

ENVIRONMENTAL MANAGEMENT PLAN



Broken Paradise

****Please note: This plan is completely fictitious - it should give a good idea of how this template can be utilised in your business ****

NAME	DATE	SIGNED
Plan Prepared by		
John Doe	01/04/2019	John Doe
Plan Reviewed by	Annual Update / Review	
John Doe	01/04/2019	

CONTENTS

ENVIRONMENTAL MANAGEMENT PLAN & IMPACT ASSESSMENT	3
THE COMPANY'S ENVIRONMENTAL AIMS AND OBJECTIVES.....	3
ENVIRONMENTAL AND CULTURAL CHARACTERISTICS	3
ENVIRONMENTAL RISK MANAGEMENT – THE ENVIRONMENTAL RISKS ASSOCIATED WITH OPERATIONS	4
ENERGY AND GHG EMISSIONS: MEASUREMENT, MINIMISATION AND MANAGEMENT STRATEGIES	6
1. IDENTIFY AND MEASURE	6
2. STRATEGIES TO REDUCE AND REPORT	7
WATER: MEASUREMENT, MINIMISATION AND MANAGEMENT STRATEGIES.....	11
1. IDENTIFY AND MEASURE	11
2. STRATEGIES TO MEASURE AND REPORT	12
WASTE: MEASUREMENT, MINIMISATION AND MANAGEMENT STRATEGIES	13
WASTE AUDIT RESULTS.....	14
CLIMATE CHANGE RISK ASSESSMENT	15
ENVIRONMENTAL BEST PRACTICE INITIATIVES	17
ENVIRONMENTAL IMPROVEMENTS	18
REPORTING PROGRAMS	18
STAFF TRAINING AND DEVELOPMENT.....	18
CUSTOMER AWARENESS	19
CLIMATE ACTION CERTIFICATION DOCUMENTATION REQUIREMENTS	20
CLIMATE CHANGE AWARENESS AND EDUCATION	20
GLOSSARY	21

ENVIRONMENTAL MANAGEMENT PLAN & IMPACT ASSESSMENT

THE COMPANY'S ENVIRONMENTAL AIMS AND OBJECTIVES

Our environmental aim is to provide luxury and sustainable accommodation for environmentally conscious tourists. To achieve this, we have designed our lodges and operation in compliance with all building regulations and environmental policies. Prior to development we have identified all the possible environmental risks associated with the project during its development and operation. These impacts have been catered for as best as possible through mitigation methods, construction materials and methods, environmental initiatives and design initiatives.

As an eco-lodge our environmental aims and objectives include:

- To minimise the consumption of energy and water.
- To minimise the generation of waste.
- To educate our guests on our environmental policies and how to reduce their impact by developing their appreciation and understanding.
- To source products locally where possible (i.e. construction, repairs & maintenance, food & beverage, furnishings, etc.).
- To continue to employ local staff.
- To continue to improve the environmental performance of our operation.
- To monitor and assess environmental opportunities, risks and impacts regularly.
- To partake in local environmental initiatives (i.e. dune rehabilitation, turtle nesting programs).
- To support local flora and fauna.
- To ensure no long term environmental or cultural impacts as a result of our operation.
- To reduce contributions to greenhouse gas emissions and make regular revisions to adaptation strategies against climate change.

ENVIRONMENTAL AND CULTURAL CHARACTERISTICS

Our operation is located within the Broken Head Nature Reserve which is home to a variety of flora and fauna species, as well as Aboriginal cultural heritage. This reserve is home to three endangered plant communities: littoral and lowland rainforest, woodlands and headland grasses.

Flora

Littoral rainforest is predominant in the area but is also under threat from coastal developments. Banksias and Tuckeroos line the coast and provide shelter from salt-laden onshore winds and allow the rainforest to thrive behind them. Brush box, native elm, hoop pines, burrawangs, bungalow palms and pink-leaved maidens bush are all found within the region. Out of the 240 plants species that the reserve is home to, twelve are threatened in NSW and six in Australia (e.g. the white lace flower rainforest tree).

Fauna

Flying foxes, micro-bats and scrub and sea birds inhabit the area including; white breasted sea eagles, Brahminy kites, green-winged and rose-crowned pigeons, Koel-rings and whipbirds. The reserve is home to various threatened species, such as the Wompoo fruit dove.

Pests

Introduced flora species include; bitou bush, lantana, madeira vine, morning glory and glory lily. Introduced fauna species include; cane toads, feral cats, feral dogs and foxes.

Culture

Broken Head Nature Reserve land belongs to the Arakwal people of the Bundjalung tribe, the recognised Aboriginal Traditional Custodians of the Byron Bay District. The land, waterways, plants and animals in the region feature within their culture and the dreaming stories and cultural learnings are still passed on today. Three Sisters (previously known as Cocked Hat Rocks) is an important Aboriginal site and holds cultural significance.

ENVIRONMENTAL RISK MANAGEMENT – THE ENVIRONMENTAL RISKS ASSOCIATED WITH OPERATIONS

Activity / Area	Associated Risk/s	Level of Risk	Strategy to Minimise Risk	Staff Role Responsible	Monitoring Process
Land clearing	<ul style="list-style-type: none"> Wildlife disturbance Run-off 	<i>Low to medium</i>	<ul style="list-style-type: none"> A site evaluation was undertaken prior to clearing and two snakes of the same species were relocated. Clearing and construction was done during the dry season to avoid delays and prevent runoff from affecting local waterways. 	<i>Owners</i>	<ul style="list-style-type: none"> Regular monitoring of water quality during and after construction is undertaken to ensure the absence of pollutants or other harmful properties.
Building construction	<ul style="list-style-type: none"> Site contamination 	<i>Low to medium</i>	<ul style="list-style-type: none"> To avoid contamination all chemicals used on site were stored appropriately to prevent leeching. A soil test was also conducted after construction. 	<i>Contractors & owners</i>	<ul style="list-style-type: none"> An annual soil test is conducted to ensure there is no leeching from the grey water system.
Bird feeding	<ul style="list-style-type: none"> Wildlife disturbance 	<i>Low to medium</i>	<ul style="list-style-type: none"> Information regarding the prohibition of bird feed and the implications it can have on species is provided to our guest upon their arrival. The property has several nesting boxes installed and guests wishing to bird watch are able to find an abundance of species around these sites. 	<i>All staff</i>	<ul style="list-style-type: none"> The staff are aware of the no feeding policy and will ensure it is not occurring or educate guests that are caught unaware. Penalise repeat offenders
Wildlife interaction	<ul style="list-style-type: none"> Wildlife disturbance 	<i>Low</i>	<ul style="list-style-type: none"> Again, guests are educated upon arrival about not interfering with the natural fauna. We encourage them to take photos but to leave the animals to their natural routines. 	<i>All staff</i>	<ul style="list-style-type: none"> The staff are aware of the no interaction policy and will ensure it is not occurring or educate guests that are unaware. Penalise repeat offenders

Activity / Area	Associated Risk/s	Level of Risk	Strategy to Minimise Risk	Staff Role Responsible	Monitoring Process
Food consumption and preparation	<ul style="list-style-type: none"> Littering 	<i>Low</i>	<ul style="list-style-type: none"> Both recycle and waste bins are present within our lodges and additional facilities have been provided within the grounds. Information regarding waste disposal and recycling is provided to guests in their welcome pack. This also outlines the dangers that rubbish entering natural areas can have on wildlife. 	<i>Groundskeeper & staff</i>	<ul style="list-style-type: none"> Monitoring the grounds for litter by our groundskeeper and all staff members. Bins are emptied daily to avoid the possibility of overflow.
Accessing the beach	<ul style="list-style-type: none"> Erosion 	<i>Low</i>	<ul style="list-style-type: none"> The private path offering direct access to the beach is guarded by “dune-forming fencing”. This path is also raked and maintained regularly. 	<i>Owner</i>	<ul style="list-style-type: none"> The path is monitored weekly to assess if maintenance is required.
Product purchasing	<ul style="list-style-type: none"> Solid waste production 	<i>Low</i>	<ul style="list-style-type: none"> We have a composting system managed by staff and our chef. We have chickens that are fed left over scraps and produce eggs for use in the kitchen. Solid waste is minimised through buying dry goods in bulk. All waste is sorted and the majority (paper, cardboard, plastics and glass) is recycled. Where possible, we buy from producers who adopt sustainable practices. 	<i>Chef & staff</i>	<ul style="list-style-type: none"> Monitor waste weekly to ensure we do not exceed our performance indicators Monitor efficiency and effectiveness of the composting system

ENERGY AND GHG EMISSIONS: MEASUREMENT, MINIMISATION AND MANAGEMENT STRATEGIES

1. IDENTIFY AND MEASURE

SOURCES

- Laundry
- Kitchen appliances
- Guest rooms (air conditioning, electricity, heating etc)
- Office (computers, printer etc)
- Fuel / gas

Indirect:

- Food miles
- Travel costs / flights

CONSUMPTION

	Consumption per year	Consumption per guest	Sources	Monitoring Process
Energy	67200 kWh	6.7 kWh	<input checked="" type="checkbox"/> Grid (from provider) <input checked="" type="checkbox"/> Solar <input type="checkbox"/> Wind <input type="checkbox"/> Water <input type="checkbox"/> Fuel (diesel/petrol)	Staff monitor energy consumption via bills and from the energy produced by the solar panels.

	Total GHG/year	Total GHG/guest	GHG Sources	Monitoring Process
Total GHG Emissions	159.5 t/Co2-e	17.9 kg/Co2-e	<input checked="" type="checkbox"/> Electricity <input checked="" type="checkbox"/> Petrol <input checked="" type="checkbox"/> Diesel <input type="checkbox"/> Biofuel	Emissions are plotted on a graph monthly for easy comparison

2. STRATEGIES TO REDUCE AND REPORT

	Topic/Area	Emissions Reduction Actions	Staff Role Responsible	Timeline/Budget	Monitoring Process
Energy Efficiency	Buildings				
	Equipment	<ul style="list-style-type: none"> Buildings are insulated to maximize energy efficiency All appliances have a 5-star energy rating. Solar hot water systems are installed. Lodges are powered by the room key, meaning that once the room is unoccupied there is no power being consumed (even by appliances in standby mode). Recycled building materials are used where necessary 	<i>Owners/ Managers</i>	Timeline: Equipment is tested regularly. Budget: There is no set budget in place. Equipment will be repaired or replaced immediately when necessary.	<ul style="list-style-type: none"> All equipment is maintained regularly and any faulty equipment is replaced immediately. We rely on guest feedback as one way of monitoring any faulty, broken or inefficient appliances. Equipment functionality is assessed quarterly.
	Lighting	<ul style="list-style-type: none"> Outside lighting is on sensors from 9pm onwards. LED lighting is used in all rooms. 	<i>Owners/ Managers</i>	Ongoing	<ul style="list-style-type: none"> Ongoing maintenance and monitoring of power usage
	Heating, cooling and ventilation	<ul style="list-style-type: none"> Maximise natural ventilation (reduce need for air conditioning) Guests receive advice on how to optimise efficiency and comfort 	<i>Owners/ Managers</i>	Ongoing	<ul style="list-style-type: none"> Ongoing maintenance and monitoring
	Water heating	<ul style="list-style-type: none"> Efficient water use is implemented throughout the building 	<i>Owners/ Managers</i>	Ongoing	<ul style="list-style-type: none"> Ongoing maintenance and monitoring of water and power usage
Energy Supply	Renewable energy	<ul style="list-style-type: none"> Solar panels installed Solar hot water systems are installed 	<i>Owners/ Managers</i>	Timeline – monthly monitoring	<ul style="list-style-type: none"> We will begin to monitor our energy production from our solar panels monthly.

	Topic/Area	Emissions Reduction Actions	Staff Role Responsible	Timeline/Budget	Monitoring Process
	Green power	<ul style="list-style-type: none"> Green power is purchased to cover the additional energy necessary for our office operations 	<i>Operations Manager</i>	Timeline – monthly	<ul style="list-style-type: none"> Purchased energy is recorded monthly
Travel / Transport	Vehicles / transportation	<ul style="list-style-type: none"> The 'green vehicle guide' is used when upgrading / purchasing vehicles We offer bicycle hire to our guests and encourage the use of public transport 	<i>Owners/ Managers</i>	Timeline: Vehicles are serviced every 15,000km Budget: \$160 per vehicle per service	<ul style="list-style-type: none"> Vehicles are always serviced on time Surveys are provided for guests so that we can determine what their preferred mode of public transport is and make the necessary arrangements
	Employee travel to work initiatives	<ul style="list-style-type: none"> Staff are encouraged to cycle or walk to work Some staff members who live close to each other have organized a car pool arrangement to and from work. 	<i>All staff</i>	Ongoing	<ul style="list-style-type: none"> Employee surveys
	Client / customer travel initiatives	<ul style="list-style-type: none"> Information regarding public transport options is given to guests upon their arrival, as well as on the website. 	<i>Manager</i>	Ongoing	<ul style="list-style-type: none"> Business plan and operations manual – annual review
Operational Areas	Partnership with climate friendly businesses and suppliers	<ul style="list-style-type: none"> Example: Supplying toilet paper/tissues from 'Who Gives a Crap', a sustainable business. 	<i>Manager</i>	Ongoing	<ul style="list-style-type: none"> Seeking sustainable partnerships
	Construction, renovation; building design and landscaping	<ul style="list-style-type: none"> Identify and collaborate with local builders and suppliers 	<i>Owners/ Managers</i>	Ongoing	<ul style="list-style-type: none"> New partnerships are investigated regularly

Topic/Area	Emissions Reduction Actions	Staff Role Responsible	Timeline/Budget	Monitoring Process
Suppliers				
Green purchasing policy and initiatives	<ul style="list-style-type: none"> For construction, a lot of local and recycled materials were used. Most furnishings have come from local furniture makers who use recycled wood. As per our green purchasing policy, we purchase eco-friendly office supplies such as recycled paper. We buy in bulk where possible, reducing the amount of packaging and transport emissions. 	<i>Owners/ Managers</i>	Timeline: Ongoing Budget: Unlimited	<ul style="list-style-type: none"> New environmentally friendly products and initiatives are investigated regularly (e.g. 100% forest friendly toilet paper) We also rely on responses from guest surveys to determine their level of satisfaction in regards to our efforts towards green purchasing and our choices.
Sourcing local products	<ul style="list-style-type: none"> Purchasing local products to reduce transport emissions These include building materials, furniture and produce. 	<i>Owners/ Managers Chef</i>	Budget: Unlimited	<ul style="list-style-type: none"> New local sources are investigated regularly.
Efficient Product Packaging (recyclable, minimal cooling etc.)	<ul style="list-style-type: none"> Food and materials are purchased in bulk where possible Overpackaged goods are avoided Single-use plastics and polystyrene are avoided 	<i>Owners/ Managers Chef</i>	Timeline: Ongoing Budget: Unlimited	<ul style="list-style-type: none"> Total amount of waste being recycled is recorded monthly

Topic/Area	Emissions Reduction Actions	Staff Role Responsible	Timeline/Budget	Monitoring Process	
In-house					
Office / Admin initiatives	<ul style="list-style-type: none"> No email print policy All equipment is turned off at its source when not in use. All printed material is on recycled paper. All ink cartridges are refilled not replaced. We have a recycling system in place, separating general waste from recyclable materials (glass, hard plastics, aluminum, paper) and soft plastics 	<i>All staff</i>	Daily	<ul style="list-style-type: none"> Included in Operations Manual We monitor our waste disposal regularly 	
Marketing and promotional	<ul style="list-style-type: none"> Increase e-marketing and online feedback submissions We are currently phasing out print material and making all brochures available through our website. 	<i>Manager</i>	Six months	<ul style="list-style-type: none"> Marketing Strategy annual review Online surveys 	
Emission Monitoring	Emissions assessment	<ul style="list-style-type: none"> Emissions will now be recorded monthly for comparison. From this we are aiming to identify where reductions could be made. 	<i>Manager</i>	Monthly	<ul style="list-style-type: none"> Emissions are monitored every month and graphed on an excel spread sheet.
	Carbon footprint calculations	<ul style="list-style-type: none"> Carbon footprint calculations completed and reported 	<i>Manager</i>	Completed	<ul style="list-style-type: none"> Annual review
Carbon Offsetting	Carbon offset contributions	<ul style="list-style-type: none"> Unavoidable emissions are offset through the purchase of carbon credits 	<i>Manager</i>	Ongoing Budget - \$100/month	<ul style="list-style-type: none"> Offset amounts are recorded
	Guests can purchase offsets for their stay	<ul style="list-style-type: none"> Guests can 'opt in' when booking their stay via our website to offset their emissions. The amount is automatically calculated based on the number of nights. 	<i>Manager</i>	Ongoing	<ul style="list-style-type: none"> Offset amounts are recorded

WATER: MEASUREMENT, MINIMISATION AND MANAGEMENT STRATEGIES

1. IDENTIFY AND MEASURE

SOURCES

- Piped (Mains Supply)
- Recycled
- Rainwater collection system

CONSUMPTION

Building	Consumption/production per year	Consumption/production per guest	Sources	Monitoring Process
Combined	1805000 L	180.5 L	<input checked="" type="checkbox"/> Piped (mains supply) <input type="checkbox"/> Water tank <input checked="" type="checkbox"/> Recycled <input type="checkbox"/> River/creek/stream <input type="checkbox"/> Groundwater	Staff monitor usages monthly via water meter and data is recorded

2. STRATEGIES TO MEASURE AND REPORT

	Topic/Area	Water Reduction Actions	Staff Role Responsible	Timeline/Budget	Monitoring Process
Water efficiency	Water Heating	<ul style="list-style-type: none"> Solar hot water system 	<i>Owners/Managers</i>	Ongoing	<ul style="list-style-type: none"> Ongoing maintenance and monitoring of water and power usage
	Bathroom/Toilets	<ul style="list-style-type: none"> Water efficient systems are installed 	<i>Owners/Managers</i>	Ongoing	<ul style="list-style-type: none"> Ongoing maintenance and monitoring of water usage
	Appliances	<ul style="list-style-type: none"> Regular maintenance program to replace leaking taps, valves and pipes 	<i>Owners/Managers</i>	Ongoing	<ul style="list-style-type: none"> Equipment functionality is assessed monthly
	Landscaping	<ul style="list-style-type: none"> Use of local native plant with low water requirement 	<i>Owners/Managers</i>	Ongoing	<ul style="list-style-type: none"> Ongoing maintenance and monitoring of water usage

WASTE: MEASUREMENT, MINIMISATION AND MANAGEMENT STRATEGIES

	What type of waste is it? Where does it come from?	Management, Re-using, Recycling and Disposal	Reduction Strategies	Role & Staff Member Responsible	Monitoring
Organic Waste	Food scraps, kitchen / cooking waste	Disposed of daily as compost, to be re-used as organic fertilizer	Increased care to cook quantity of food appropriate to guest numbers. Feed appropriate food scraps to chickens.	<i>Managers / Chef</i>	Quarterly waste audit. Annual review of management commitment to recycling program.
Paper	Packaging / office operations	All paper is recycled	Adopt a no-print policy where possible. Reuse scrap paper for notes and messages.	<i>All staff</i>	Quarterly waste audit.
Plastic	Packaging	All plastic is recycled. Soft plastics are separated from hard plastics.	Employees are encouraged to bring re-usable containers to work. Purchases are made in bulk, where possible.	<i>All staff</i>	Quarterly waste audit.
Chemicals	Chemical waste from cleaning products	Work activity involving any oils, grease, chemicals or other harmful substances is carried out in a manner to avoid spillage, wastage or harmful exposure. Any chemical waste is disposed of responsibly and carefully, following formal procedures and regulations.	We are mindful of the products we buy, and refrain from purchasing chemicals as much as possible, opting instead for environmentally-friendly alternatives. Replacing acidic drain cleaners with environmentally-friendly bacteria cleaning system.	<i>Managers / maintenance personnel</i>	Quarterly waste audit. Ongoing monitoring of and compliance with waste disposal programme.
Metals	Metal tins, aluminium cans	Metals are recycled where possible	Improving accuracy of purchase orders	<i>Managers / staff</i>	Quarterly waste audit

Area	Consumption/production Per year	Consumption/production Per guest	Sources	Monitoring Process
Waste	45000 L	4.5 L	<input checked="" type="checkbox"/> Paper <input checked="" type="checkbox"/> Glass <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Organic	Staff monitor waste disposal by tracking each disposal bin emptied and recording the measurements

WASTE AUDIT RESULTS

Type Of Material	Approx. Volume Of Waste (Litres Per Week)	Location Of Bin
General waste/ landfill	60	Outside
Food Waste	25	Kitchen
Paper	80	Office
Cartboard	50	Office
Glass	10	Kitchen
Hard Plastics	40	Outside
Soft Plastics	80	Kitchen
Metal	5	Outside

CLIMATE CHANGE RISK ASSESSMENT

Area of Risk	Business Vulnerability <i>Existing risks (past and current) and future risks and opportunities</i>	Level of Risk	Adaptation Strategy	Responsibilities and Partnerships	Timeline / Budget	Monitoring and Review
Building Management	<ul style="list-style-type: none"> • Extreme/unpredictable weather: rising temperatures and tropical climates 	<i>Moderate</i>	<ul style="list-style-type: none"> • We used insulation building materials to maximise energy efficiency and natural ventilation 	<i>Managers Architects / Builders</i>	Ongoing	<ul style="list-style-type: none"> • Ongoing maintenance of building
Water Use and Drought	<ul style="list-style-type: none"> • Implications for facilities / utilities available to guests 	<i>Low</i>	<ul style="list-style-type: none"> • Educate guests on ways to reduce unnecessary water use • Ensure grey water system is functional 	<i>All staff</i>	Ongoing	<ul style="list-style-type: none"> • Monitor weather patterns and conditions • Monitor grey water system regularly
	<ul style="list-style-type: none"> • Less predictable rainfall patterns 	<i>Low</i>	<ul style="list-style-type: none"> • Increase on-site water storage capacity 	Managers	Ongoing	<ul style="list-style-type: none"> • Reduce annual water consumption
Rainfall Intensity and Flood Risk	<ul style="list-style-type: none"> • Destruction of or damage to property 	<i>High</i>	<ul style="list-style-type: none"> • Ensure emergency response plans have a section dedicated to flood preparation and evacuation procedures • Ensure full insurance coverage 	<i>Managers</i>	Quarterly	<ul style="list-style-type: none"> • Monitor weather patterns and conditions to prepare for potential flood / heavy rainfall
	<ul style="list-style-type: none"> • Guest cancellations / Substitute choices 	<i>Moderate</i>	<ul style="list-style-type: none"> • Early communication with guests to discuss potential inconveniences due to weather and how to deal with them. 	<i>Managers</i>		<ul style="list-style-type: none"> • Regular review of online systems to ensure timely and effective communication with guests

Area of Risk	Business Vulnerability <i>Existing risks (past and current) and future risks and opportunities</i>	Level of Risk	Adaptation Strategy	Responsibilities and Partnerships	Timeline / Budget	Monitoring and Review
Fire Risk and Bush Fires	<ul style="list-style-type: none"> • Loss of property and/or life. 	<i>Moderate</i>	<ul style="list-style-type: none"> • Ensure appropriate fire-fighting equipment is on site • Train all employees on bush-fire procedures to ensure the fire department is contacted immediately and damage is minimised. • Clearly display information for guests in reception area and in the rooms regarding the location of fire exits and the appropriate procedures to follow. • Emergency bush fire plan and evacuation procedures recently updated. 	<i>All staff</i>	Update emergency plans annually	<ul style="list-style-type: none"> • Regularly monitor the integrity of existing infrastructure • Review of evacuation procedures and emergency plans annually.

ENVIRONMENTAL BEST PRACTICE INITIATIVES

Initiative Category	Environmental Initiative	Purpose	Role & Staff Member Responsible	Monitoring
Construction	<ul style="list-style-type: none"> Insulation materials were used when building the walls and roof. Ceilings were constructed to let as much natural light in as possible. The use of recycled materials e.g. timber The use of environmentally sensitive paint 	<ul style="list-style-type: none"> Maximise energy efficiency Reduce lighting use Re-use materials 	<i>Manager / Architects</i>	<p>At any stage where construction is being undertaken.</p> <p>Regular monitoring of integrity of infrastructure.</p>
Landscaping & Gardening	<ul style="list-style-type: none"> Food scraps are broken down in a composting system and used as organic fertilizer on the garden Plants and feeders are installed around the gardens to provide nourishment for birds and insects, and trees planted in positions that provide shelter for birds and other animals during extreme weather conditions. Planting of native plants and trees is always the preferred option 	<ul style="list-style-type: none"> Avoiding the use of chemicals / harmful substances Re-using food waste to promote healthier plant root development. Animal protection/conservation 	<i>Kitchen staff / Gardeners</i>	Ongoing
Noise, Light & Air Pollution	<ul style="list-style-type: none"> To control noise pollution, construction was limited to the hours of 7am – 6pm during the week and 8am – 1pm on the weekend. 	<ul style="list-style-type: none"> To minimise noise pollution. 	<i>Owners / Contractors</i>	At any stage where construction is being undertaken.

ENVIRONMENTAL IMPROVEMENTS

Solar panels

At the end of the financial year we will be investigating the possibility of installing additional solar panel cells to our system. This will be subject to available funding but the end goal is to be completely dependent on the energy produced on-site in the next three years.

Rainwater tanks

To reduce some of the demand on the mains water supply, we will be investing in rainwater tanks for water supply to showers. At first we will be trialling this by purchasing one tank in January 2020 and this tank will supply water to our outside shower for beach rinsing as well as for refilling our swimming pool.

Erosion control

Broken Head is not typically subject to erosion impacts as it is protected by the headland. However, to ensure that there is no impact from our guests, we will be partaking in a sand dune planting session in October next year. This will involve the planting of grass species on the dunes to help with protection from coastal storms and potential erosion from user access.

REPORTING PROGRAMS

- Local conservation groups
- Wildlife reporting and protection
- The National Greenhouse and Energy Reporting Act (NGER)
- We report any spills, leaks or other pollution incidents to the Environment Protection Authority (EPA)
- SafeWork NSW

STAFF TRAINING AND DEVELOPMENT

We are lucky to be located in a region in which the environment is held in high regard and as such, the people in the area are very environmentally conscious. All our staff are very motivated about our environmental policy and share our vision for creating sustainable lodges. This has made training very easy and widely accepted.

Training

All staff must undergo an induction before commencing work that includes the potential environmental impacts and our environmental policies (regarding littering and animal feeding/interaction) associated with our operation.

Our chef was responsible for setting up the vegetable garden and compost system and is also responsible for training the staff on how these systems work.

Training regarding the monitoring of the solar panels, energy consumption and water usage is done at a management level. The owners, manager and two IC are all trained in this area. They are educated on how each functions, where to take measurements from and how frequently, as well as how to record this data into our spreadsheet records. However, if any problems occur or maintenance is required on these systems, these are conducted by a professional and staff are taught who to contact depending on the system.

All contractors and sub-contractors working on site are also educated on our environmental policies and procedures; however, we usually use the same people for maintenance so this is rarely required.

CUSTOMER AWARENESS

Customer awareness is a large component of our organisation. We have an awareness package that each guest receives upon arrival that outlines our policies on animal interaction and feeding, energy and water saving, waste minimisation and pollution. It also contains our vision for ecotourism, why Broken Paradise was established, and how guests can become “greener” travellers.

Within this package we also offer our guests the opportunity to offset the emissions of their trip through ‘Carbon Neutral’, an online carbon solutions provider. We supply basic information on this company and outline the benefits.

The package also provides educational material to explain why guests should conserve water, energy and waste. We outline the benefits of using a bike to travel into Byron Bay and surrounding areas. All the information in the package is provided in a laminated folder and not reprinted for each guest.

We also provide each lodge with a small book on the Arakwal people. This book provides a map of special sites found in the region and some information on each. It also provides a short dreamtime story of the ‘Three Sisters Rock’ (also known as Two Sisters), a formation sacred to the Arakwal people off the headland at Broken Head.

CLIMATE ACTION CERTIFICATION DOCUMENTATION REQUIREMENTS

CLIMATE CHANGE AWARENESS AND EDUCATION

Topic / Area	Action(s)	Responsibility	Timeline / Budget	Monitoring and Review
Emissions assessment, carbon footprint, offset information	<ul style="list-style-type: none"> • Include information on website and in marketing/promotional material • Monitor and update information 	<i>Operations & Marketing Manager</i>	Ongoing	Annual
Owner/manager and employee climate change awareness training	<ul style="list-style-type: none"> • Attend industry forums, presentations and conferences • Identify training courses attended • Learn key facts and statistics about local area and impacts of climate change • Distribute resources to (new) employees 	<i>Manager</i>	Ongoing	Annual
Client/customer climate change awareness initiatives	<ul style="list-style-type: none"> • Encourage customers to support local climate change initiatives • Voluntary contributions e.g. donations to climate change funds when booking • Link to carbon offset / carbon footprint calculator included on website 	<i>All staff</i>	Ongoing	Annual
Business to business (B2B) initiatives	<ul style="list-style-type: none"> • Actively seek out linkages with ECO certified or Climate Action certified companies 	<i>Manager</i>	Ongoing	Annual
Government, state, national park or non-government organization initiatives	<ul style="list-style-type: none"> • Involvement in marine monitoring program • Compliance with National Park Climate Action Plans 	<i>Manager</i>	Ongoing	Annual
Continuous improvement	<ul style="list-style-type: none"> • Achieve Climate Action Certification • Become carbon neutral 	<i>Manager</i>	12 months	Annual

GLOSSARY

Adaptation changes: Changes made in response to the likely threats and opportunities arising from climate variability and climate change.

Adaptive capacity: Ability of a system to respond to climate change to moderate potential damages, to take advantage of opportunities, or to cope with the consequences.

Contingency plan: Any plan of action that allows an organization to respond to events should they occur. This includes all plans that deal with stabilisation, continuity of critical business functions and recovery [AS/NZS 5050:2010, Definition 1.3.8]

Level of risk: Magnitude of a risk or combination of risks, expressed in terms of the combination of consequences and their likelihood. [ISO Guide 73:2009, Definition 3.6.1.8]

Likelihood: Refers to the chance of something happening, whether defined, measured or determined objectively or subjectively, qualitatively or quantitatively, and described using general terms or mathematically (such as a probability or a frequency over a given time period). [ISO Guide 73:2009, Definition 3.6.1.1]

Risk identification: Process of finding, recognising and describing risks. [ISO Guide 73:2009, Definition 3.5.1]

- Note 1: Risk identification involves the identification of risk sources, events, their causes and their potential consequences.
- Note 2: Risk identification can involve historical data, theoretical analysis, informed and expert opinions, and stakeholder's needs.