Not sure what you mean by 'piping', but we are very rust conscious having spent many years at sea
9	Yearly
10	When required
11	check pipes yearly
12	My house is new. But I would do it yearly after 10 years.
13	Internal flexible piping & taps every 5 years approx
14	I think you mean cleaning out the gutters? If so, about twice one year. Or when necessary.
15	Annually to stop wadtage



16	Continuously
17	Continually
18	water goes into garden
19	as necessary. With modern plumbing rust is hardly an issue.
20	Plastic pipes but not much corrosion but if there's links we fix it.
21	Every 2 yrs
22	Not sure
23	external piping is poly, internal is copper
24	Annual inspection
25	house has been completely repiped less than 10 years ago.
26	Haven't started maintainace yet
27	Monthly
28	6 monthly

Q28: Do you have a septic tank?

ANSWER CHOICES	RESPONSES	
Yes	45.54%	51
No	54.46%	61
TOTAL		112

#	IF YES, PLEASE PROVIDE DETAILS:
1	Recently pumped out and new trenches dug
2	Plastic
3	??? It's a septic tank in the back yard.
4	maintained by landlord
5	Septic
6	We have a composting toilet
7	its been ther since the house was built in 1970
8	smart, use recyle water on garden
9	An enviro septic. It's a Passive system
10	general septic- no sewer line to house
11	Bio cycle tertiary treatment plant
12	SEPTIC TANK INSTALLED WHEN HOUSE WAS BUILT IN 1994
13	In our current residence we have no access to mainstream, so septic tank in back yard.
14	Biocycle
15	Not sure of details



16	Biocycle tertiary water treatment plant
17	It's a Septic tank!!!
18	Not sure of details as I rent
19	Old and smelly
20	Very old style septic tank.
21	BioCycle. Bought the house like that - Hailes avenue doesnt have STP connection.
22	Not a septic but a bio cycle system - no waste water - grey water used for garden, fruit trees
23	It works well
24	Bio septisc
25	Not allowed - council forced us to change to the sewerage system at great inconvenience and cost to us with very little benefit
26	Basic septic

Q29: Are you aware of or do you participate in any incentive schemes that encourage water usage reduction?

ANSWER CHOICES	RESPONSES	
Yes	33.64%	37
No	66.36%	73
TOTAL		110

#	IF YES, PLEASE DESCRIBE:
1	Water restrictions
2	TCC program
3	Handwater gardenshort showers
4	Grey water from washing
5	Council water wise program
6	Only watering in allowed days
7	Short showers and shower with a friend
8	TCC water wise
9	When council introduces water rationing for gardens
10	Have applied for Townsville Council 'Water Smart Package.'
11	Council prescribed restrictions
12	I reuse water from my washing machine for plans and grass. I have an automated system for much of the garden and operate within Council guidelines
13	TCC incentive scheme
14	Townsville City Council scheme
15	water saver
16	Townsville Water Wise program



17	2 4WD diesel
18	Council water restrictions
19	Normal Council Restrictions.
20	Second time this question has been asked!!!
21	Mulching garden
22	Trying to register for tcc waster saver campaign.
23	watersmart
24	Yes but not officially, we stick to the restrictions that the Council imposes. Allowed to water for 2 hours twice a week.
25	*Residence has a biocycle system for sewerage - no waste water - used for garden, so mains water not necessary for garden maintenance; have applied for current Council Water Wise program financial support for improved water use
26	Council water supply rules are restrictive. We should be able to pay for less water in the part of the year that rainfall is high and more in the dry season when we need more for gardens and personal use. There is very little difference between paying for an excessive annual amount or paying for the low cost option which gives you less than half the quantity. Our problem is an inefficient and controlling Council.
27	TCC waterwise project
28	Townsville City Council Water Wise
29	Aware of schemes but have my own systems in place
30	Water watcher with local council

Q30: How many vehicles do you own?

ANSWER CHOICES	RESPONSES	
1	51.38%	56
2	34.86%	38
3	11.01%	12
4 or more	2.75%	3
TOTAL		109



Q31: Do you own any of the following vehicle types? Please select all that apply

	SMALL (PETROL)	SMALL (DIESEL)	LARGE (PETROL)	LARGE (DIESEL)	HYBRID	ELECTRIC	N/A	TOTAL	WEIGHTED AVERAGE
Car	58.70% 54	5.43% 5	19.57% 18	13.04% 12	0.00% 0	0.00% 0	3.26% 3	92	1.87
Ute	16.67% 7	16.67% 7	11.90% 5	26.19% 11	0.00% 0	0.00% 0	28.57% 12	42	2.67
Truck	0.00% 0	5.56% 1	11.11% 2	0.00% 0	0.00% 0	0.00% 0	83.33% 15	18	2.67
Van	13.04% 3	13.04% 3	13.04% 3	0.00% 0	0.00% 0	0.00% 0	60.87% 14	23	2.00
Boat	41.03% 16	7.69% 3	10.26% 4	5.13% 2	2.56% 1	2.56% 1	30.77% 12	39	1.96
Motorcycle	43.75% 14	3.13% 1	0.00% 0	3.13% 1	0.00% 0	0.00% 0	50.00% 16	32	1.25

#	OTHER (PLEASE SPECIFY)
1	sailing boat
2	Medium petrol
3	2 petrol cars (one on island, one on mainland)
4	2 small cars
5	Additional large petrol car in town
6	None of these
7	Sailing yacht with electric auxiliary motor.
8	also small petrol
9	Use the bus frequently
10	1 x 50 cc motorscooter
11	E bike for commuting
12	Bicycle

Q32: Do you use any alternative modes of transport? Please select all that apply

ANSWER CHOICES	RESPONSES
Walk	82.88% 92
Bicycle	40.54% 45
On-island public transport	56.76% 63
Ferry	97.30% 108
Carpooling	21.62% 24
Total Respondents: 111	



#	OTHER (PLEASE SPECIFY)
1	Barge
2	electric scooter
3	Taxi/Uber
4	are you mad ?..
5	Townsville buses
6	Used to carpool - used to share the car with the neighbours but dont any more.
7	Sailboat - but not really transport

Q33: How many vehicles and seagoing vessels does your household operate?

#	RESPONSES
1	1 car, 1 sailing boat
2	3
3	2
4	2
5	2
6	3
7	1
8	1
9	2boats 1 4WD
10	3
11	4
12	3
13	2 vehicles, 1 sail boat (with engine)
14	3
15	2 cars, 1 ute
16	2
17	3
18	4
19	1
20	1
21	3
22	2 cars, 1 Boat
23	0
24	5
25	5



26	3
27	3
28	1
29	1 car 1 postie bike
30	2
31	2
32	3
33	0
34	3 but I just said that above
35	1
36	1
37	1
38	1
39	2
40	6
41	5
42	3
43	2 vehicles- one on the island and one on the mainland
44	1 on the Island
45	1
46	3
47	2
48	no seagoing vessels
49	1
50	1
51	2
52	2small cars
53	One
54	One boat two cars
55	1
56	2
57	None
58	2
59	1
60	1
61	2
62	1
63	One



64	5
65	1
66	3
67	None
68	1 car. 2 boats
69	3
70	nil
71	1 dinghy
72	2
73	1
74	3
75	2
76	2
77	1
78	4
79	4
80	None
81	5
82	1
83	Nil
84	3
85	we have one on island and one on mainland
86	2
87	1
88	3
89	2
90	2
91	2
92	1
93	3 + 4 bikes
94	none
95	2
96	One
97	2
98	0
99	1
100	0
101	N/a
102	none



Q34: Approximately how much do you pay for fuel (vehicle or boat) every year?

#	RESPONSES
1	700
2	500
3	1000
4	2000
5	5000
6	N /A
7	\$1500
8	1200
9	\$1000
10	Too much
11	\$3000
12	4-5000
13	\$3500
14	2000
15	\$4000
16	1000
17	1000
18	\$500
19	Ba
20	\$1200
21	\$2000
22	Unknown as have vehicles on island and in town
23	Unknown as have vehicles on island and in town
24	\$1200
25	750
26	3000
27	1440
28	1000
29	\$1600.00
30	\$1200
31	350
32	\$2000
33	\$2000
34	\$500
35	\$250



36	\$1000
37	2400
38	Varies
39	5000
40	2000
41	No idea
42	1200
43	No idea
44	2600
45	\$400
46	1000
47	I don't add it up because it would not make any difference. If you need to use your car you need to put fuel in it and you have to pay whatever it costs.
48	\$1000-\$2000 per year
49	\$700
50	Too much
51	\$1550.00
52	\$3,000
53	Don't know
54	\$1300
55	Not applicable
56	\$250
57	\$3,640.00 PETROL FOR CAR
58	\$600
59	\$6000
60	\$500
61	5000
62	\$450
63	\$1200.00
64	Minimal
65	\$1500
66	\$1.87/ ltd
67	500
68	\$2000
69	\$1000
70	\$250.00
71	\$1500
72	\$1000
73	\$100
74	2000



75	A lot
76	\$2200
77	?????????
78	\$1400.00
79	2500
80	\$600
81	\$500
82	\$100/month
83	Every 3 months we top up. \$250/year
84	\$270-300
85	\$3000
86	\$1000/year (for island travel only - extra cost for longer mainland trip in the vehicle)
87	No idea
88	\$500
89	\$2500
90	nothing
91	1000
92	\$500
93	unknown
94	400
95	500
96	Nil
97	\$700

Q35: Have you undertaken any actions to reduce transport energy use to/from and on the Island?

ANSWER CHOICES	RESPONSES	
Yes	36.70%	40
No	63.30%	69
TOTAL		109

#	IF YES, PLEASE DESCRIBE:
1	Bicycle, walking, public transport
2	Walk or cycle
3	Diesel \$60 month av
4	I use a bike but less now than previously after near accidents on a narrow hill road.
5	Try to keep mainland trips to minimum
6	Bring it back when I'm town myself
7	Hire car is cheaper than bringing own vehicle over on the ferry



8	Moved house
9	I ride my bike
10	Try to support local business
11	Share car in town and on island
12	catch public transport regularly
13	Bus as much as oossible
14	walk to catch the ferry
15	Walk more
16	Not really possible
17	Zero waste
18	Catch the bus when possible
19	Yes as my latest car uses a lot less fuel than my last one, although it is a diesel.
20	Retired
21	electric bike
22	Moved from 6 cylinder car to 2x 50cc scooters
23	Use bus and walking to get to ferry rather than drive. Island car rarely used. One car is kept on mainland for the short drive to work. Would change this to bus if bus timetable allowed me to get there in time by bus.
24	retired
25	Frequently walk instead of using a vehicle
26	Do month ly trips to buyup
27	Reduced Ferry and Barge use to absolute minimum.
28	Started using premium petrol
29	Trying to get permission to work from home 4/5 days a week.
30	only option is the ferry
31	Electric bicycle
32	We just dont go. Get buses to visit friends and family. Go over as least as possible. Medical things 3 times a week sometimes. Both of us: Once a fortnight
33	Avoid taking car to Townsville
34	I ride my bike to the ferry, then to childcare in town and then on to my work place and do the reverse in the afternoon. I ride the four days per week that I work in Townsville regardless of the weather.
35	E bike commute
36	Like swimming to the mainland?
37	walk to places in my bay
38	I walk as often as I have time to do so.
39	Downgraded from a car to a scooter
40	Not having a car
41	Go less often
42	I use a bicycle for town transport



Q36: What have been your major climate related impacts and associated costs since 2010? (The physical impacts can include sea level rise, erosion, storm surges, heatwaves, flooding/rain events, reduced water quality/availability, cyclones, etc. The effects might include higher insurance premiums, income loss, health and wellbeing)

#	RESPONSES
1	27 metres of beachfront lost since 2004,
2	Cyclone Yasi, 2019 flooding 5000? increased insurance
3	Higher insurance premiums Mould
4	Being unable to obtain basic home and contents insurance. Currently paying \$4500.00 per year with \$6000 excess for a two bed highest.
5	Cyclones - yasi! Insurance premiums, business closed due to downturn in both tourism and local economy. Lack of support form residents
6	Severe weather event
7	Insurance premiums
8	Increased house insurance
9	Sea level rises, floods,
10	Increased insurance
11	Increased insurance costs
12	Ridiculously high insurance premium price rises
13	flooding/rain events; we were without power and water for 10 days after Yassi; insurance premiums have doubled since 2010, the only way to reduce premiums was to increase excess.
14	Cleaning of mould from walls and furniture. Replace furniture. \$1000
15	Feb 2019 floods. Led to an independent living parent losing his accom to rain damage. He now lives with us in a flat previously earning income as holiday accommodation.
16	Only been on the island for four years now. The worst thing so far has been the mold attacks after the long rains. We have had some beach erosion after storms but the council has been good at remedial work.
17	Higher insurance. loss of income due to weather
18	The Island NEEDS a Cyclone Shelter
19	Increased insurance premiums since Townsville flood(50%)
20	The cost of living rising and less opportunity for people to live a stable life with work and play
21	Higher Insurance Premiums
22	Insurance
23	Heat waves,rain events. Higher insurance
24	Heat waves,rain events. Higher insurance
25	Very much higher insurance premiums.
26	Floods
27	Flooding, rain events, cyclones, heatwaves
28	income loss- flooding closed business property damage - flooding health issues- smoke from fires
29	Cyclone. I have made considerable changes to make my property more resilient



30	Insurance 10
31	Mould during wet season; high insurance
32	heatwaves increased cost of a/c
33	Increased insurance
34	Mould damage. Income loss. Higher insurance.
35	Absolutely higher insurances
36	Higher insurance. Re doing roof.
37	Increase in body corporate fees due to increase in insurance
38	NA
39	Heat. Floods. Fire.
40	Insurance is extremely high on the island
41	Higher insurance premiums. Great compliance costs building a new home
42	1. Cyclone Yasi - erosion and water ingress 2. Higher insurance premiums 3. QPWS 'Controlled Burns' - have on 3 occasions become uncontrolled and threatened my property 4. Health issues from smoke, Severe stress and anxiety from having advancing fire so close, no public plan in place and only 1 fire truck on the Island to deal with multiple fire fronts. 5. Lack of Community consultation, notification and public health information prior to burns being scheduled. 6. Reduced water quality due to inadequately maintained reservoir system and no back up when power outages occur for the water pumping system.
43	Much higher insurance premiums Expense involved in removing cyclone debris and damage sustained to the house
44	2019 Floods damage from rain and mould. Loss of some household items.
45	Cyclones Flooding from Gustav Creek. (isolated by floodwater for 12 days earlier this year)
46	Erosion of the Horseshoe bay beachfront on the western side of the boat ramp nothing is being done about it
47	Nature is nature you can't control it and our interaction is a continually changing and dynamic one
48	Erosion, flooding/rain events, reduced water quality/availability, cyclones. Higher insurance premiums,
49	The 5 year drought was a challenge as I am a keen gardener so spent four hours each week holding a hose from 5 am before work. Cyclones are a challenge for all. Loss of income is usually an issue as I am casually employed. Higher insurance premiums have been a growing issue for some years now. With a \$5000 excess (the only way I can afford insurance for my home), I did not put in a claim after the recent monsoon. It was a challenge I would not like to repeat. Physically, cleaning mould constantly has left ongoing effects to my right elbow for which I receive treatment. Emotionally, the final straw was when, on the last day we received a huge deluge in Horseshoe Bay. I had to replace most outdoor furniture, cushions, rugs, anything leather etc. the recent 'controlled burn' has been a new challenge, the smoke has been terrible and also the fear of wind changes and knowledge that fire fighters can not access most areas. Don't get me wrong, I love living here.
50	Wear and tear on vehicles
51	Don't know
52	Climate change associated impacts, ie rising sea levels, increased storm surge, changes in weather patterns, more frequent and sever storms and weather events. Resulting in increased insurance, mental health impacts etc



53	Cyclone and flooding
54	Higher cost of insurance.
55	Higher insurance, unable to get insurance due to location.
56	FLOODING EROSION CYCLONES HIGHER INSURANCE PREMIUMS STRESS
57	Cyclone & rain events
58	Dune erosion nelly bay. Septic leaching I. Extreme weather events
59	High insurance premiums.
60	Not sure?
61	beach head erosion
62	Higher insurance costs, sealing driving & under to prevent further erosion and egress
63	erosion from flooding and rain, trees falling over from heat & drought related stress & also from erosion of roots. Damage to house and health from severe & prolonged mould & damp. Increased insurance costs.
64	Repair and maintenance of roof
65	Cyclone. High cost of insurance
66	Better roof screws& better cross ventilation
67	Inconvenience of extended road closures due to flooding; isolation because of rockfalls and vegetation closing roads
68	Significant cost increases in Insurance for Home and Contents. Some water damage in Yasi and the recent Townsville rain event.
69	Higher Insurance Premiums. Qld Govt Body Corporate Law INSISTS the these premises MUST be Insured. The Govt needs to provide this Insurance so that BC Owners can be compliant at a reasonable cost. There are 3 Negatives with Insurance companies - 1. North Queensland - now defined by them as North of Bundaberg. 2. Off-Shore Island - even though we are a Residential Suburb of Townsville. 3. Units; They are a 'Cartel' and the Govt should have the 'guts' to stop them operating in Qld if they are not prepared to cover ALL insurable possibilities. After all, that is the principle behind 'Insurance'.
70	Higher Insurance cost
71	Excessive precipitation Air pollution from prolonged fires (hazard reduction burns)
72	N/A
73	Rain and fire
74	Cyclones (little cost)
75	higher electricity prices
76	Melioidosis
77	Rain events Can,t get insurance
78	Higher Insurance Premium ---- certainly NOT a King Tide.
79	Insurance Premiums are high and very hard to get insurance. I spend about \$8000 per year on building and contents insurance.
80	Loss of garden plants.
81	Increase in insurance premiums, cost involved in maintaining a clean environment (demould) and also maintaining guttering etc as it gets rusty. also getting car spray painted to protect from rust.
82	rainfall event damage, cyclone damage



83	Sea level rise/erosion/storm surges - concern but no direct financial impact. Affects access and Heatwaves - did put AC in 6 years ago. feels like it's getting hotter for longer and more humid. Flooding/Rain - claim on insurance, affected the house marginally. Recent rain had a river going under the house, affected some shelving. So much rain from the cyclone ripped of the guttering of the house. Water quality/availability - without water for a week during a cyclone Yasi, but other than that it's been fantastic. Especially quality. Cyclone - Landline didnt work for 6 weeks, TV didnt work, Stove didnt work, had some mold in the house (hard to get ontop of). Just inconvenience. Insurance is very expensive as well! Almost becoming un-insurable.
84	cyclone impact beach erosion, storm surges, rain events, increased insurance premiums, reduced ferry services in times of weather risk
85	Costs are considerable - especially the insurance premiums. There have been environmental costs, coral bleaching, freshwater inundation bleaching and significant loss of corals in Jan/Feb of 2008), beach erosion.
86	Have not lived on the island yet - will be moving here mid next year when house is built.
87	flooding/rain events - cost =insurance claim
88	Rain induced structural damage
89	Higher insurance premiums and insurance companies failing to pay out on legitimate claims
90	cyclone damage to trees. loss of power during cyclones, increasing insurance premiums
91	Costs associated with too much rain - leaky roof; damage to ceilings, walls - needed to claim for repairs after a severe rain event Have had to pay for transport & alternative accommodation before/during major cyclones - seeking shelter Have had to replace items after cyclones - eg spoiled food, mouldy furnishings
92	higher insurance premiums
93	Cyclones
94	N/A - only just moved to the island.
95	Increased insurance costs; repiling home due to erosion from flooding.
96	Cyclones
97	erosion- mitigation costs, heatwaves- purchasing a portable air-conditioner resulting in increase in power bills and physical stress, rain events-no loss of income but depressed mood and mental stress.

Q37: How many hours/days can you operate in "island mode"? (without outside support for energy, water, waste, food, communications, health services)

#	RESPONSES
1	When in cyclone preparedness up to 7 days
2	Don't know
3	24 hours/yearl
4	1 week
5	10 days
6	48 hours without preparation 7 days with
7	0
8	7
9	5-7
10	Less than 1 day



11	A week
12	We were without power and water for 10 days after Yassi, we have gas cooking and we collected and boiled water from the creek. We had plenty of food from the defrosting freezer. We now have a small petrol generator to run the fridge/freezer if we lose mains power, with probably enough petrol for a few days.
13	Nil
14	1 week
15	3 or 4 days
16	3 days, maybe longer
17	one week
18	I'm not on the Island in summer
19	As long as needed
20	As water, telecommunications & electricity are provided via the mainland this has to be zero
21	10
22	Don't understand the question
23	Don't understand the question
24	7 days
25	7 days?
26	With enough prep a week
27	1 day
28	?
29	10
30	3 days
31	weekly at least
32	3 days
33	0
34	nil
35	1 day??
36	None
37	7 days have canned food and water supplies
38	With notice -several days. With batteries for our solar this would be much longer.
39	4 days
40	5 days
41	8 hours
42	Had adequate supplies for 12 days during 2019 flooding. Have lived here 31 years so know to be prepared.
43	8
44	week
45	2-5
46	A few days depending on notification.



47	7-21 days
48	3
49	We did a full week after Cyclone Yasi
50	7 days
51	4 or 5 possibly
52	3-5
53	A few days
54	Given notice of impending disaster/power/water loss I estimate at least a week.
55	NONE?
56	Not a great worded question. I consume Island services daily and mainland services about once a fortnight
57	3 days
58	30 days while renovating and needing to get supplies from Townsville. When I was working on the island I almost never left, when working in Townsville commute for work only.
59	Not sure
60	8
61	4 days
62	5 -7days in a wet season as we are surrounded by creeks
63	I don't think I can
64	4 hours
65	1 month
66	approx 10
67	Ten days
68	We have lived with no outside support after Cyclone Yasi for 10 days. But we did have a large battery pack for lighting. We charged it on our neighbours generator at that time.
69	Stupid question. I am in Island Mode 24/7 but I am not a Hermit so need those support services to survive as a normal human being.
70	2
71	Weeks
72	3-4 days with preparation, maybe more. Depends on if we have time to prepare.
73	0
74	A week
75	3
76	2 weeks
77	2weeks
78	3 days
79	7 days
80	2-4
81	5
82	very little unless forewarned.



83	days
84	Have a gas cooker. Survived a week without power or water for a week. Could go for several weeks living on tinned food. Would depend on how much gas we have in our cylinder. Could easily go a week. If it happened without warning it would be harder, but we usually get prepared. We get fair warning at the moment.
85	0 - no self sustainability
86	Not at all computer necessary for income..three days if just living
87	This is an unclear question.
88	5 days
89	3-7 days
90	none without energy - we depend on electricity for hot water and cooking. For communications (mobile phone, we would need to recharge every three to four days. We could manage for about a week for food and at least two weeks with tank water. We would use a battery powered radio for information and we would only need health services in an emergency. However the roads may not be passable.
91	1 day
92	Not sure what you mean by 'Outside help" . We are connected to Townsville's water and energy supplies. I rarely go to town, if that's what you mean.
93	one week?
94	0
95	5
96	Up to one week, possibly longer
97	10 days
98	24 hours

Q38: How frequently do severe weather events occur? Are they occurring more frequently and are there any stories passed down that can help us get ready?

#	RESPONSES
1	Yes they are occurring more frequently
2	Not sure
3	Yearly
4	No change. As weather events happening everywhere. Need to be prepared transit
5	Not more frequently
6	Every 2 years
7	Increasing temperatures... Paint roofs with solar reflective paint. Don't remove ask the trees on the property risk su
8	Yes, history repeats! Listen to the locals.
9	Every 2-3yrs
10	They are unpredictable, but there have been at least 3 since 2010
11	Depends on the summer season - get prepared for a week without power by November
12	definite increase in frequency and severity of cyclones in the region - although not specifically on the island



13	1 a year.
14	Mostly cyclones in our region if not directly hitting 1-2 per year. Maybe not more frequent but now larger storms. Don't know about stories but have previous experience and follow basic preparedness measures.
15	severe weather events do seem to be more frequent
16	hard to say
17	Once a year, yes
18	Wind is increasing and stories are being told
19	Global warming is pointing to increased severity of severe weather events world wide
20	Minor changes
21	Occurring more regularly and more severe
22	Occurring more regularly and more severe
23	Annually
24	Not frequently, educating people
25	More frequently, progressively over the last few years
26	a couple times a year
27	yes, More heat waves and threat of significant events like cyclones
28	Not a useful question
29	The Seasons are the same we still have the same ones and the current climate change discussion is just that a discussion and I have yet to hear from the doomsayers what will happen when they stop the climate changing..... get in early and book a seat on a interplanet flight
30	Check with the Bureau of Meterology
31	Once a year
32	...I was in Cyclone Winifred in Innisfail in 1986 , that was the most severe event I have had to cope with...we lived on the beach in Horseshoe Bay through Cyclone Yasi however Winifred was more damaging to us on a hill and inland in Innisfail than where we were right on the beach in Horseshoe Bay through Yasi.
33	Can't say
34	Yearly and increasing
35	More frequently
36	Annually
37	N/A
38	about the same
39	Every 3/4 years??
40	1. The severe weather events are more frequent - information and planning for cyclone readiness is very very efficient. Need to rethink the shelters on the Island as the designated shelters are not reachable- Sooning St to X Base goes under water in storm surge and is not passable.. Also relocating the SES TO Picnic Bay will seriously restrict access to more populated bays in theses events. 2. The only severe fire events in the last 40 years have been from the QPWS controlled burn regime. They have been very poorly managed and there has been no opportunity for affected parts of the community to give feedback. The latest burn area as designated on the website was not supported with firebreaks along the residential edge as a preventative measure. Consequently residents of Kelly St, Nerita Cres, Lilac St, Compass Cr and Hideaway Estate were all extremely vulnerable during the event. A check of the 000 zero calls for assistance would be informative.



41	Every 5 years or so.
42	every few years not more frequent if looked at over time.
43	In recent years..... every wet season.
44	every couple of years
45	All weather constitutes "an event" whether it's severe or not. How we are affected depends on how prepared we are and to a certain degree how wealthy or affluent we are to be able to sustain the event or rebuild/reviver after it
46	Cyclones every few years. Rain events have been reducing over the 20 years. This year is definitely the exception.
47	been here 40 years and have had moderate events 3-4 times
48	1
49	Not much I can add that is not already known.
50	Expect some sort of event every year or two
51	The severe weather events are getting stronger....rain tanks and PV with solar batteries would be wise
52	At least annulaty, and yes, increasing in frequency and severity.
53	Who knows what
54	More frequently
55	PROBABLY ONCE EVERY 3 YEARS
56	3-4 cyclone events/year (not necessarily directly hitting the island but certainly impacting it)
57	More frequently
58	More dry days, less rain.
59	Not sure
60	3/year
61	they are more severe & more frequent
62	There is potential for a severe event every year but really bad events seem to be every 3-5 years.
63	I can't rely on my anecdotal responses
64	Big wets. Cyclone b every 20 years No increase in frequency or severity
65	About the same Cat 5 cyclone every 18.6 years& local cyclone every three years .storms been starting October since year dot .global climate change has always been on earth. Pollution ,& ferral animals are manmade & a disgrace
66	unsure . yes more frequently
67	Not more frequent; get roads and drainage through Horseshoe Bay sorted!
68	Weather seems to even out over time.
69	Another stupid question. BoM have those statistics.
70	6 monthly
71	Probably; have you not read the news?
72	Yearly
73	Increasing severe weather events (number and size) associated with climate change.
74	every 10 years



75	They occur less frequently than the used to 30 years ago
76	Once every couple of years
77	frequency is not the issue --- it is being prepared --- taking notice of those about you with experience. Part of the preparation is to understand that you might have to stand on your own legs for a period, of no power, transport etc.... you should have already prepared with food, water and alternative lights.
78	Prepared for a number of events over the 16 years on MI But only been impacted to any degree twice.
79	yearly
80	1 per decade?
81	annually. we need the island to have independent back ups to support power loss.
82	every couple of years
83	Maybe ones every 3-5 years. Remained the same here on the island. Water levels are rising, erosion is definitely getting worse. THats the most obvious thing. Doesnt take a major weather event, just a spring tide but the water levels are definitely encroaching. Thousands went into Horse Shoe Bay. Perhaps will need to put in a rock wall. Opinions differ on how to manage it. \$\$\$ Nelly Bay to put sand all along there. Geoffery bay is the next one to go with the plants - will fall once the water gets under the trees. DONT want the rock walls.
84	apparently more weather events but hearsay not science - have not seen relevant data
85	We have about once a year on average. Drainage and power
86	They are more frequent and more intense. Severe weather seems to be occuring at least every other year.
87	once every 3 years and not more frequently.
88	No comment
89	cyclone and heavy rain events much more frequent in the last 10-15 years than in the past (e.g. 25, 30, 40 years ago)
90	Once every 2-5 years. A cyclone shelter would be good!
91	At least once per year, on average - and mostly in summer. People generally know how to prepare for cyclones, as they threaten the island and other tropical locations every summer (almost). Other events, e.g. fire, we would be far less able to be prepared.
92	3-4 east coast cyclone events / year
93	N/A
94	This is a silly question - look at the NQ data on this.
95	One every 5 years Watch where the cockatoos go!
96	Over the last couple of years they have been annual but in the previous decade 5 yearly and 20 years ago 10 yearly.

Q39: What stands out as the biggest area of concern for your community in terms of resilience (vulnerability)?

#	RESPONSES
1	Water, power
2	All the above
3	Electric generation and ability to move around the island due to poor roads



4	Transit locals. Not educated and quick to be keyboard warriors. Need to be educated and understand what can happen in disasters including isolation
5	Waste disposal
6	Power availability, associated lots of water and sewerage
7	Little self containment.. ie, growing own veges in case of extreme weather event esp if loss of access to the mainland
8	Cost of ferries.. too many retirees moving here! People moving here from southern states with no understanding of fire management. Fire and increased natural disasters are more frequent!
9	Transport off the island in the case of rough seas or cyclones Availability of groceries Communications
10	Power & water
11	Major cyclone damage causing extended power outage. Resources for a major rebuild if severe damage occurred
12	Greater self reliance on power and water.
13	Power outages.
14	Climate change
15	Food supply in bad weather
16	Water and power and cyclones
17	Cyclone shelter More aged care so people don't have to leave
18	Cyclones
19	Water
20	Vulnerability to Cyclones
21	Water supply, electricity supply
22	Communication
23	Communication
24	Inflation: ferry costs, food cost, JOBS ON THE ISLAND
25	Able bodies with sufficient equipment to respond
26	- waste - erosion -transportation
27	Coastal impacts and heatwaves
28	Ignorance
29	Flooding
30	the usual water supply power ad food availability
31	Having suitable evacuation enters and getting assistance to the island In inclement weather
32	Cyclone and storm surge
33	probably the public transport...the big buses
34	Sea level rise. More frequent & violent weather events
35	Cyclones and floods and extreme weather events
36	beach front
37	Too many cars. Makes increased need for toad maintenance. Need 1 car per house policy and car pooling.



38	N/A
39	Power outages
40	Over use of the island by tourists and their vehicles
41	The burning. There are currently no community protocols in place for fire events. The Victorian visitors are appalled that there is no advertised response plan for the community or individual members to prepare properly. It is particularly galling that on the 3 occasions I have needed this the fires have been deliberately lit by QPWS and not been st all controlled.
42	Reliance on the mainland
43	Possibility of power and water cut offs.
44	Using unsustainable practices to try and survive. So when a cyclone is coming we are encouraged to buy bottled water but this means lots of water bottles that then need recycling.
45	The threat of bushfires
46	the council not keeping the island clean and tidy
47	Loss of power and water. Restrictions on being able to evacuate from the island before, during or after any significant event.
48	transport, food, water, electricity
49	being prepared so many ignore warnings.
50	Health services, particularly for the aged. Palliative and respite services would be wonderful.
51	Lack of ferry service to bring food to island and potential for water and/or electricity services to be damaged
52	Cut off from the mainland help, in case of severe weather events
53	Failure to adequately mitigate climate change.
54	I am on chemotherapy and I may need to get to the hospital Asap
55	loss of water supply
56	ISOLATION NOT HAVING HELP AT HOME
57	See above: Population growth & high population turnover resulting in a high proportion of residents not understanding the environment they've come to live in or what's required (including of them) to protect and improve it
58	Vulnerability
59	Water supply in the dry months, falling water table as more people tap bores.
60	Sustainability in the event of large scale natural disaster.
61	erosion of beach at nelly bay
62	water
63	Reliance on food, water and power from the mainland
64	Cyclone protection
65	Water turbidity Effect on recreational fishing and diving Channel widening dredging will be the nail in the coffin and i will move elsewhere
66	Pollution of sea, land & feral cat s etc kill 1.2 million small creatures in Australia every day..that is disgusting!!
67	limited accessibility to essential services in bad weather , cyclone, floods etc
68	Isolation during cyclone events; inability to transport medical cases to Townsville for treatment; loss of electricity for most residents should cables be damaged; single road access to many bays should evacuation be necessary in the event of bushfire; safe shelters for cyclone events.



69	Govt support (State and Local) for a diverse community - a Residential Suburb and Tourist Destination.
70	water and electricity
71	Cyclone
72	Complete dependence on mainland supplied food and water (in emergencies). Lack of options for transport off island (2 ferry services only)
73	Cyclones
74	Business as usual approach of people and governments
75	Water supply
76	Food
77	Communication
78	The number of unoccupied and unsecured houses at times of vulnerability.
79	1. Cyclones and no community cyclone shelter for residents and visitors. 2. Dangerous road travel on the Island. The vehicle sizes and volume are too large for the roads. We need electrical autonomous mini buses to reduce cars and better bike and walking tracks
80	Loss of ferry service. Loss of water supply from mainland.
81	pollution of the reef and the environment.
82	lack of integrated planning for resilience
83	Erosion (see notes from earlier in the questionnaire). Fire control is good on the island. Back burning happened, probably not nice for tourists but it needs to happen. Widening the channel in Townsville (will take 5 years). Will take the sand from the channel and will put into the Port of Townsville where they are reclaiming the land. Concerned it will cloud the water over here on the island - dont want to lose the clarity. Concerned about the dredging and how it will affect the life of the animals/sea life. Looks like they're trying not to affect the water here and we're hoping that it wont. Dont want it to be cloudy.
84	*reliance on the mainland for food and support for services eg petrol for ambo, fire service, *reliance on mainland for dental and specialist medical services * weather events * no centralized responsible point of contact/management on island - all is fragmented * no forward planning for resilience
85	Drainage power lake of cyclone shelters
86	Storm surge and cyclone damage. There is no cyclone shelter on the island and many residents are in low lying areas.
87	Power supply
88	lack of jobs, especially for middle class
89	self sufficiency in food production. It would be good to have a renewable energy hydroponics farm and be able to generate our own electricity
90	If our water supply is cut off from town for any reason including severe weather, the island community would be very vulnerable. Very few people have independent sources of water. (ie rainwater tanks). For the same reason, we are also very vulnerable to damage done to the electricity grid. It would be great if the island could generate its own supply of electricity - ideally through a solar farm with storage located on the island. I also think we are very vulnerable to fire - we are not well prepared for a major bush fire event, and we have a lot of houses that are on bush blocks.
91	storm damage
92	A community with high turnover and a high proportion of people who don't understand the environment or climate that have come to live in
93	Climate change



94	Water waste during long droughts; lack of preparedness of residents for cyclones, floods, fires and droughts
95	Food and water
96	Water and power

Q40: What do you do to prepare for a severe weather event and what do you do to handle climate related impacts better?

#	RESPONSES
1	Full cyclone procedure - and now to to handle climate change the house is sold and I have moved to a safer location and again with emphasis on lowering carbon footprint further
2	Store fresh water. More Airconditioning
3	Cyclone prep
4	Have a cyclone box ready inc. generator
5	Follow weather reports. Ensure water and tin food supplies adequate Check in pets, fuel up car and take out cash
6	Survival kit, sufficient water, food and fuel for generator
7	Store water and gas, stock up on food
8	Remove all loose garden and external household items and place indoors. Check roof. Collect water and dried or tinned food, keep temporary stove in good condition, collect important legal documents and ensure they are safe. Check on neighbours
9	Always prepared! Extra food, fuel, radio, cyclone kit, generator, full camping kit. Always prepare for the worst!
10	Stock up on food/water Fuel for generator Make sure tall trees tops lopped Pick up anything that can become a missile in a storm
11	Make sure the household can be self sufficient for as long as possible. Be better prepared for severe weather events.
12	Prepare to be Self sufficient for at least a week over summer
13	We have a generator for power loss but will soon have solar and battery. We have a creek beside the house which provides a good water source during a cyclone. We have made home improvements for passive cooling (insulation, ventilation)
14	We have an emergency kit. Fill up the cars. Store water. Stock up on non-perishable foods.
15	Stock up and clean up potential projectiles
16	We learn more after each event
17	Will leave the Island temporarily in the case of large cyclone (early)
18	Stock
19	I listen to what else is happening in the community and I prepare as I need to
20	Sand bags and tarpaulins held on site
21	Deal with as it comes
22	Stock up on food, water, lights
23	Plan and prepare. Be aware
24	weatherproof house, prepare food storage



25	I have made many changes to my property to cope with climate change challenges
26	Understand the unknown or what if,,,
27	Cyclone preparation list; keep garden and gutters clean;
28	stock up foods water and medicines
29	Do cyclone prep as suggested by local council
30	ensure plenty of candles, batteries, water, gas bottles
31	Ground drainage.
32	Make sure my insurance policy is up to date and relevant to where I live...Keep outside debris free...other than that our house is built to a Cat 5 built in 2016 with extra roof screws on roof...yes I learnt that from being in Cyclone Winifred...also we have mainly aluminium louvres and minimal glass
33	Follow council instructions
34	clear around house
35	Not much
36	Don't believe they are getting any worse but are having storm shutters installed and gutter protection to stop debris building up in the gutters
37	Batten down- (we need some shutters) and stock up food, fuel etc.
38	1. Follow the advertised preparation protocols for the event 2. Have the designated survival kit prepared in advance of cyclone season 3. Ensure my roof has been checked 4. Clear the property of rubbish. Trim any overhanging shrubbery away from the house. 5. Secure and or store loose items 6. Have back up batteries and chargers to keep connected 7. I have planted a locally sourced dry tropics native garden that has cyclone rated tree and shrub species - the damage to my garden and property is significantly minimised, JCU has a list if suitable species. 8. I have good insulation and wide verandah to cool and the home
39	Bring in and secure all small or damaging wind borne objects. The longer we live on the island the less we prep. Gather all important documents and sentimental objects in tubs in dry places.
40	Try to have stored water available, independant stove and fuel. Sources of light other than electrical. Long life food stuffs
41	Normal Cyclone season preparation & stocking up on food & basics.
42	sock up on consumables and have a cash stash as all power goes out, then there is no access to money available
43	Keep up to date with forecasts and predictions and act earlier rather than later.
44	Ensure there is plenty of water/food/lighting remove all debris from the property that could become hazards during strong wind etc. Improving drainage to try and prevent flooding
45	be prepared and listen to information
46	What everyone does, batten and tie down everything, keep garden clear of debris, maintain property and fences. Sort emergency kit and procedures
47	Have plenty of long life milk and tinned / dry food on hand for when fresh runs out. Ensure fuel and gas containers are full plus diesel in cars. Stock up battery supply for radios and torches as well as candles and matches. All island residents should be considered REMOTE and have access to satellite NBN
48	I would like to be more self reliant in terms of water and energy...as well as some fresh produce if possible.
49	Prepare emergency kit with requisites for several days off the grid.
50	Can foods BBQ gas water dry foods candles batteries



51	temporary water storage containers, small generator to operate fridge and fans
52	PREPARE FOR CYCLONE/FLOODING AS PER COUNCIL INSTRUCTIONS HARD LANDSCAPING IN GARDEN TO REDIRECT FLOODING THAT COMES OFF THE STREET INTO THE GARDEN
53	Standard annual and event time preparations for cyclone events
54	Clean up lock down
55	Change gardening practises, move towards more native vegetation.
56	Keep trees trimmed & away from house & power lines, designed house for breezes so rarely used air conditioning.
57	secure all loose equipment
58	prepare the house
59	Have a good supply of essential foods, water and fuel... enough for 10-14 days. Have medical supplies & generator. Batteries for radio. Check on neighbours etc. Batten down.
60	Ensure water and supplies and put away items that could be blown around
61	A weeks non perishable food Batteries Petrol
62	We have always had storms, be prepared & make sure housing is cyclone resist FYlant
63	NO BURN THE BUSH LIKE THE IDIOTS DID RECENTLY !
64	Have fuel for generator; emergency kit is prepared and safely stowed, secure loose and vulnerable items; alert and assist neighbours to prepare
65	Whatever is required!
66	Freeze 4 litre water bottles
67	Cyclone plan
68	Store non-perishable food, water and extra ice plus "cyclone kit" items when one is expected.
69	Cyclone management
70	Lock-on!
71	Listen to bulletins and follow online media Try and make sure we are prepared each cyclone season
72	Age old check list that I have for my household/property.
73	We have installed extra strong glass in Windows on prevailing wind side of house. Remove all awnings, outdoor furniture and loose items from around house and have a small generator in case we lose power. Water available from bore if needed.
74	Batten down and Hide
75	Standard prep for cyclones.
76	PAck everything away inside. Remove things from walls. Prepare meals and freeze to cover for 3 or so days. Pack water and canned foods etc into plastic boxes. batteries etc,
77	store water, prepare camping / solar and battery storage
78	Stock up with water, get in torches and batteries, get plenty of tinned food, dont batter the windows (unless it was coming directly for the island and it was going to be severe). Keep the gutters clear by pruning the palms that are near the gutters, fill up water jugs.
79	Follow the instruction issued by council - clean up all loose items outdoors, stay indoors during an event, keep across developments using a wind up radio



80	Make sure there is lots of water. Canned and dried foods flour. Candles and torches extra batteries dig drains and cover windows clean up yard take off week branches and park cars close to house or outside flood zone.
81	Replaced our roof with extra cyclone reinforcement. Maintain our house to cyclone standard. Store everything away.
82	Batten down
83	Keep property in good condition; regularly reduce garden growth to minimise the risk of damage; follow the preparation guides for cyclones etc.
84	I have built on a hill in a house that is sustainable and moderately protected from cyclones (I would have built stronger but couldn't find a builder of rammed earth locally
85	All the usual cyclone preparations - eg cleaning up the yard, stocking up on food, having plenty of bottled water, a radio etc. I need to get a solar powered fridge, or better still a solar battery for the whole ghouse to be less reliant on electricity from Townsville. I also need to get a water tank for the same reason.
86	Just follow the cyclone preparation rules - no big deal (unless you've never done it before)
87	Keep trees away from the house and maintained. We haven't experienced a severe weather event yet.
88	Follow government guidelines, and make sure my neighbours have enough help.
89	Stock up no perishables and fill water containers Tidy yard
90	Get the house ready, charge batteries, store water, stock up on non perishables.

Q41: Are there any mainland (or neighbouring island) businesses you are heavily reliant on?

ANSWER CHOICES	RESPONSES	
Food Providers	95.45%	84
Waste Providers	38.64%	34
Maintenance Companies	30.68%	27
Fuel Suppliers	64.77%	57
Total Respondents: 88		

#	OTHER (PLEASE SPECIFY)
1	No not really. I always stockpile. Maybe food providers at times.
2	Electricity provider
3	Ferry
4	ferry
5	Transport - Ferry and school bus on the mainland.
6	Townsville farmers markets
7	Ferry
8	Hardware
9	Buy on the island and do a major shop in Townsville when I arrive and ever 3-4 weeks
10	Not sure what you mean here, but obviously we need food etc over time.



11	Alcohol providers
12	No; I believe in supporting local businesses incl. supermarkets.
13	no shop local
14	Hospital
15	We can get food from Island suppliers but they are dependent on mainland suppliers
16	Health facilities
17	None
18	Main Hospitals
19	ferry services
20	Electricity, water, communications.
21	Electricity and Water
22	Mainland for electricity, water. Transport providers - SeaLink are reliant on
23	veterinary services, health services
24	Electricity
25	I buy most of my food, petrol and other goods on the island. I shop online for clothes and other items. I rarely go to town for shopping.
26	transport to the mainland



Q42: Resilience Rating

	1 - NOT AT ALL	2 - LOW	3 - MODERATE	4 - HIGH	5 - VERY HIGH	N/A	TOTAL	WEIGHTED AVERAGE
How would you rate the extent of the changes you have made to your lifestyle to reduce the impact or associated costs of climate related impacts?	6.42% 7	19.27% 21	44.04% 48	20.18% 22	8.26% 9	1.83% 2	109	3.05
How would you rate your general readiness in the event of a severe weather event? (equipment, roads and infrastructure, access to services, health support, medication)	0.00% 0	13.64% 15	39.09% 43	30.00% 33	15.45% 17	1.82% 2	110	3.48
How comfortable are you with your evacuation/safety plan for a severe weather event?	4.55% 5	10.91% 12	35.45% 39	23.64% 26	23.64% 26	1.82% 2	110	3.52
How would you rate your access to capital and resources after a severe weather event?	1.85% 2	21.30% 23	43.52% 47	24.07% 26	8.33% 9	0.93% 1	108	3.16
How would you rate your capacity to recover/rebuild the cultural and historical aspects of your community after a severe weather event?	0.92% 1	19.27% 21	39.45% 43	24.77% 27	8.26% 9	7.34% 8	109	3.22
How much do you rely on the mainland for food/water/energy supply?	0.91% 1	6.36% 7	12.73% 14	27.27% 30	49.09% 54	3.64% 4	110	4.22
How much does your community pitch in and help to rebuild after a severe weather event?	0.91% 1	3.64% 4	11.82% 13	32.73% 36	45.45% 50	5.45% 6	110	4.25



Q43: Are there any other comments or suggestions you would like to provide to the project team regarding improving resilience and transitioning to a low-carbon economy on Magnetic Island?

#	RESPONSES
1	I have answered this survey as though I still live on Magnetic Island, having been a community leader there for about 25 years or so. I have recently retired and relocated (for the time being at least) to France. I am happy to be contacted at gibhemp@bigpond.net.au
2	Communal battery storage
3	Greater access to cheaper solar power for island residents
4	Has to be a community approach and not residents doing for their own benefit
5	No
6	Information meetings
7	I guess more Gov funding to get people more connected and aware of efficiencies. Another round of solar city funding!
8	If we could get greater celebration of MI being within a World Heritage Area, perhaps people would desire the trappings of 21st century (A/C, cars, needing to be able to drive everywhere) and build a truly great place to live and visit.
9	As previously mentioned, Magnetic Island needs a multi-purpose cyclone shelter which can work for most of the year as a community hub. It could serve as a location for a food co-op, drop in centre, auditorium and many other needs to help build connections and resilience within the community while providing a much needed safe place for anybody who is uncertain whether their own home will withstand a dangerous cyclone.
10	Job opportunities
11	Council Green Waste Bin Service to Reduce Garden Waste Going to Landfill
12	Recycling station: don't pay trucks and ferries to dispose of waste, let's Refuse, reduce, reuse, recycle , spend this money of transport on a recycling plant on the island Equipment/ building materials to turn waste into sustainable products (furniture, roads made of glass particles, public compost area, multi recycling bins for glass, paper, food scraps etc) There are not even bins next to the brand new bus stops! Government subsidy for people taking public transport, eg: Townsville district subsidises 50% of any public transport abonnee (students,school,home-work) to get the public to use more public transport. Same for installing solar, starting compost bin, reward people If they don't use all their solar electricity, reward them and use/sell the solar energy to someone else.
13	Island relies heavy on mainland to provide all resources. If events accrue there and not here we suffer. If both are affected it's dire needs
14	Replace large busses with smaller ones. Have alternatives for power, sewerage, water. There are no viable options available without a drama
15	Not sure what the last few questions are getting at. We are all reliant on the mainland for services and resources. I shop on the island but ultimately everything comes from town.
16	We need a subsidy to make battery energy storage affordable to the average household There needs to be a community composting facility collecting organic business waste and turning it into useable garden compost. Perhaps even a community garden to reduce the volume of food I.e. transportation costs , coming to the island
17	Get Ergon Energy on-board!!!!
18	1. Stop planting declared noxious weeds in streetscaping 2. Stop cutting down 100+ year old trees to plant palm trees 3. Reduce the vehicle nos on the Island - we have a wonderful bus service 4. Stop the QPWS burns - they are poorly conceived, poorly managed and not consistent with current scientific methodology 5. Introduce, resource and enforce a domestic animal policy to keep cats and dogs away from the wildlife, the beaches and other people's property



19	Work on beaches and roads to prevent further erosion.
20	No
21	Car hire companies are the growth industry of late and yet the roads remain the same. Plans to steal National Park to accommodate these cars is now on the agenda. Can we not look at a shuttle from maybe the red park in HSB which has a big car Park? A new business for someone to operate specifically to forts and back again. Keep the cars off the hill. I drive over the hill up to four times per day. It has many hazards already with cyclist, walkers, pot holes etc. a roundabout on a hill with a bend is not going to solve this but add to it. This really needs to be under review with more consultation and more ideas.
22	Whole island should be eligible for REMOTE access to satellite NBN
23	We could probably develop a Virtual Power Plant with more incentive to PV and Battery, and some Wind Turbines due to our limited small size .
24	Incentives to disaster proof Magnetic Island - subsidise and promote solar panel and battery storage and e-vehicle take up, including charging points.
25	Increased use of recycled water, encourage suburban homes to add water storage systems to capture rainwater in the wet season.
26	community garden, community water capture, community solar with battery backup, community bio diesel power generation
27	No
28	No idea what a "low carbon economy " is Quite happy with current set up
29	Solar power collect your own water
30	Provision of solar micro grids for independent power supply to each bay to reduce reliance on our single cable;
31	Put a tax on ferry tickets for non-residents and use that to fund resilience related programs that benefit residents and local small businesses.
32	Lord Howe Island
33	No
34	How do we do this even when we are renting and to be cost efficient
35	I don't think you can have a low carbon community of Magnetic Island without the low community community of the rest of Australia. If you live in Australia then you don't have to live as in the Sahara or in Nepal. Education and adaption to your place and climate is essential to serenity, calmness, conduciveness, etc etc etc. Separatism is not workable, especially on a tourist island. Palm Island is set to become a tourist Island. Tourists have expectations which can be limited from a norm if they are aware of those limitations of place.
36	We need an overall plan for the whole Island
37	Stop shipping compostable material to the mainland for land fill!
38	Helping us to work towards more pooling. Also community gardens in every bay. (include composting)
39	Think we've covered it all. Electric vehicles would be good to see. Subsidies to encourage EV's on the island. Buses too. Even if all the hire cars went electric that would be good because they dont leave the island. Hybrid cars too. Really love the mulch program. Green waste collection would be something the council could consider. Not everyone has cars to trailers. Once a month and someone could put their tree branches on the curb to get collected. Council are really good at trimming the trees/branches that are close to the power lines. Amazingly well looked after on the island. council consideres in the Jewel so they're good at looking after us.
40	A key impediment is transitioning. This is not an island community mind set so awareness and expectations would need to be fostered



41	The island swimming pool should be covered with a solid roof to support a large solar panel array to power the pool and heat it in the winter months. So many benefits - reducing power cost and usage, reduces evaporation, reduces chemical needs, provides solid shade for school kids and public using the pool and surrounding area, and if heats pool in winter allows everyone to swim all year round. Waste management of organic matter is a valuable resource for gardens and should not be going to landfill.
42	The large number of island based hire cars on the island contribute to noise, traffic density and carbon emissions. This issue is a small part of a much larger issue relating to tourism and sustainability where the Butler model of tourism development is stealthily manifesting itself before our eyes.
43	Power storage
44	Don't do anything that will push a financial burden onto property owners and residents. Our properties have a low value but we are slugged high rates from Council. We can't afford to pay for the whims of bureaucrats. If you want to change things, you come up with the money to do them and don't put the burden back on us local property owners, residents and ratepayers.
45	Installation of underground power and on island generation would build resilience to storm events. Connect all houses to sewer to reduce health risks from flooding. Power generation from waste (such as Pyrolysis plant) and more renewables generation and community battery storage
46	No

Q44: Would you be willing to be a case study for our project based on your household's carbon profile?

ANSWER CHOICES	RESPONSES	
Yes	49.54%	54
No	50.46%	55
TOTAL		109



BUSINESSES

Q45: Please select the type of business / organisation you operate:

ANSWER CHOICES	RESPONSES	
Supermarket or general store	3.85%	1
Retail store	3.85%	1
Church or religious group	0.00%	0
First Nations organisation	0.00%	0
Venue such as community hall or sports club	0.00%	0
Accommodation (Hotel/Motel/BB/Lodge/Camp)	38.46%	10
Restaurant / Cafe	7.69%	2
School	0.00%	0
Tour company	11.54%	3
Golf course	0.00%	0
Equipment or vehicle leasing	0.00%	0
Community services (fire, police, ambulance)	0.00%	0
Other	34.62%	9
TOTAL		26

#	OTHER (PLEASE SPECIFY)
1	Media

Q46: What is your average capacity for overnight guests (including staff)?

ANSWER CHOICES	RESPONSES	
1 - 10 people	28.57%	2
10 - 20 people	28.57%	2
20 - 30 people	0.00%	0
30 - 50 people	0.00%	0
50+ people	42.86%	3
TOTAL		7



Q47: What facilities does your accommodation provide? Please select all that apply

ANSWER CHOICES	RESPONSES	
Self-contained apartments	50.00%	3
Motel style rooms	16.67%	1
Rooms with communal bathroom / kitchen facilities	50.00%	3
Swimming pool	50.00%	3
Gym, sauna, spa	0.00%	0
Dining facilities	0.00%	0
Total Respondents: 6		
#	OTHER (PLEASE SPECIFY)	
1	Open plan cabins with shared toilet/bathroom facilities	

Q48: If your business / organisation is a school, how many students and how many teachers are onsite for a one year period on average?

#	RESPONSES
1	10423 pax in total over calendar year 2018
2	N/A

Q49: If your business / organisation is a restaurant or cafe, what is the number of restaurant covers (people who are eating at your facility) for a one year period on average?

#	RESPONSES
1	19000
2	Quite variable n difficult to give an exact number, certainly increasing though...
3	8338 pax estimated over calendar year 2018
4	N/A

Q50: If your business / organisation is a golf course, what is the total property area of the golf course (hectares)?

#	RESPONSES
1	Na
2	n/a



Q51: If your business / organisation leases equipment or vehicles, what is the total number of vehicles/equipment hired in a one year period?

#	RESPONSES
1	Na

Q52: What is the total area under roof of your business / organisation? Area under roof - the total number of square metres (m2) of the organisation's interior area and undercover outdoor areas. If unknown, please provide a rough estimate of the size of your building in the best way you can.

#	RESPONSES
1	3000
2	62 ft
3	15 x 10m
4	450
5	estimated 1000m2
6	We have multiple buildings on site. Total estimated building size would be 800m2 over 20 buildings.
7	225 sq m under canopy cover
8	400m2
9	10x10
10	65
11	420
12	100

Q53: Please provide more information about your operations on Magnetic Island.

#	RESPONSES
1	Operate accommodation and koala park attraction 35 a frame bungalows Camping ground Food and beverage Koala park tours
2	We did operate on Magnetic Island for 10 years and are now in Airlie Beach.
3	A cafe open for 8-10 mth each year
4	We are a traditional Bed and Breakfast providing accommodation specialising in overseas travellers. We promote eco tourism in that it is an environment that is the jewel in our crown.
5	motel accommodation (no food)
6	We provide a residential accommodation camp in open dormitory/cabin style with catering and outdoor recreational activities for schools, sporting and corporate groups
7	tank space is 85 sq m, while I have a caged area where I keep microalgae stock cultures and about 15 aquaria for rearing of clownfish larvae (summertime), the main display of tanks is for tourism.
8	Concrete, water diversion, landscaping business hiring local residents and using Magnetic Island suppliers.
9	Health Retail
10	Hostel / Guest House



Q54: What would make you invest in these sustainability/energy efficiency features?

#	RESPONSES
1	Information and grants
2	Getting help collecting environmental taxes ie not being forced to include in competitive ticket prices and it being treated more like entry to national parks eg in Tasmania where ticket collection is undertaken by the government.
3	If I believed in there effectiveness n viability
4	Government support
5	Grant funding as we are community not for profit
6	Depending on the cost as my business is small
7	Profitability
8	Information and necessity
9	Not sure, needs to be compelling
10	Cost Savings
11	Subsidy for putting in water tanks. Reducing the cost of replacing solar inverter. (One of the two we have has died).

Q55: What would motivate you to reduce energy use and emissions? Please select any that apply:

ANSWER CHOICES	RESPONSES
Reduced bills	90.00% 9
Reduced environmental pollution	60.00% 6
More efficient appliances	50.00% 5
Community led education and awareness program	30.00% 3
Not important to me	0.00% 0
Total Respondents: 10	

#	OTHER (PLEASE SPECIFY)
1	Grants
2	I just spent \$22000 on a solar system this year to help balance our power consumption

Q56: What do you think are the most important issues facing your Island community in terms of sustainability and resilience?

#	RESPONSES
1	Central point to disperse information Peak and off peak periods, hard to budget All small family business operations, tight budgets
2	Facing the island when we were there is the way eco accreditation tickets were given out to eg large boats which made a mockery of being environmentally accredited. No policing in the marina of yachts having holding tanks. Having a community that is behind environmental friendly tourism.



3	Waste and infrastructure to support increased tourism
4	Society and its appetite for commercialism and over government
5	Keeping the island in its pristine managed environment so that there is a reason for guests and community to stay and visit on the island
6	cost of living here is higher than in Townsville so this is perhaps the most important issue.
7	All Level Government Influences
8	Water storage, coastline protection, care of our native animals and plants, better waste initiatives, community garden, community compost area, new residents thinking they know better than those of us that have been living here for generations.
9	Cost
10	Waste disposal and water

Q57: Do you actively and regularly participate in Island community events, associations or groups? Please provide details.

#	RESPONSES
1	I was inaugural chair of TOBMI from 2009-2012. We managed to get the council to consider greening the ferry terminal area only to be undermined by a vocal local who continually attended meetings to undermine this kind of change.
2	No too busy currently in business
3	Active in many activities predominantly as a volunteer. Surf life saving, Magnetic Island State school,
4	We are starting to participate in island events
5	I have been on the committee for Tourism Magnetic Island, Inc. since it was formed over 10 yr. ago. I also am a committee member of the Townsville LMAC
6	Yes - Townsville Enterprise
7	Yes
8	Regularly sponsor and volunteer - sporting and school events
9	RSL Volunteering
10	Yes, I have previously been a festival director for the island, and I update whatsonmagneticisland.com.au each week, ... and I distribute information for MICDA

Q58: Do you participate in any initiatives with other Islands to share learnings and leverage off collective knowledge? Please provide details.

#	RESPONSES
1	No, good idea
2	No
3	No too busy currently in business
4	No
5	No.
6	no
7	King Island
8	No but would love to be involved with this



9	No
10	No

Q59: What is your main operating cost? Please select one

ANSWER CHOICES	RESPONSES	
Electricity	80.00%	8
Waste removal	0.00%	0
Transportation / logistics	20.00%	2
Water	0.00%	0
TOTAL		10

#	OTHER (PLEASE SPECIFY)
1	environmental taxes/marina fees
2	rent
3	Wages
4	Transportation is high with the barge and then higher again with transport company.

Q60: Do you encounter any environmental or plant/animal issues on the Island? E.g. Insects invading homes or salt corrosion

ANSWER CHOICES	RESPONSES	
Yes	66.67%	8
No	33.33%	4
TOTAL		12

#	IF YES, PLEASE DESCRIBE:
1	Classic seasonal flies and mosquitoes
2	Strangely enough whilst we love them Wallabies and the destruction they can bring adds to our annual expenses through repairs and maintenance
3	both salt corrosion and at times insect invasion e.g.march flies
4	Salt erosion.
5	the salt water from the tanks does increase corrosion of the canopy metal structure. However, the seawater system is recirculating so increased corrosion is just inside the canopy area.
6	We need more native bee hives and flora to protect our natives. Feral cats seem to be impacting the scrub fowls as they nest in the ground. Many echidnas though!
7	Snake weed & sticky weed is prolific in our area of residence. Irresponsible dog owners, dogs wandering streets and owners with dogs not on leads. Dog owners taking their dogs into National Parks. Sighting cats, probably feral and domestic loose and the impact on all native animals from lizards to birds. Yes there is salt corrosion on steel, but we do live on an Island. Pest treatment for insects and need to remember 1 week after 1st rains for flying ants.
8	Termites, (which are to be expected), invasive weeds, salt corrosion (also to be expected), too many possums (due to overfeeding).



Q61: Have you identified or implemented any opportunities to reduce your use of energy, water or waste or to generate electricity through renewable sources?

ANSWER CHOICES	RESPONSES	
Yes	100.00%	12
No	0.00%	0
TOTAL		12

#	IF YES, PLEASE PROVIDE MORE DETAILS ON WHAT YOU IMPLEMENTED:
1	40kw solar Low flow water Sensor devices for Acond in guest rooms
2	environmental toilets, recycling - not selling plastic bottles on board. Using our sails as much as possible.
3	Commercial dishwasher n solar system
4	We are now using smart technologies and appliances to reduce our energy footprint. This had made a significant contribution in reducing our energy costs
5	We sort rubbish and recycle cans and bottles etc. When rooms are not used, we make sure that there are no lights, fans or air-cons left on. We use bore water for irrigation.
6	Installation of water waste devices on taps in toilets and showers. Installation of clean septic facilities and reuse of clean treated water. Air con used as required rather than when guests arrive. Non security lighting switches are on timers.
7	I have 10 solar panels to help generate power, but this amount is not enough to cover all the requirements. The government payment per kw hour is so small and cost of purchasing more panels. In winter I already put heavy duty blue bubble wrap over the water on the tanks and run submersible heaters at night to maintain suitable temperature for the coral reef organisms. In summer I run an industrial fan to blow hot air up and away from the canopy.
8	Power saving on lighting/refrigeration via latest industry initiatives
9	I collect seaweed, wash and leave in my watering cans. Not renewable, but circular. We have Redcycle for our soft plastics, a receiving area at the kindy for bottles for enviobank, plastic lids, toothpaste waste. Now we just need a food waste system and a community garden.
10	We installed Solar panels on our residence. We have a rain water tank. We recycle.
11	LED Lights, timers to control periods of operation of energy consuming equipment
12	Purchasing solar panels.

Q62: What would motivate you to reduce the energy use and emissions of your operations? Please select any that apply:

ANSWER CHOICES	RESPONSES	
Reduced bills	90.91%	10
Reduced environmental pollution	54.55%	6
More efficient appliances	45.45%	5
Community led education and awareness program	18.18%	2
Government grants or subsidies	54.55%	6
Not important to me	0.00%	0
Total Respondents: 11		



Q63: Please select which of the following elements your business has:

ANSWER CHOICES	RESPONSES	
A/C unit	63.64%	7
Dishwasher	36.36%	4
Washing machine	54.55%	6
Dryer	45.45%	5
Television	36.36%	4
PV panels (solar power)	27.27%	3
PV solar panels with battery	0.00%	0
Solar hot water	0.00%	0
Gas hot water	27.27%	3
Electricity hot water	45.45%	5
Water tank or other water storage	27.27%	3
Energy efficient lighting	81.82%	9
Energy efficient appliances (energy star)	72.73%	8
Water efficient appliances	18.18%	2
Diesel generator	27.27%	3
Wind energy	9.09%	1
Passive design (orientation, natural light/shade, air flow)	45.45%	5
Insulation	36.36%	4
Electric vehicle charger	0.00%	0
Please specify if other or if multiple of the same answer	0.00%	0
Total Respondents: 11		

Q64: When do you use most electricity? (Select all that apply)

ANSWER CHOICES	RESPONSES	
Weekdays	54.55%	6
Weekends	54.55%	6
Morning	36.36%	4
Afternoon	36.36%	4
Night	45.45%	5
Total Respondents: 11		



Q65: What are the main uses of this electricity? Please select all that apply

ANSWER CHOICES	RESPONSES	
Air conditioning	72.73%	8
Fridges/freezers	81.82%	9
Computers/televisions	27.27%	3
Lighting	45.45%	5
Hot water	36.36%	4
Total Respondents: 11		

#	OTHER (PLEASE SPECIFY)
1	heaters in winter, fans in summer & normal pumps for water flow and aeration.

Q66: Approximately how much do you pay for electricity every year?

#	RESPONSES
1	\$55000
2	not known
3	Variable now due to large solar instal
4	4000
5	\$17000
6	\$16,900
7	\$1500
8	\$100000
9	2400 business and private
10	6000.00
11	7500
12	\$2,800

Q67: What would encourage your operations to reduce the amount of energy consumed?

#	RESPONSES
1	Bill reduction, signage for guechts
2	we are already working on that 100%
3	Lowering the cost of smart technologies. Its still in its infancy and as early adopters initial costs remain significant
4	Install battery stored solar paneling that reduces consumption on my property and not sold back to the grid and inflated pricing and meter charges etc.
5	difficult to reduce it in my situation
6	subsidies



7	Information and availability
8	Incentives to implement power saving devices.
9	I need no encouragement; I need options
10 can I say that you didn't have 'pools' in your list of electricity uses above, or washing machines and dryers (especially for BnB's and accommodation places). ... we reduce the amount of energy used as much as possible - REF: Solar Cities Program a few years back.

Q68: In general how old is your electrical equipment?

ANSWER CHOICES	RESPONSES	
>1 year	0.00%	0
2-4 years	58.33%	7
5+ years	33.33%	4
10+ years	8.33%	1
TOTAL		12

Q69: Would you consider the energy efficiency rating of an appliance before purchasing?

ANSWER CHOICES	RESPONSES	
Yes	100.00%	12
No	0.00%	0
TOTAL		12

Q70: Approximately how much rubbish does your operation generate every week? Please select:

ANSWER CHOICES	RESPONSES	
Half wheelie bin or less	33.33%	4
1 wheelie bin	0.00%	0
2 wheelie bins or more	66.67%	8
TOTAL		12

Q71: What are your main waste items?

#	RESPONSES
1	Food waste, cardboard,
2	we have wraps with recycled paper - mainly bottles from our licensed bar
3	Varied packaging related to stock n food prep
4	Glass and plastic bottle



5	bottles and cans (recyclable and non recyclables)
6	kitchen waste
7	plastic packaging
8	Cardboard
9	Materials packaging
10	packaging, labels.
11	packaging
12	Food/drink packaging

Q72: Do you recycle items such as plastic, paper and glass?

ANSWER CHOICES	RESPONSES	
Yes	91.67%	11
No	8.33%	1
TOTAL		12

Q73: Do you compost any organic or food waste?

ANSWER CHOICES	RESPONSES	
Yes	50.00%	6
No	50.00%	6
TOTAL		12

Q74: Do you use Council facilities (waste transfer station) to dispose of your rubbish?

ANSWER CHOICES	RESPONSES	
Yes	91.67%	11
No	8.33%	1
TOTAL		12

#	IF NOT, DO YOU ARRANGE FOR YOUR OWN RUBBISH TO BE TRANSPORTED OFF ISLAND AND HOW MUCH DOES THIS COST?
1	N/a



Q75: What would encourage your operations to reduce the amount of waste generated?

#	RESPONSES
1	have a government more proactively supporting recycling. Airlie Beach has only just introduced kerbside recycling.
2	It's much harder to reduce waste as more business means more waste but we need to educate our guests and visitors to the island better
3	Facilities to enable us to do so on the island.
4	N/A
5	Legitimate recycling initiatives
6	well, the waste comes to us, it is not like we generate the waste.
7	Cannot easily control guest habits
8	We repurpose as much plastic as possible, but many Islanders are discouraged as the TCC don't recycle the items we put into our yellow recycling bin. If this could be fixed, it would be a MAJOR incentive.

Q76: Are you aware of or do you participate in any incentive schemes that encourage waste reduction?

ANSWER CHOICES	RESPONSES	
Yes	25.00%	3
No	75.00%	9
TOTAL		12

#	IF YES, PLEASE DESCRIBE:
1	Guest signage
2	Organic wasted to animals on island cardboard to waste transfer station
3	recycling
4	Not yet, but we plan to.

Q77: Approximately how much water does your operation use every day?

#	RESPONSES
1	Lots
2	unknown
3	Not sure
4	Not sure
5	Unknown
6	300 litres freshwater
7	?
8	10l
9	not much
10	varies with guest count
11	???



Q78: What are the main uses of water? Please provide details.

#	RESPONSES
1	Guest showers, commercial kitchen food and beverage
2	drinking water
3	Coffee machine and dishes
4	Washing laundry, guest use and evaporation of the swimming pool
5	guests showering
6	Showers, kitchen, cleaning
7	washing / cleaning and adding to tanks to cover evaporation in saltwater tanks
8	Cleaning
9	Washing tools
10	sink, washing up
11	showers, washing
12	Laundry for AirBnB and garden.

Q79: Do you collect and use your own water?

ANSWER CHOICES	RESPONSES	
Yes	25.00%	3
No	75.00%	9
TOTAL		12

Q80: Do you have any water saving appliances or features? Please select all that apply

ANSWER CHOICES	RESPONSES	
Dual flush toilets	90.00%	9
Low flow showerheads	60.00%	6
Low flow taps	30.00%	3
Efficient garden sprinklers	50.00%	5
Total Respondents: 10		

#	OTHER (PLEASE SPECIFY)
1	toilet environmental
2	I have a bore for personal water use
3	Chemical toilet



Q81: Do you maintain piping to prevent the impacts of rust or salt corrosion?

ANSWER CHOICES	RESPONSES	
Yes	45.45%	5
No	54.55%	6
TOTAL		11

#	IF YES, HOW OFTEN?
1	Mostly all new
2	Most piping for water or electricity is PVC
3	We fix it when it breaks.

Q82: Do you have a septic tank?

ANSWER CHOICES	RESPONSES	
Yes	58.33%	7
No	41.67%	5
TOTAL		12

#	IF YES, PLEASE PROVIDE DETAILS:
1	ship's tank
2	?
3	Unknown
4	Not sure what you want to know?

Q83: Do you consider water efficiency ratings when purchasing new equipment/appliances?

ANSWER CHOICES	RESPONSES	
Yes	91.67%	11
No	8.33%	1
TOTAL		12

Q84: What would encourage your operations to reduce the amount of water consumed? Please detail

#	RESPONSES
1	Financial and guest awareness
2	already answered
3	Subsidies
4	Government grants to purchase and install



5	difficult to reduce in my situation
6	?
7	maybe the landlord to pay for his responsibilities
8	Being allowed by TCC to use grey water. We were told that we had to connect to the sewer mains, hence even the kitchen sink and laundry water don't get reused.

Q85: How many vehicles do you own?

ANSWER CHOICES	RESPONSES	
1	27.27%	3
2	36.36%	4
3	27.27%	3
4 or more	9.09%	1
TOTAL		11

Q86: Do you own any of the following vehicle types? Please select all that apply

	SMALL (PETROL)	SMALL (DIESEL)	LARGE (PETROL)	LARGE (DIESEL)	HYBRID	ELECTRIC	N/A	TOTAL	WEIGHTED AVERAGE
Car	44.44% 4	22.22% 2	22.22% 2	11.11% 1	0.00% 0	0.00% 0	0.00% 0	9	2.00
Ute	28.57% 2	28.57% 2	14.29% 1	28.57% 2	0.00% 0	0.00% 0	0.00% 0	7	2.43
Truck	0.00% 0	33.33% 1	0.00% 0	33.33% 1	0.00% 0	0.00% 0	33.33% 1	3	3.00
Van	0.00% 0	0.00% 0	0.00% 0	50.00% 1	0.00% 0	0.00% 0	50.00% 1	2	4.00
Boat	60.00% 3	0.00% 0	0.00% 0	20.00% 1	0.00% 0	0.00% 0	20.00% 1	5	1.75
Motorcycle	100.00% 3	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	3	1.00

#	OTHER (PLEASE SPECIFY)
1	Motorcycle is a scooter - many people have scooters on the island

Q87: Approximately how much do you pay for fuel (vehicle or boat) every year?

#	RESPONSES
1	20000
2	\$3000 pa
3	Minimal on the island
4	3000
5	\$1000



6	\$6,100
7	\$2000
8	\$4000
9	Heaps
10	7500.00
11	1200
12	TOO MUCH!

Q88: Have you undertaken any actions to reduce transport energy use to/from and on the Island?

ANSWER CHOICES	RESPONSES	
Yes	50.00%	6
No	50.00%	6
TOTAL		12

#	IF YES, PLEASE DESCRIBE:
1	n/a
2	Walking
3	Not available to us.
4	take the passenger ferry
5	We pick up staff
6	get a child to catch the bus
7	Limit the numbers of trips we do, but organising shopping and banking into one trip, instead of multiple trips where possible.

Q89: What have been your major climate related impacts and associated costs since 2010? (The physical impacts can include sea level rise, erosion, storm surges, heatwaves, flooding/rain events, reduced water quality/availability, cyclones, etc. The effects might include higher insurance premiums, income loss, health and wellbeing)

#	RESPONSES
1	Storms cyclones Increased insurance
2	Higher insurance premiums, stronger cyclones (more intense with massive flooding) due to climate change Greatly impacts tourism numbers
3	Drought, floods and cyclone readiness
4	The last rain event in February 2019 resulted in the insurance company not willing to renew the insurance. We are one of many tourism businesses in North Queensland experiencing this phenomenon. Still under review.
5	Cyclonic after effects of cyclones including rain events.
6	Cyclone Yasi ~ 8 yr ago was a major problem and late Jan. to early Feb 2019 was the flooding in our area that caused problems including many display fish died and had to be replaced.



7	Cyclones
8	High
9	higher insurance premiums - it's a con job!
10	Rain: \$1300 for storm drainage repairs, loss of guest bookings, mould removal
11	Insurance premiums doubled after Cyclone Yasi, and each cyclone/major event after that, they have risen dramatically. This is a HUGE annual cost to everyone on Magnetic Island. Loss of income is expected after a major event like this, as services need repair, and time is taken for the clean up.

Q90: How many hours/days can you operate in "island mode"? (without outside support for energy, water, waste, food, communications, health services)

#	RESPONSES
1	3 days
2	n/a
3	Minimal
4	Unsure of this question. Best guess one month
5	14 days
6	I have a genset to power outages. We have a rainwater tank for drinking
7	Personal - days Business - a few hours
8	5
9	Have done 3-4 days using generator etc. Maximum probably 1 week.
10	7
11	Working hours/days = 0 (I need the internet/electricity/water to work) Survival = 5 days approx.

Q91: How frequently do severe weather events occur? Are they occurring more frequently and are there any stories passed down that can help us get ready?

#	RESPONSES
1	Bi annual large storm
2	Almost annually
3	At least twice per year
4	On average one weather event every 2 to 3 years.
5	Annually around January/February.
6	Every few years there is a severe event and I believe this is increasing.
7	5 year frequency
8	Large fires in 70s. Slow burn offs for the win
9	In the 20 years I have being on the Island there have being 3 impact cyclones to my recollection. I don't believe this is any more or less then historically occurring.
10	Perhaps you can source this from ABS?
11	I can't say. I've been here since 2005. It would seem normal to me, possible slightly higher rate of cyclones, but older residents will be better informed.



Q92: What stands out as the biggest area of concern for your community in terms of resilience (vulnerability)?

#	RESPONSES
1	Cyclones
2	Vulnerability - we sustained \$40,000 damage to our boat in Cyclone Debbie due to 2 boats not being tied up properly. Also lack of government will to get a national climate policy and introduce legislation that forces the judicial system to include climate change
3	Cyclone
4	Government and decisions made by non islanders
5	Insurance companies attitude, they take your money when nothing happens and when something does they do not want to know you.
6	Evacuation from the island
7	Cyclone damage to reduce visitors to the island
8	Equal government funding/assistance compared to Capital Cities
9	Cyclone or disaster shelter ASAP
10	Complacency and ignorance - certainly surrounding cyclones
11	Lack of electricity, water, and health services. (Food we can stockpile if necessary).

Q93: What do you do to prepare for a severe weather event and what do you do to handle climate related impacts better?

#	RESPONSES
1	Store Generators
2	baton down the hatches - literally. We have no control over the above two mentioned issues.
3	Make sure all flying debris is tied down
4	Follow recommended cyclone procedures, reduce energy consumption, work with nature not against it
5	Assess the need for evacuation of guests to the mainland, take down all shade covers and install hoarding around vulnerable glass areas. Stock up on food/battery items.
6	"Tie everything down that could be taken away in the wind. Barricade doors and put shutters on windows for the house.
7	Ensure business is ready to support community in case of disaster
8	We have a cyclone kit always checked at beginning and end of season
9	All the steps recommended in cyclone preparedness. Put away. Tie down. Fill up water. Extra fuel. Cash out. Store food. Alternate light source. Generator power. Bunker down.
10	Have a generator and water storage vessels/containers
11	Store water where possible, increase food stores (and storm supplies), clear the yard, top up petrol, and prep for flood.



Q94: Are there any mainland (or neighbouring island) businesses you are heavily reliant on?

ANSWER CHOICES	RESPONSES	
Food Providers	100.00%	8
Waste Providers	62.50%	5
Maintenance Companies	12.50%	1
Fuel Suppliers	62.50%	5
Total Respondents: 8		

#	OTHERS (PLEASE SPECIFY)
1	Ferry services
2	n/a
3	Transport providers (Ferries)
4	most things needed can be purchased at the local hardware store
5	Wholesaler
6	Supermarkets, TCC, etc



Q95: Resilience Rating

	1 - NOT AT ALL	2 - LOW	3 - MODERATE	4 - HIGH	5 - VERY HIGH	N/A	TOTAL	WEIGHTED AVERAGE
How would you rate the extent of the changes you have made to your lifestyle to reduce the impact or associated costs of climate related impacts?	0.00% 0	16.67% 2	50.00% 6	16.67% 2	8.33% 1	8.33% 1	12	3.18
How would you rate your general readiness in the event of a severe weather event? (equipment, roads and infrastructure, access to services, health support, medication)	0.00% 0	8.33% 1	50.00% 6	41.67% 5	0.00% 0	0.00% 0	12	3.33
How comfortable are you with your evacuation/safety plan for a severe weather event?	0.00% 0	8.33% 1	16.67% 2	50.00% 6	25.00% 3	0.00% 0	12	3.92
How would you rate your access to capital and resources after a severe weather event?	16.67% 2	41.67% 5	16.67% 2	25.00% 3	0.00% 0	0.00% 0	12	2.50
How would you rate your capacity to recover/rebuild the cultural and historical aspects of your community after a severe weather event?	0.00% 0	18.18% 2	45.45% 5	27.27% 3	0.00% 0	9.09% 1	11	3.10
How much do you rely on the mainland for food/water/energy supply?	0.00% 0	0.00% 0	25.00% 3	8.33% 1	58.33% 7	8.33% 1	12	4.36
How much does your community pitch in and help to rebuild after a severe weather event?	0.00% 0	0.00% 0	33.33% 4	25.00% 3	41.67% 5	0.00% 0	12	4.08



Q96: Are there any other comments or suggestions you would like to provide to the project team regarding improving resilience and transitioning to a low-carbon economy on Magnetic Island?

#	RESPONSES
1	electric cars - should have been done long ago as a pilot study if you want to truly say you are trying.
2	Government policy and guidance
3	Solar energy is the biggest reducer of energy loss and it could generate enough electricity to run the island if an investment was made to do so.
4	this seems all very "feel good" but the reality is, energy use by 2500 people is really a pittance of the population.
5	Just allow quite a bit of time for your Info Sessions. Islanders are very good about talking about these things ;)

Q97: Would you be willing to provide a case study for our project report based on your business's carbon profile?

ANSWER CHOICES	RESPONSES	
Yes	50.00%	6
No	50.00%	6
TOTAL		12