Cape York
Ecotourism Feasibility Study

Mutee Head

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Version Notes

Version 2.4: This version is the final report for Cape York Sustainable Futures.

Executive Summary

Introduction

This Feasibility Study has been prepared to identify the key factors in planning and realising a potential model profitable ecotourism business on Cape York which could provide training and awareness of an example of the ecotourism development potential on Cape York. The project was undertaken by EcoSustainAbility, Kleinhardt and Research Australasia for Cape York Sustainable Futures with funding provided by the Queensland Government.

Feasibility

The study is based on many assumptions and remains at a Feasibility Study stage. There are many uncertainties, critical factors and dependencies which would need resolution prior to confirmation of the financial viability of the proposed development. The selection of the site at Mutee Head and the design has involved some consultation with the Board of the Apudthama Land Trust but there have been no firm commitments by the indigenous land owners to provide a lease or other rights of access to the site for the proposed development. Further, the feasibility will rely upon access to lands and sea areas near the proposed site to undertake ecotours.

Cape York Tourism

About 20,000 tourists travel to the Tip of Cape York Peninsula. The baseline estimate for tourism to the area of interest on Cape York (excluding Cooktown), for the purpose of this report is taken to be 50,000 visitors. Average length of stay is taken to be 7 nights. It is assumed that 80% of visitors are from Australia.

Estimated expenditure per day used for campers is $70 ($73 in 2011 dollars) for campers, (based on the Outback Central West results for campers and caravaners), and $165 in 2011 dollars for visitors staying in commercial accommodation (based on TNQ averages).

Between November 2010 and April 2011 Cape York Sustainable Futures undertook a series of forums throughout the cape to identify tourism futures, opportunities and issues for Cape York. The need for additional tourism accommodation was one of five identified key priorities.

Cape York has a challenge with tourism, its value is the large scale landscapes and the highly scenic places/attractions (be they waterholes, beaches, headlands, rock art, mountains or rivers) are widely separated. The challenges for this have constrained growth of tourism, ventures even where there are close attractions and access such as Pajinka Lodge had difficulties. Recent tourism planning includes the Cape York Peninsula & Torres Strait Tourism Development Action Plan – 2008–2011, the Cape York Camping and National Park Tourism Framework and the Tropical North Queensland Tourism Opportunity Plan. Each if these recognise the unique remote attributes of Cape York and identify ecotourism and ecolodges as potential opportunities.

Learning from Experience

There are a variety of tourism accommodation products across Australia which can be considered ecotourism enterprises, situated in remote locations. They have a variety of product components, standards, different emphases and a range of target markets. The most relevant will tend to be those with some degree of association with Aboriginal and or Torres Strait Islander people, in recognition of the circumstances and nature of Cape York.

A number which seem relevant are reviewed in the feasibility study, providing insights into contemporary ecotourism markets, components of successful products, key success factors, price points, operational considerations and pitfalls to avoid. Examples reviewed include Kooljaman, Wildman, Jowalbinna, Lotus Bird and the issues around the closure of Pajinka. The roles of Indigenous Business Australia and the Indigenous Land Corporation in investing in and fostering indigenous tourism are reviewed.

Mutee Head

Located to the west of the northern Peninsula communities, near the mouth of the Jardine River, 36 km to Bamaga, 44 km to Bamaga Airport, 70km to tip of Cape York.

Mutee Head and the bay immediately to the east is an exceptionally beautiful site. Behind the white sand beach the site has elevation with a high dune and ridge above the beach. Pleasant woodland with shade on the potential site behind the beach. There are existing cleared areas for major facilities and space between trees for nestling cabins. It would be possible to relocate the vehicle access to the track above site, thus avoiding vehicle access onto beach which spoils the amenity.

There has been a history of some use for camping on the site and development will displace this use. The site could provide an ecolodge with a beautiful coastal setting near Cape York with two potential market foci:

- A short stay accommodation facility for self drive cape York visitors (as a one night or two night stay as part of a longer 7 to ten day Cape York self drive trip).
- A longer term stay (3-5 nights) for fly-in visitors (but would require greater level of facilities and a wide variety of tour options to ensure visitor satisfaction for a longer stay).

One opportunity could be an ecolodge style development with individual cabins (12-20 most likely to be the size with best initial feasibility).

Local attractions for tours include:

- Cape York "Tip", Lockerbie Scrub, Somerset (2 hours each way, a day trip);
- Local rainforest and wetlands.
- Jardine River (crocodile spotting, bird watching, mangroves, rainforest, wetlands etc.).
- Biffin Swamp (wetland bird watching), also potentially other bird watching sites;
- Fishing tours;
- WW2 history with the Radar site;
- Thursday Island day tours (direct or via Seisia);

Tenure

The land is Aboriginal Freehold with the Apudthama Land Trust as the trustee. To develop an ecotourism facility on the site a separate lease or other title, specific to the site will be required for security for finance and allow exclusive possession. In order to obtain a lease, an "entrepreneur" may express interest to the land trust to create a lease. There is a process which will involve a Development Approval (reconfiguration of a lot) and other subsequent IDAS approvals. Native title may be an issue and an Indigenous Land Use Agreement may be required (this may require additional financial consideration beyond the lease rental paid to the Aboriginal Council).

The process to create a lease on the site is potentially a time consuming process with no certain outcome nor timeframe and cost. The process may require an ILUA negotiations depending upon the interest by the claimants or prescribed body corporate. In some circumstances the negotiation of an ILUA may require financial considerations over and above lease payments.

Further, it is most likely to require a development approval under IDAS. Further, other approvals such as under *Vegetation Management, Coastal Management* and other legislation may be required (some of these are integrated into the IDAS process).

The Potential Tourism Product

The potential tourism product is an ecolodge style product which is established to meet a number of specific and distinct markets. The ecolodge could have a modest standard of hospitality, more than a campsite/bushcamp but not that of a luxury resort. The potential is for the focus of the ecolodge to be ecotourism and cultural immersion activities rather than leisure/recreation amenities.

Target Markets

The proposed Mutee Head Ecolodge could target the following markets:

Self Drive (Cape York Adventure): This group may seek a night or two of relatively luxury as a respite from the 4WD camping trip up the Cape. The group would be somewhat attracted by the accommodation and food/beverage/amenities, although the key attraction for this group would be a tour or activity which is unique and adds to their Cape York experience (such as a guided crocodile spotlighting by boat on the Jardine River or offshore or fishing tour, etc.).

Usual stay expected would be one or two nights.

Safari Bus Group Tour: Tour companies may be attracted to a location with tour/activities products that offer good accommodation and services for their guests. Tour bus capacities vary, up to about 22 passengers. As such 10-15 double/twin rooms would be required to meet tour groups' needs. One or two night stay is likely.

Fly in Tourists: There is the potential to develop markets for various interests this could include bird watching, more general ecotourism/cultural tourism and sport fishing. None of these are mutually exclusive markets/activities, however specific marketing approaches and activity offerings would be required and as such some focus on one or two of these markets may be best initially. This market is likely to stay for 3-5+ nights

Competitive Position

Within the NPA there is a range of accommodation at present. An overview investigation of accommodation by EcoSustainAbility in 2011 found 68 beds at Punsand Bay, 31 at Loyalty Beach, 85 at Seisa and 90 at Bamaga. In terms of campsites, these are 450 campsite spaces in total for Mutee, Umagico, Bamaga, Loyalty, Nanthau, Somerset, Punsand Bay and at least another 400+ for Seisa.

With the closure of Pajinka there is no accommodation with an ecotourism/cultural tourism focus on in the Northern Peninsula Area. The two equivalent coastal camp/lodge style developments, Punsand Bay and Loyalty Beach have more of a fishing focus.

There is limited other accommodation for self drive tourists "doing the Cape", to the south is Bramwell (30 beds) and Moreton Telegraph Station (70 beds). There is a range of commercial accommodation at Weipa (although anecdotally, there is little available capacity with business and government demand from mining, defence and refugee/detention centre activity). Further south there is accommodation at Archer River (12 beds), Coen (56 beds) and Musgrave (28 beds) and Lotus Bird Lodge (Saltwater Creek, 8 rooms)

It is concluded that an ecolodge at Mutee Head would complement existing accommodation to the south and have a unique positioning among existing offerings in the NPA area.

Accommodation

It is suggested that the Ecolodge have two types of accommodation:

12 cabins, which are convertible twin/double configuration with a modest size/amenity level ensuite and a small verandah. These cabins meet the market needs for tour operator guests and self drive visitors who are selecting a one or two night stay in lieu of camping.

8 lodges, which are larger and more luxuriously appointed with a larger verandah to suit a day bed and deck chairs/small side table, larger room with built in robe and larger ensuite (preferably a well appointed semi/outdoor experience. Depending upon further investigation of the market, a small spa may be fitted in the deck with views or in a screened outdoor area. These lodges meet the potential longer stay fly-in market and can be upsold to self drive passengers. The lodges are more suitable for a longer stay experience.

Activities

The focus of the Mutee Head ecolodge should be nature and cultural experiences. As far as possible these should be unique and quintessentially "Cape York" experiences.

Ideally some key unique tour products and experiences should be integrated into the product. For instance a short night spotlighting tour on the Jardine and a short cultural activity (e.g. Elder campfire chat, short walk outlining bush skills/bush tucker/hunting skills experience) could be offered for all guests included in the tariff. Other ecotours would be additional cost.

An experienced Cape York tour operator has advised that it is essential to have easy departure for a Thursday Island Day trip from the lodge. This could be achieved through off beach access straight onto a Ferry or through a bus transfer to Seisa.

Lodge Layout

Key aspects are:

Accommodation and facilities are to the west of the access road.

A day use area is provided on the beach to the east of the access road.

Staff accommodation includes an amenities/training space and is located back from the guest areas.

Workshop should be behind the beach ridge and ensure any generator noise is muffled and away from guest areas.

All major buildings are behind the 1m above HAT (highest astronomical tide) contour and with a design floor level of 1.5m above HAT (further consideration of coastal planning law will be required to confirm level). A verandah, pool, patio with shade sails covering is suggested on the presently cleared area between the beach and central facilities.

Denser (cabin style) accommodation is close up to the resort central facilities. The cabins can be relatively closely spaced, perhaps dense vegetation planting to preserve some privacy. A few cabins should be common wall with an adjoin door to allow for families and a two bedroom unit option.

Lodges could be more spaced and laid out to preserve privacy. With the lodges needing to be above 1.5m above HAT, it is suggested to placed them on the toe of the hillside, with the verandah 2m above ground level, this means folk walking along the beach side path will not see straight into rooms. A low pitched roof will ensure the roofline remains below the tree line.

Guest vehicle parking should be behind the lodge area behind the ridge, with a path down the ridge to the central facilities.

A day use area can be accommodated to the east of the present road terminus. This is not critical to the resort, although it may provide a focus for independent travellers to visit Mutee Head lodge and use facilities. This area could be a good location for a "fishing shack" activities hut.

Proposed Lodge

Key attributes of the Lodge are:

- A central facilities building including reception, restaurant, bar, lounge, and kitchen and office of 300-430m^2 (plus 200-270 m^2 decking/outdoor lounge dining areas and a small pool);
- A "Radar Bar" located atop Mutee Head with a westerly outlook, styled as a WWII camp (timber ridge pole, tented roof, circa WWII army boxes as tables, canvas deck chairs, lots of khaki!). Operated without facilities based on a simple drink selection from an esky brought to site daily.
- 12 cabins (30-40 m^2) each with ensuite, bar fridge, fan, air conditioning lighting, bedding king/spilt to allow double or twin configuration.
- 8 premium lodges (55-70 m^2) with ensuite, bar fridge, fan, lighting, outdoor shower in screened area behind lodge (and perhaps plunge pools), bedding king/spilt to allow double or twin configuration;
- staff accommodation for 10-15 (using prefabricated/portable buildings), and including an amenities/training room;
- access Road and car park (removed from guest cabins;
- internal paths and landscaping; and
- power, water, sewerage and communications services.

Design

The lodges and cabins could be tropical with a bush influence incorporating a casual feel with luxurious amenities.

Cabins can be prefabricated/simple buildings or even solid floor/door tent style (although need to be able to air-conditioned). A design challenge is to allow adequate natural ventilation to avoid reliance on air-conditioning, but then be able to seal to space for when air conditioning is needed.

Lodges should be larger and bit higher quality finish than the cabins. They could use materials such as rough sawn timber, unbraced plywood panel walls, screened timber louvers, mini-orb corrugated iron, canvas and stone. They should have a point of interest in their perspectives... "WOW" factor. Lodges could have cross-ventilation and natural cooling principals (but will also need to be sealed and allow for air-conditioning at times).

Overall the design theme for the building could be bush/WWII focus with the interior design and artwork celebrating the local Aboriginal and Torres Strait Islander culture with many artefacts etc.

Ecoefficiency

It is proposed that the lodge use best practice ecoefficiency to reduce both capital costs and ongoing operational costs. Further analysis of initiatives is required during design; however, potential initiatives which could be considered are set out below.

Construction Costs

Indicative costs are an estimate of $2.7m.

Ecotourism Positioning

Ecotourism *per se* is not necessarily an aspirational experience for many tourists and in its own right is unlikely to create demand. However, it is the product and activities which will create the competitive positioning and the elements of ecotourism which support the ecological/social and cultural appropriateness of the product. All the proposed potential markets are interested in tourism products which offer wildlife and cultural tour activities, most potential tourists are also interested to ensure the cultural sensitivity, social responsibility and ecological sustainability aspects have been addressed.

Governance

A key issue will be the corporate entity and approach to the development of the Ecolodge. Some potential options include:

A Private Company that leases the land from the Apudthama Land Trust with the only commercial arrangement being a commercially set lease rent and perhaps a commitment for local employment.

A Private Company that leases the land from the Apudthama Land Trust with modest rent and a profit/equity sharing arrangement toward the end of the lease such that the Apudthama land trust ends with a proportional equity in the whole business towards the end of the lease.

Apudthama land Trust established a corporate entity) e.g. the "Mutee Head Ecolodge Company Limited") which leases the Mutee Head site from the Land Trust (but with major or total equity the Ecolodge is essentially owned by the Apudthama Land Trust).

A Joint Venture be established with two or more partners, which leases the site from the Land Trust. In this case, one partner would be the Apudthama Land Trust. The others may be IBA and / or a private investor, who may or may not also operate the Lodge. If IBA were to participate, this is a common model adopted. Typically the arrangement is for the Indigenous partner to buy out the IBA share over time.

This last model seeks to incorporate the advantage of engaging experienced business management and industry skills in the corporate entity from the outset, as well as the financial contribution the investor brings. It can also facilitate the transfer of governance skills to the Indigenous directors over time, if established with this in mind.

For this Feasibility Study, the factor which essentially needs to be resolved is the source of capital funding for the Ecolodge. If a private investor can be identified and the Apudthama Land Trust considers that the Mutee Head Ecolodge is a priority for the Trust and they wish to pursue the project as the proponent, it is suggested that a variation on the last option discussed above be the first investigated.

If the Apudthama Land trust wishes to proceed with the project, potential funding from the Indigenous Land Corporation or Indigenous Business Australia may facilitate the project. If this isn't possible and funding needs to be sourced from commercial banks, discussion with bankers on the preferred corporate entity and lease options should be undertaken early to decide on the corporate structure approach.

For the purposes of the financial model developed to test project feasibility, an amount of $10,000 per annum has been assumed as a lease payment to the Apudthama land Trust. Depending on the corporate structure, the profitability levels indicated in a final, specific project plan and negotiations between the parties, the Trust may also have some level of participation profit distribution.

Management Arrangements

Once the corporate structure and lease arrangement are resolved, then a decision must be made as to the management of the Ecolodge. Many projects of this type have the land owned by a "developer" the resort built and then a management company commissioned to manage the resort.

Staffing

The staffing of the Mutee Head Ecolodge will need a range of positions and skills:

- Manager
- Administration/book keeper (including "night auditor" function)
- Reception/reservations clerk
- Chef/cook
- Kitchen hand
- Wait staff (2 during peak periods)
- Housekeeper
- Tour Guides
- Engineering/maintenance/gardening

It is likely that an initial opening staff of six to eight covering all the above roles is the maximum that can be supported for a 20 room lodge. Some positions may be part-time or casual. A small staff for a small ecolodge requires much multitasking and flexible working hours.

Training

There are opportunities to deliver training and education associated with the Wilderness Lodge concept as developed for the Feasibility Study. These opportunities are at a number of levels, Show Case, Training Venue, Staff Development and Traineeships. However for these opportunities to be implemented effectively, they need to be cognizant of the particular social, cultural, economic and historical environment in which they are to be delivered.

Training Venue

It is proposed that the Lodge be utilised as a training venue during the Wet season. It would be made available for hire as a residential training venue for whatever courses training providers may wish to present. This would contribute to offsetting the limitations of the short tourist season on Cape York. The isolation of the site from any community may also be seen as an advantage in maintaining attendance levels at courses offered.

The venue would also be available for agency led meetings and training sessions.

It would certainly present some particular advantages as a training venue for ranger training, environmental management, eco-tourism guide training, accommodation management and hospitality services.

Market Analysis

The product capacity initially is proposed as 20 rooms (12 cabins and 8 lodges). The potential exists for growth to around 30 rooms in total. This may include a few more cabins and additional lodges. In terms of site layout, additional cabins should be behind the initially proposed ones, on the hill slope and further lodges to the west around Mutee Head.

Financial Model

This feasibility level financial model has been prepared for Cape York Sustainable Futures. It has been developed to determine whether a 20 cabins ecotourism resort located a Mutee Head is a viable investment. The model provides a profit and loss and cash flow statement for a six year period from the commencement of operations.

The financial model is based on a number of assumptions which can significantly change the results of the model.

With 20 cabins the occupancy has been estimated at 20% in year one and growing to 50% by year three and then stabilising at 50% through to year 6 (based on 2 persons per room). The types of visitors has been assumed with mostly FIT (self drive visitors) being the majority for the first year with only a few tour operator bookings, with tour operator booking growing to be 35% of room nights by year 3 and fly in growing to be 20% of room night by year three onwards and training growing to be 10% after year three onwards.

It is assumed that the majority of visitation will occur during the dry season between April and October.

In order to fund the "risk capital" of the approvals and lease acquisition process a grant of $300,000 for this is assumed.

In terms of expenses, it has been assumed that staffing will be 5 FTE's in year one growing to 8.2 from year three onwards.

Based on the above and other assumptions detailed in the report, Net profit after tax will be negative for the first two years, become positive in year three and levels out in years four to six. This reflects that in the first three years guest numbers will increase and then stabilise in years four to six. By year 6 an annual net profit after tax of over $280,000 is estimated. Operating cash flows are negative in the first year, become increasingly positive in years two and three and then level out in years four, five and six.

Based on the operating, investing and financing assumptions the resort will need an additional $53,000 working capital in the first year of operation. However, from year two the resort should be able to sustain itself and maintain an increasingly positive net cash position.

The average net profit before tax return on investment based on the current assumptions is 6.56%.

Modelling was also completed in order to determine the breakeven rack rate of $169 and the rack rate at which a 15% before tax return on investment is achieved was determined to be $302.

Considering the stated assumptions and the high-level analysis completed it can be concluded that the proposed ecotourism resort at Mutee Head has potential to be a financially sustainable investment.

However, it is important to understand that that the financial analysis in this study has been completed at a feasibility level. Therefore, there is a significant risk that the assumptions will change as the project develops. If the project is pursued it is recommended that the financial model is updated and more detail financial modelling is undertaken once more information is known about each assumption.

Achieving the Vision

There are numerous key steps to facilitating the project:

Planning and Project Scoping

- Confirm feasibility of site layout with planning constraints (pre-lodgement discussions with agencies)
- Confirm key engineering/infrastructure aspects power supply (Ergon powerline or onsite generation) and water (ground water bore/desalinator etc.)
- Discuss concept with key tour operators and input their comments to scope.
- Discuss concept with key adventure travel/ecotourism wholesalers and input their comments to scope.

Corporate model and finance options

- Further evaluate corporate model and likelihood of independent developer option.
- Review corporate finance options.
- Identify likelihood of grant funding for training or land trust initiatives to be embedded within project.
- Discuss project concept with ILC and IBA
- Discuss project concept with commercial banks
- Discuss project concept with ecolodge management/development companies.
- Discuss project concept with potential investors
- Land trust creates Company/Corporation (if model chosen)
- Consider seeking expression of interest for commercial partners/private equity finance.

Tenure

- Start lease creation process.
- Work with land trust in expression of interest, CATL process.
- Survey
- Develop lease consideration options, lease rental, equity growth and terms ownership models.
- Undertake relevant Sustainable Planning Act approvals as part of lease settlement process.

Approvals

- Ensure appropriate licences and access can be gained for tours (e.g. river cruises on Jardine, Crab island, Tip tour etc. etc).
- Identify and develop process and critical path for environmental and planning applications.
- Finalise infrastructure approaches (e.g. pipeline/bore for water powerlines, desalinator requirements) and determine approvals needed.
- Indentify terms of reference for required environmental or engineering studies.
- Undertake studies, lodge approval applications, provide any further information and negotiate conditions.

Design and Project Management

- Taking into account needs of potential partners, feedback from tour operators, wholesalers, and community/land owner consultation and conditions of lease and approvals undertake detailed design.
- Develop documentation and if kit/prefabricated buildings work with manufacturers for design/documentation and site works etc.
- Appoint project manager/construction contractor etc.
- Undertake procurement of infrastructure items and develop critical path for construction program and progress expenditure.

Ecolodge Management Establishment

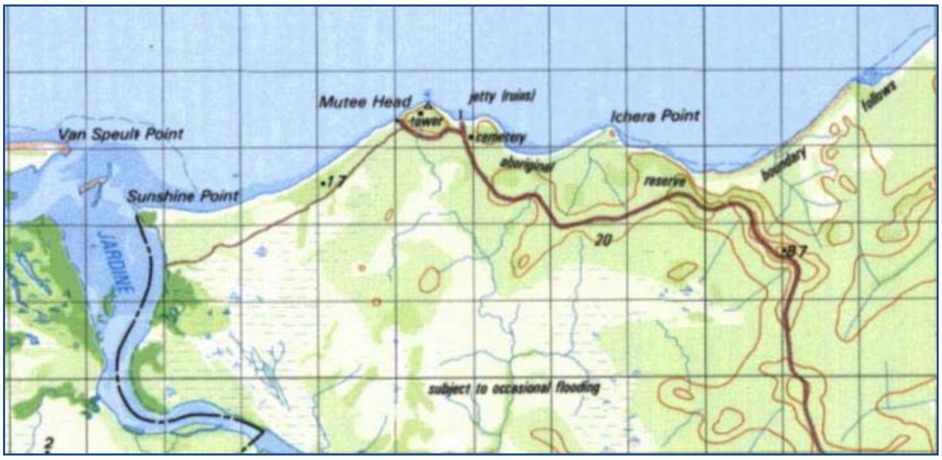
- Identify key staff and/or management company arrangements. Ideally have potential manager or management company have input to final design aspects.

Understanding Risks and Security

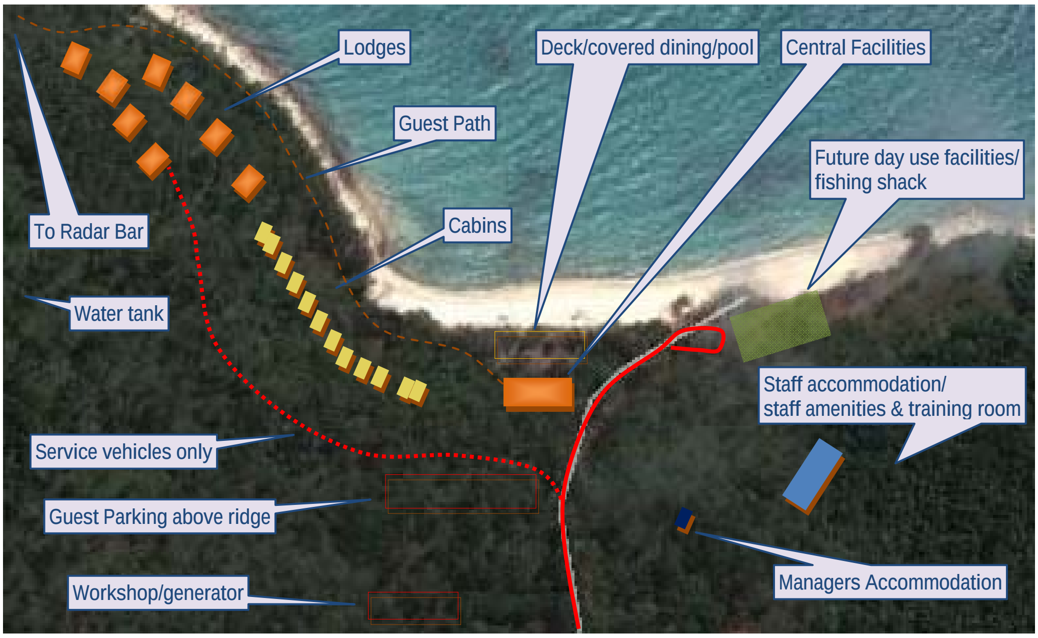
One important aspect with the Mutee Head Ecolodge proposal is that there is very little security or certainty for an investor until the lease is established and key environmental approvals are confirmed. As such there is much work to be undertaken and/or money required to progress the project without any security being able to be offered (other than a memorandum of first option type offer by the Land Trust) until a lease is obtained.

It is likely that some form of seed funding/grant will be require to progress this project to the point where it is “bankable”.

Mutee Head Location



Indicative Mutee Head Ecolodge Layout



Introduction

Cape York Ecotourism Feasibility

This report is the culmination of a project undertaken on behalf of Cape York Sustainable Futures as a Feasibility Study for a potential model ecotourism development on Cape York. Funding for the project was provided by the Queensland Government.

The report has been prepared to identify the key factors in planning and realising a profitable ecotourism business on Cape York which could provide training and awareness of an example of the ecotourism development potential on Cape York.

Feasibility

Importantly, the study is based on many assumptions and remains at a Feasibility Study stage. There are many uncertainties, critical factors and dependencies which would need to be resolved prior to being able to confirm the financial viability of the proposed development.

Importantly, the selection of the site at Mutee Head and the design has involved some consultation with the Board of the Apudthama Land Trust but there have been no firm commitments by the indigenous land owners to provide a lease or other rights of access to the site for the proposed development. Further, the feasibility would rely upon access to lands and sea areas near the proposed site to undertake eco tours.

Authorship

The authors of this report are:

- Guy Chester (EcoSustainAbility): Overview of site options, Cape York ecotourism context, Mutee Head considerations, feasibility, resort scope, Mutee Head infrastructure scope, management aspects (partial), next steps
- Jim Bitomsky (Kleinhardt) and Victoria Maclaran (Kleinhardt): current market (Cape York), ecotourism enterprises review, management aspects (partial), market analysis, financial model, and
- Kate Sutcliffe (Research Australasia). Cultural and social context.

Authorship of some sections of ecotourism context is by Sally Driml of the University of Queensland (as part of another project with EcoSustainAbility and Guy Chester).

Overview of Site Options

Prior to selecting Mutee Head as a potential site to focus the Feasibility Study on, the following sites were considered during a site inspection in November 2011:

- Pajinka
- Somerset
- Wroonga Point
- Red Island
- Mutee Head
- Cullen Point
- High Bank (Wenlock – Mapoon)
- Cape Weymouth
- Restoration Island

A separate CYSF report sets out a discussion of the considerations for each site. It is important to note that there are known to be many other opportunities for ecotourism on Cape York and the above list is not meant to be exhaustive. For the purposes of this project, the aim was to find a site with the greatest potential, that would meet the needs of self-drive and Cape York safari tour visitors, have the potential to meet fly-in tourism (therefore must be near an airport with regular scheduled flights and have enough interest for activities to support longer stay special interest visitors), have a local community to draw on for staff and trainee, have land owner interest and/or the potential to establish a suitable tenure.

The analysis was not intended to be exhaustive and once Mutee Head was chosen no further analysis or investigation of the other sites was undertaken. It should be noted that many of these sites have great potential.

Cape York Ecotourism Context

Tourism

Tourism in the Cape York Peninsula Area has one focus in the lower Cape based around Cooktown as the destination. This includes commercial tours from Cairns as well as self drive tourism. The other major tourism focus is longer trips to the tip of Cape York on commercial tours and by self drive tourists.

The stock of commercial accommodation in the Cape York Peninsula Area is described from the Australian Bureau of Statistics survey of Tourism Accommodation, see Table 1 and Table 2.

Table 1: Number of Accommodation Establishments, June Quarter 2010, Selected LGAs[1]

	Hotels, motels, serviced apartments 5 to 14 rooms	Hotels, motels, serviced apartments over 15 rooms	Caravan Parks Over 40 powered sites	Visitor hostels Over 25 bed spaces
Cook Shire	1	7	2	1
NPA* - Bamaga		1	1	
NPA - other		1	1	
Weipa		2	1	

*Northern Peninsula Area

Table 2: Cook Shire, Hotels, Motels, Serviced Apartments with Over 15 Rooms, Quarters 2009-2010[2]

	Establishm ents	Rooms	Employ-ment	Occ. rate %	Guests	Average nights stay	Visitor nights	Takings
Sept 2009	7	188	147	75.5	12,505	1.9	23,759	$4,044,706
Dec 2009	7	192	138	50.3	7,103	2.0	14,206	$3,328,271
March 2010	7	191	142	34.6	4,437	2.2	9,761	$2,222,980
June 2010	7	192	153	55%	8,018	2.0	16,020	$2,930,396
Annual Total					*32,055*		*63,474*	*$12,526,299*

Estimate of Baseline Tourism Visitor Numbers

There is considerable uncertainty around estimates of tourist numbers, visitor nights and expenditure due to small sample sizes for the Cape York Peninsula Area in the major tourism surveys, the National Visitor Survey and International Visitor Survey. The aim of this section is to derive an estimate of tourism to Cape York excluding Cooktown.

The most recent published information on tourism in the area is for the Cook Shire (including Cooktown) in 2007, see Table 3. This data indicates that there were 87,000 visitors and 276,000 visitor nights when domestic and international tourism is added together.

[1] Australian Bureau of Statistics, *Tourism Accommodation, Small Area Data*, Queensland, June 2010
[2] Australian Bureau of Statistics, Tourism Accommodation, Small Area Data, Queensland, June 2010

Table 3: Tourism to Cook Shire 2007, Based on Three to Four Year Average[3]

	International	Domestic overnight	Total*
Visitors ('000)	9, 000	78,000	87,000
Visitor nights ('000)	47,000	229,000	276,000
Spend ($ millions)	$2m	$26m	$28m
Average stay (nights)	5.0	2.9	
Average spend per trip ($)	162	335	
Average spend per night ($)	32	115	

*Calculated from TRA published data

For the purposes of this study, small area data was viewed on Tourism Research Australia's online database for the LGAs that make up the Cape York Peninsula Area. This data should be treated with caution due to small sample sizes[4].

The estimates for the visitors to Cook Shire are very similar to the 2007 published estimates. Data on visitors to the rest of the Cape York viewed support an estimate of around 20,000 visitors per annum.

The average stay for all international and domestic visitors viewed on the TRA data base is similar to averages for the Tropical North Queensland Region (international, 9 nights; domestic, 6 nights) (Tourism Research Australia 2011 TNQ regional profile). Efforts have been made to disaggregate Cook Shire tourism into that which occurs in Cooktown and in other parts of the Shire. One basis for this is to assume that all the tourism in commercial accommodation in enterprises larger than 15 rooms does in fact occur in Cooktown[5]. On that basis, at least 32,000 visitors, 63,000 visitor nights and takings of $12,500,000 can be attributed to Cooktown (see Table of Tourism Accommodation, above). It is assumed however, that a larger proportion of visitors to Cook Shire are in fact visitors to Cooktown only.

Table 4 shows estimated numbers for Cooktown (minimum), the rest of the Cook Shire and the rest of Cape York Peninsula.

Table 4: Visitor Estimates

	Visitors
Cooktown (minimum)	32,000
Rest of Cook shire	55,000
Rest of Cape York Peninsula	20,000
Total	*107,000*

The document *New Horizons and Opportunities* states 'Tourism is a rapidly growing industry with 60,000 visitors to Cooktown and lower Cape York in 2009 per year. About 20,000 tourists travel to the Tip of Cape York Peninsula.' (Cape York Sustainable Futures 2010, page 10). However no source is provided for this data.

[3] Tourism Research Australia 2008, Tourism Profiles for Local Government Areas in Regional Australia, Queensland: COOK SHIRE
[4] This data are not available for commercial use; however estimates have been derived based on viewing this data. Sample sizes for international visitors ranged from 51 to 82 for the 5 years for the Cook Shire and 8 to 11 for the rest of the LGAs combined. Sample sizes for domestic visitors ranged from 24 to 30 for the 5 years for the Cook Shire and 7 to 13 for the rest of the LGAs combined.
[5] This can be supported based on a search of accommodation listings and local knowledge.

Biosecurity Queensland have a traffic counter in place at Coen. This captures all traffic; the northbound counts are shown in Table 5. This includes traffic to Weipa and all local and commercial transport traffic (not just tourism). If it is assumed that half of the vehicle movements are tourism and that of these the average vehicle occupancy is 3 this would represent a number of tourists for 2010 of 32,725. Whilst (owing the assumptions) this is little more than a guesstimate, it is within the same magnitude of the CYSF estimate above, with some tourists only travelling to Weipa and other locations south of Cape York.

Table 5: Coen Northbound Traffic Counts[6]

Month	2008 Northbound	2009 Northbound	2010 Northbound
January	264	69	334
February	104	108	94
March	137	228	151
April	734	1053	433
May	1770	1918	1892
June	2764	3187	3598
July	3593	4502	3965
August	2942	3306	3213
September	2622	2800	2760
October	2123	2027	2693
November	1578	1577	1573
December	980	1249	1111
Totals	*19611*	*22024*	*21817*

In summary, a conservative approach to estimating current visitor numbers to the area of interest on Cape York (excluding Cooktown) has been taken. The baseline estimate for tourism to the area of interest on Cape York (excluding Cooktown), for the purpose of this report is taken to be 50,000 visitors. Average length of stay is taken to be 7 nights. It is assumed that 80% of visitors are from Australia.

Estimate of Baseline Tourism Expenditure

The published estimate of expenditure by visitors per visitor night reported for the Cook Shire of $32 per night ($34 per night in 2009-10 dollars) for international tourists and $115 per night ($125 per night in 2009-10 dollars) for domestic tourists can be compared with published estimates of per visitor night expenditure for a number of Australia's tourism regions selected to represent remote regions, see Table 6, (Tourism Research Australia 2010). It can also be compared with a recent report on Caravan or Camping visitors in Queensland Outback Central West (Tourism Research Australia 2011(c)), Table 7. The Cook Shire estimate for international visitors is lower than reported for other regions, while the domestic estimate is within the range reported for other regions.

6 Compiled by Scott Templeton, Biosecurity Inspector Coen

Table 6: Tourism Expenditure Per Visitor Night in Remote Tourism Regions[7]

	Domestic Day Trip	Domestic Overnight	International
Tropical North Queensland	$103	$191	$127
Outback Queensland	np	$72	np
Northern Queensland	$147	$151	$84
Australia's north west (WA)	$140	$146	$62
Australia's Coral coast (WA)	$121	$119	$69
Kakadu (NT)	np	$95	np
Katherine (NT)	np	$140	np

Table 7: Average Expenditure of Caravan or Camping Visitors in Queensland Outback Central West[8]

	Average expenditure per night	Average expenditure per trip
Used a combination of commercial and non commercial sites	$90	$560
Only used commercial sites	$80	$425
Only used non-commercial sites	$60	$415

Estimated expenditure per day used for campers is $70 ($73 in 2011 dollars) for campers, (based on the Outback Central West results for campers and caravaners), and $165 in 2011 dollars for visitors staying in commercial accommodation (based on TNQ averages).

Cape York Tourism

Tourism Positioning and Development

Cape York has a challenge with tourism, its value is the large scale landscapes and the highly scenic places/attractions (be they waterholes, beaches, headlands, rock art, mountains or rivers) are widely separated. The challenges for this have constrained growth of tourism, ventures even where there are close attractions and access such a Pajinka Lodge had difficulties.

Cape York Tourism Development Action Plan

The Cape York Peninsula & Torres Strait Tourism Development Action Plan - 2008-2011 states:

> *"Tourism development throughout Cape York and the Torres Strait will undoubtedly be a positive move towards meeting the increasingly diverse demands of both domestic and international visitors, but it is not exclusively for the benefit of visitors or the tourism industry alone. It is also about providing commercial and non-commercial opportunities that will promote community and personal development and self-fulfilment.*
>
> *This region represents a unique opportunity for tourism in Queensland, offering a range of nature-based and cultural tourism experiences while at the same time providing the opportunity for local communities to improve their self sufficiency through active involvement in the tourism industry.*
>
> *While tourism development in Cape York and the Torres Strait needs to reflect market demands and commercial realities, unlike a traditional industry driven approach, communities will play a pivotal role in shaping the nature and direction of tourism product development in the region."*

7 Source Tourism Research Australia Regional Tourism Profiles 2009/2010
8 Source: Tourism Research Australia 2011(c), Queensland's Outback Central West Visitor Profile and Satisfaction Report:

The Action Plan describes the target markets and product:

> *"Visitation to Cape York is dominated by mature Australians, German-speaking Europeans, British, North Americans and New Zealanders travelling as part of a group or in hire vehicles. Through improved infrastructure and destinational promotion the opportunity to open new markets and increase current smaller markets such as fly-in fishing, cruising and specific themed touring will increase. Improvements to road access will open the Cape to a wider touring market and present communities off the main track the opportunity to cater to the more adventurous 4WD traveller."*
>
> *"The main activities visitors are seeking while in Cape York are:*
>
> - *4WD*
> - *Camping*
> - *Exploring*
> - *Fishing*
> - *Swimming*
> - *Relaxing*
> - *Sightseeing*
>
> *Niche Markets are small yet significant and include:*
>
> - *Fly in/fly out fishing*
> - *Fly in/fly out sightseers*
> - *Self drive international camping*
> - *Backpackers*
> - *Bird watching – Iron Range and Lockerbie Scrub*
> - *Hunting – pigs. Rifle and bow-hunters*
>
> *Potential market segments include:*
>
> - *Bird watching*
> - *Diving*
> - *Cruise shipping*
> - *Super Yacht cruising*
> - *Family members "War memories" tours"*

It is noted that the above does not overtly mention cultural tourism with the visitor being guided through a natural/cultural landscape by traditional owners, tourism products for the Cape which have been successful in Kakadu and elsewhere in the Top End of the Northern Territory.

The Action Plan includes proposals for further development of visitor facilities in national parks, the identification of tourism opportunities and "tourism champions" in local communities, a tourism reference group and developing a Cape York brand.

It is concluded that there are many challenges for tourism development on Cape York. The world heritage listing could provide some focus to the better establishment of a Cape York tourism brand, however much more effort in development of tourism products in terms of infrastructure (both on public land such as national park facilities and private such as camp sites, lodges etc.) and access (roads, coastal and marine facilities etc.) will be required to realise any greater tourism potential.

Cape York Camping and National Park Tourism Framework

Recently (2009) various Queensland government agencies collaborated to develop the Cape York Camping and National Park Tourism Framework (Queensland Government, 2009). In essence this Framework was developed to address two key issues identified in the above mentioned Tourism Development Action Plan, unregulated bush camping in Cape York and strategic tourism planning in national parks. The Framework's introduction sets out the context:

"Nature-based tourism has been identified as a growth sector of the Cape York region. Tourism is generally based on the Cape's natural assets, specifically its unspoilt wilderness, remoteness and open spaces as well as the lack of commercialization of the region and challenging terrain. Visitor research has identified that the adventurous journey to Cape York is as much a motivating factor to travel there as the destination itself.[9] *Visitors to the region are generally people who enjoy the outdoors, are adventurous and are seeking a challenge.*

The foundation for nature-based tourism to play a role in the future of the region is based on the flow of tourists along the Peninsula Development road that provides access to the Cape and its unique natural assets. High profile attractions include the National Parks of the region such as the Jardine River National Park, Iron Range National Park and Lakefield National Park. The popularity of Cape York's national parks has been recognised by the Environmental Protection Agency who has invested a total of $2.3 million in visitor infrastructure at selected sites over the past 5 years.

To date, unregulated camping has led to the environmental degradation of many sites in the region. As a consequence this has negatively impacted on the visitor experience. The Cape York Camping and National Park Tourism Framework works toward identifying appropriate camping areas and associated visitor infrastructure needs for Cape York in line with market demand in order to build a sustainable, world-class experience. The document will identify commercial opportunities available for Traditional Owners, operators and local communities to build, manage and maintain campgrounds and tourism infrastructure to capitalise on visitation to their region. Furthermore, it identifies potential protected area visitor experiences, infrastructure and access requirements."

The Framework recognised a series of key issues and challenges:

- *"A lack of security of tenure for commercial tourism operators is hampering future investment in current and potential camping and national park opportunities.*
- *Commercial Tourism operators are uncertain about the ramifications of the land acquisition process for their business, particularly during the tenure resolution process.*
- *Tenure resolution and native title negotiations are ongoing across the Cape resulting in a constantly changing framework for negotiation of tourism opportunities.*
- *A lack of coordination across government agencies, land trusts and the commercial tourism sector in the planning and development of tourism opportunities has led to an ad-hoc approach to appropriate infrastructure development in the past.*
- *Camping development to date has been done in isolation from research indicating visitor trends, changing visitor needs and expectations.*
- *There has to date been a lack of dedicated funding for the development of camping facilities outside protected areas.*
- *Cape York covers a significantly large landmass with many remote areas inaccessible during the wet season. This makes the maintenance of visitor infrastructures, rubbish removal & cleaning of toilets, difficult and expensive.*
- *A framework is in place to guide agencies when negotiating Indigenous Land Use Agreements. This framework does not specifically consider commercial feasibility and tourism investment issues.*
- *Development on Cape York is required to comply with urban planning and building regulations. These regulations have not been designed with the environmental and economic landscape of Cape York in mind and in many cases, this is prohibiting further tourism development.*

[9] "Cape York Tourism Market Assessment and Potential," Tourism Queensland, 2003.

- *Cape York is not actively marketed as a tourism destination, resulting in low consumer conversion. Negative publicity has impacted on the image of the destination, particularly in regards to alcohol related issues.*
- *There is a lack of 3-4 star quality accommodation on Cape York. Barriers to commercial investment in the region have led to the use of temporary, low quality accommodation facilities that are not reflective of visitor expectations.*
- *There is a lack of directional signage across Cape York that limits visitors in their movements away from the Peninsula Development Road and Overland Telegraph Line to other camping and national park sites."*

The Framework sets out six key visitor hubs (or developed tourism nodes). It recognises that ultimately, the aspirations of Traditional Owners and market forces will determine the experiences offered in each node:

- ***"Northern Tourism Node****: This region incorporates three key experiences on Cape York including Pajinka (the "Tip of Australia") and the NPA, the Overland Telegraph Line and the natural wonders of the Jardine River. This is a rugged, adventure destination that is rich in cultural history.*
- ***Iron Range/Lockhart River Tourism Node****: This tourism node is characterised by its stunning natural attributes, namely its beaches and rainforest, and the quaint seaside community of Portland Roads. It has tangible links to its military past and is a popular tourism destination.*
- ***Central Tourism Node****: This area presents both a wilderness experience and a chance to connect with some of Cape York's local communities. Mungkan Kanju National Park offers remote camping, fishing and bird watching opportunities while the town of Coen and the local roadhouses provides contact with locals and opportunities to replenish supplies.*
- ***Lakefield/Cooktown Tourism Node****: This region is a popular fishing and camping destination characterised by billabongs, rivers, open spaces and a spectacular coastline with prolific marine life. This node is a tourism destination in its own right and is becoming increasingly popular.*
- ***Weipa Tourism Node****: This tourism node incorporates Napranum and Mapoon. It is a strong fishing and camping destination on the West coast of Cape York.*
- ***Pormpuraaw and Kowanyama Tourism Node****: This node provides visitors with the opportunity for wilderness camping along its pristine coastline. It is primarily a fishing destination for self-contained visitors."*

The Framework includes recommendations for redevelopment of the Pajinka site to support day-use and preparing the abandoned resort site for future commercial investment, best practice, environmentally sustainable accommodation be constructed at Chili Beach, camping infrastructure be developed along the Overland Telegraph Line and Redevelopment of the camping ground and day-use site at Somerset.

Table 8 sets out priority sites for development. The Framework identified two potential management models, using volunteer campsite managers and indigenous campsite managers.

Table 8: Sites for Priority Development of Camping[10]

Recommended Sites for Priority Action	*Recommended Sites for Action in the Medium Term*	*Recommended Sites for Long-term Action*
Somerset *Pajinka* *Overland Telegraph Track* *Eliot Falls* *Cockatoo Creek* *Chili Beach* *North Chili Beach* *Garraway Falls* *River Bend* *Vrilya Point* *Old Laura Homestead*	*Mutee Head* *Captain Billy Landing* *Rainforest Campsite* *Cooks Hut* *Gordon Creek* *Mungkan Kanju* *Kalpowar* *Hann Crossing* *Marina Plains* *Shelburne Bay* *Paradise Creek* *Evan's Landing* *Billy Lagoon* *Mapoon* *Bowchat*	*Injinoo* *Umagico* *Heathlands* *Jardine River* *Bathurst Heads* *Six Mile Waterhole* *Twelve Mile Waterhole* *Ussher Point*

A range of nature-based tourism accommodation and camping options are outlined in the framework, which are outlined in Table 9:

Table 9: Camping and Accommodation Options

Accommodation	Features	Visitor Volume
Remote, non-commercial campsite	▪ Low key camping area consistent with setting ▪ No designated sites with limited or no visitor facilities	Suitable for low use, remote sites
Accessible, non-commercial campsite	▪ Designated campsites including campervan/trailer sites ▪ Visitor facilities including toilets, showers, fire rings ▪ Facilities for commercial tourism operator groups including BBQ facilities and segregated camping zones ▪ Regular maintenance of facilities	Suitable for high use sites
Commercial Campsite	▪ Commercial facilities may include designated camping areas, toilets, hot showers, powered and unpowered sites and communal areas, BBQs and kitchen facilities and potable water. ▪ Can include other accommodation structures including cabins, safari style tents, self contained units. ▪ Facility is staffed during peak tourist season ▪ Rubbish removal and ongoing maintenance of facilities to a high standard is required ▪ Facilities are required to withstand wet season	Suitable for high use areas
Safari Camp	▪ Safari style tented accommodation ▪ Camp may have permanent or removable features ▪ Toilets, showers and cooking facilities provided ▪ Communal areas available ▪ Staffed and maintained during tourist season ▪ Unique, exclusive experience for limited number of visitors. ▪ Rubbish removal and ongoing maintenance of facilities to a high standard is required	Suitable at high use sites for an exclusive experience with a limited number of people
Eco Lodge	▪ Permanent, built accommodation facility with high level of visitor services and facilities potentially including restaurant/bar ▪ Exclusive facilities ▪ Larger capacity than Safari Camp ▪ Rubbish removal and ongoing maintenance of facilities to a high standard is required.	Suitable at high use sites for an exclusive experience with a limited number of people

Cape York Market Segmentation

Cape York's main market tourism market appears to be mature Australian mostly self drive domestic adventurer, together with German-speaking Europeans, British, Americans and New Zealanders travelling as part of a tour group or in hire vehicles.

[10] Cape York Tourism

The Cape York Camping and National Park Tourism Framework (Queensland Government, 2009) sets out a summary of a recent market segmentation study for domestic visitors to Cape York:

> *"Tourism Queensland commissioned "Domestic Market Segmentation Research" based on psychographics (wants and needs) of visitors.*[11] *This research forms the basis of the visitor profile for Cape York as opposed to traditional demographic segmentation based on age and income. By comparing the holiday activities offered by Cape York with the holiday needs of the segments, it was determine that Active Explorers are the primary domestic market for the destination. This segment perceives that holidays are about pushing boundaries through challenging themselves. They enjoy the company of others but their focus is on exploring the extremes of their physical environment and themselves. Holidays for them are about feeling alive.*
>
> *Active Explorers are likely to drive to a destination, sometimes taking a caravan. As is typical of the times, they also fly, yet prefer to avoid the hassle of airports. They also enjoy yachting or boating. Of all the segments, they are the most likely to visit multiple locations during their holiday, though they are unlikely to go on a daytrip.*
>
> *Active Explorers, and their travel party, like to get away from the usual hustle and bustle, whilst at the same time being able to meet and mix with others and locals in a natural and authentic environment. Active Explorers are more open to staying in backpacker hostels, eco lodge resorts or camping beside the road than other segments. They like to get away from the TV, people and their daily routine and stay at accommodation set amongst an untouched environment. Where they stay has to be clean and comfortable.*
>
> *Active Explorers consider themselves to be very sporty, they love physical activity and they'll take risks while doing it. When on holiday they want to be active rather than be sitting around. They'll go away for weekend breaks when they can. They are more open than most other segments to a full eco-tourism experience. They are more likely than others to feel that the short time they have available for holidays limit the distance they can travel.*
>
> *Connectors have been identified as a secondary market for Cape York. Connectors see holidays as a chance to connect with the people they care most about. They will often subordinate their own preferences in terms of activities to ensure everyone has a good time. It's about what is real and what's really important. Connectors are considered to be friendly, supportive, loyal and appreciative. For them holidays are about socialising, relaxing, spending time with family and friends, and ensuring everyone is enjoying themselves. They express a preference for a self contained house, apartment or holiday unit while on holiday. For them, having access to a well equipped kitchen is important to preparing meals."*

Demographic research was conducted on the existing and potential markets for Cape York in 2002[12]. This research indicated that most visitors to Cape York reside in Queensland, with a significant proportion represented by the regional local market that is Cairns, Townville and Mackay. New South Wales and Victoria are the largest interstate source markets.

> *"The research indicated that visitors were motivated to travel to Cape York for an adventure, and for the sense of achievement of making it all the way to the top. Other motivating factors include the scenery, the unspoilt environment, the excellent fishing and bird watching opportunities, and simply 'getting away from it all'. Generally, the length of stay varied between one to two weeks and two to three weeks with just under 20% staying more than four weeks.*

[11] Domestic Segmentation Research. (2008). Tourism Queensland
[12] "Cape York Tourism: Market Assessment and Potential." (2002). Tourism Queensland

These reports highlight that the profile of Cape York Visitors is mainly self-drive, couples and families (two adults and children) between 45 and 64 years of age. Young couples between the ages of 26 to 35 are the region's secondary market.

The main length of stay varies between one to two weeks and two to three weeks with just under 20% staying more than four weeks.

The top five stated motives for travelling to Cape York are: never been before, adventure, fishing, go to the Tip, and four-wheel driving. Visitors' main activities while in Cape York are:

- *Four-wheel driving*
- *Camping*
- *Exploring*
- *Fishing*
- *Swimming*
- *Relaxing*
- *Sightseeing*

Niche Markets are small yet significant and include:

- *Fly in/ fly out fishing*
- *Fly in/ fly out sightseers*
- *Self drive international camping*
- *Backpackers*
- *Bird watching - Iron Range and Lockerbie Scrub.*
- *Hunting - pigs. (Rifle and bow-hunters)*

A Tourism Queensland survey undertaken in 2003 "Exploring non-visitors' perceptions of Cape York" gave some insight into perceptions and expectations of the Cape York visitor experience. That report indicated that potential visitors appear to rely on hearsay and guesswork when asked to describe their expectations of the facilities and infrastructure at Cape York.

Some think, and indeed hope, that there will be next to nothing in the way of built accommodation and amenities, as they want to experience a truly natural holiday. People generally expect to camp during their Cape York holiday, although some, particularly females and those with children, would hope to spend at least some of their time in a cabin or motel. They are unlikely to book accommodation in advance as they do not want to feel 'locked in' to arrive at a certain place on a certain day.

Potential visitors expect to find the odd fuel stop and general store on their way to the top of Cape York, but they would attempt to take as much as possible with them to avoid paying higher prices in remote areas.

Visitors generally expect to participate in activities like fishing, bird watching, and exploring either by foot or car. While they do not generally have a great desire for organised activities in Cape York, there is some appeal for organised activities such as fishing charters and guided tours.

Potential visitors generally anticipate driving all the way to the top of the Cape, even those living in Melbourne. There is little awareness of options such as flying part or all of the way there, but there is evidence that this may be an appealing option for some.

Safety is an obvious concern for those considering travelling to Cape York, including concerns about crocodiles, flooding and isolation. One of the main ways people plan to deal with these safety concerns is to travel in a group with at least two vehicles."

The Framework cites the Great Tropical Marketing Plan report prepared for TTNQ in 2005. Key marketing issues for the international market are that there is relatively low market awareness of the appeal of Cape York as a destination. Marketing activities need to be tailored towards building destination awareness in conjunction with development and distribution of niche touring options such as culture, adventure and fishing.

The Framework identifies potential or emerging international visitor market segments which, after further investigation, may offer additional prospects for development:

- *"Bird Watching – older / high disposable income / singles and small groups from US, Europe and Japan*
- *Recreational / Sport Fishing – singles and small groups from Europe and US*
- *Diving – singles and small groups from US, Japan and Europe (There has been very little in the way of promotion, and accordingly there is little recognition in all markets as yet, of existing and potential opportunities for dive experiences north of Port Douglas)*
- *Cruise Shipping – older / high disposable income / singles and couples from Australia, US, Europe (scheduled cruises along the east coast of the Cape have been increasing in frequencies in recent times)*
- *Super Yacht cruising*
- *Family member "war memories" tours – repeat US Market"*

Tropical North Queensland Tourism Opportunity Plan

The Queensland Government, Tourism Queensland and Tourism Tropical North Queensland published the 2010 – 2020 Tourism Opportunity Plan[13] for the region and identified a "*Cape York Wilderness Experience*" as one of eighteen catalyst projects. The opportunity is seen as:

"Opportunity:

Develop a uniquely Cape York sustainable tourism experience that celebrates the region's environmental, cultural and landscape values through the implementation of the following key initiatives:

- *Re-development of Pajinka Resort and the wider 'Tip' experience*
- *Implementation of the Cape York Camping and National Park Tourism Framework with the aim of establishing a network of camping and accommodation opportunities and associated attractions and tours across the Cape.*
- *Implementation of other key actions in the Cape York Peninsula and Torres Strait Tourism Development Action Plan dealing with infrastructure, product and industry development, coordination and marketing.*
- *Establish the 'Dreaming Trail' concept across Cape York where environmental and cultural values are presented and experienced at tourism nodes and along tourism trails (walking, road and sea) and where there are opportunities for authentic engagement with Indigenous people.*

Background:

The Cape York region between Cooktown and Bamaga offers a remote wilderness tourism experience through a richly diverse natural and cultural landscape. It is one of the unique and iconic Australian adventure journeys.

Current visitation to Cape York is dominated by mature aged Australians with international tourists representing less than 10% of the market. Over 80% of domestic visitors to the Cape use their own vehicle with the remaining domestic and international visitors using hire vehicles and commercial tour operators with only a very small proportion using air and sea.

13

The current attraction of Cape York revolves around its isolation, open spaces, unspoilt environment, spectacular scenery, fishing and the sense of adventure at escaping from the everyday hustle and bustle. Into the future Cape York has the potential to build on these attributes and attract a broader domestic and international visitor market looking for a true adventure wilderness experience and authentic engagement with Indigenous Australians.

Cape York represents a unique opportunity for TNQ and Queensland to present itself to the world as having one of the last great wilderness adventure and cultural experiences - and tourism represents a valuable economic, social and environmental opportunity for the Cape York community. The Cape York Peninsula and Torres Strait Tourism Development Action Plan provides the blueprint for realizing the great potential of tourism on Cape York as a partnership between all levels of government, industry and the Cape York Community."

Accommodation

Table 10 has been compiled to provide a snapshot of the accommodation on the Cape. Fundamentally the vast majority of "accommodation" on Cape York is camping for the self drive or safari tour market.

Camping accommodation includes an approximate capacity of 4500 people, including all bush camping sites, or 3500 people at sites with at least basic facilities. There are 11 developed camping areas/ caravan parks. Commercial accommodation ranges from the Bamaga Resort and resort style motels at Weipa to the remote lodges such as Lotusbird Lodge and Iron Range Cabins. The work for this project has identified 947 bed capacity. The Weipa accommodation is mostly local business travel, as is some accommodation along the Peninsula development Road and in Communities.

For the purposes of this study it is assumed that there are 700 beds in 24 properties available for leisure travel tourism. This provides an annual capacity of 147,000 bed nights for a seven month season. The campsites with at least basic facilities provides for 735,000 "bed" (*sic* tent!) nights.

If it is assumed that there are 50,000 visitors to Cape York Peninsula (excluding Cooktown and surrounds) with an average length of stay of seven nights this represents a current demand of 350,000 bed nights.

NOTE At present there is overcrowding of key sites during peak periods such as school holidays.

Table 10: Cape York Campsites and Beds[14]

Location	Name	Definition[15]	Campsites (People)[16]	Lodge/ Cabin/ Motel (Beds)
Punsand Bay	Punsand Bay Fishing Lodge	Developed Camping Area and Motel/Lodge/Cabins	100	68
Punsand Bay		Bush camping	10	
Somerset		Bush camping	10	
Nanthau		Bush camping	10	
Loyalty Beach	Loyalty Beach Campground and Fishing Lodge	Developed Camping Area and Motel/Lodge/Cabins	200	31
Seisia	Seisia Holiday Park	Developed Camping Area and Motel/Lodge/Cabins	1000	85
Bamaga	Bamaga Resort	Motel/Lodge/Cabins		90
Bamaga		Bush camping	50	
Umagico		Bush camping	10	
Umagico		Camping Area	50	
Mutee Head		Bush camping	10	
Mutee Head South		Bush camping	10	
Jackey Jackey Creek		Bush camping	10	

14 The table has been compiled from a wide variety of sources, including telephone survey of most commercial accommodation. The "Cape York" Hema map, 2010, has formed the prime input of location of commercial accommodation and bush camping. Sites and accommodation to the west of and not including Cooktown and Lakeland have been included.
15 The terms Camping area, campground, caravan park etc. are intermixed and use no specific definitions, terms as used by various sources are unchanged.
16 For all bush camping sites we have assumed a capacity of 10, obviously some sites can accommodate a number of groups whereas other just one group.

Location	Name	Definition[15]	Campsites (People)[16]	Lodge/ Cabin/ Motel (Beds)
Heathlands RR[17]	Eliot Falls	Camp ground	250	
Heathlands RR	Captain Billy Landing	Camping area	100	
Jardine River NP[18]	South Jardine River	Camping area	80	
Jardine River NP	North Jardine River	Camping area	60	
Bridge Creek	Nolans Brook	Bush camping	10	
Ussher Point	Ussher Point	Bush camping	10	
Ussher Point	Ussher Point South	Bush camping	10	
Vrilya Point	North of Vrilya Pt	Bush camping	10	
Vrilya Point	Vrilya Point North	Bush camping	10	
Vrilya Point	Vrilya Point South	Bush camping	10	
Crystal Creek		Bush camping	10	
Cypress creek		Bush camping	10	
Cannibal Creek		Bush camping	10	
Mistake creek		Bush camping	10	
Gum Creek		Bush camping	10	
Canal Creek		Bush camping	10	
Sailor Creek		Bush camping	10	
Cockatoo Creek		Bush camping	10	
Bertie Creek		Bush camping	10	
Dulhunty River		Bush camping	10	
North Alice Creek		Bush camping	10	
Ducie Creek		Bush camping	10	
Palm Creek		Bush camping	10	
Rocky Creek		Bush camping	10	
Bramwell Junction		Camping with Facilities	50	
Bramwell		Developed Camping Area and Motel/Lodge/Cabins	100	30
Moreton Telegraph Station		Developed Camping Area and Motel/Lodge/Cabins	100	70
Stones crossing		Bush camping	10	
Gibson WH Barrage		Bush camping	10	
Pennfather River		Bush camping	10	
Mapoon	Cullen Point	Camping with Facilities	65	
Mapoon		Bush camping	10	
Weipa	Albatross Bay Resort	Motel/Lodge/Cabins		160
Weipa	Anchorage	Motel/Lodge/Cabins		110
Weipa	Ash Palm	Motel/Lodge/Cabins		20
Weipa	Beachfront Lodge	Motel/Lodge/Cabins		32
Weipa	Weipa Camping Ground	Developed Camping Area	360	
Weipa	Western Cape Centre	Motel/Lodge/Cabins		34
False Pera Head		Bush camping	10	
Amban		Bush camping	10	
Aurukun		Motel/Lodge/Cabins		16
Merluna		Developed Camping Area and Motel/Lodge/Cabins	100	20
Iron Range National Park	Chili Beach camping area	Camping area	60	
Iron Range National Park	Cooks Hut camping area	Camping area	15	
Iron Range National Park	Gordon Creek camping area	Camping area	10	
Iron Range National Park	Rainforest camping area	Camping area	8	
Portland Roads	Portland House	Motel/Lodge/Cabins		8
Portland Roads	Portland Roads Beach Shack	Motel/Lodge/Cabins		4
Iron Range	Iron Range cabins	Motel/Lodge/Cabins		32
Archer River Roadhouse		Motel/Lodge/Cabins	100	12
Mungkan Kandju NP	Mango Lagoon	Camp site	10	
Mungkan Kandju NP	First Coen River campsite	Camp site	10	
Mungkan Kandju NP	Chong Swamp	Camp site	10	
Mungkan Kandju NP	Second Coen River	Camp site	10	
Mungkan Kandju NP	Pandanus Lagoon	Camp site	10	
Mungkan Kandju NP	Vardons Lagoon	Camp site	10	
Mungkan Kandju NP	Night Paddock Lagoon	Camp site	10	
Mungkan Kandju NP	Langi Lagoon	Camp site	10	
Mungkan Kandju NP	Old Archer Crossing	Camp site	10	
Mungkan Kandju NP	Bobs Lagoon	Camp site	10	

17 RR = Resources Reserve
18 NP = National Park

Location	Name	Definition [15]	Campsites (People) [16]	Lodge/ Cabin/ Motel (Beds)
Mungkan Kandju NP	Twin Lagoons 1	Camp site	10	
Mungkan Kandju NP	Twin Lagoons 2	Camp site	10	
Mungkan Kandju NP	Ten Mile Junction	Camp site	10	
Mungkan Kandju NP	Governors' Waterhole	Camp site	10	
Mungkan Kandju NP	Horsetailer Waterhole	Camp site	10	
Coen	Exchange Hotel	Motel/Lodge/Cabins		36
Coen	Homestead Guesthouse	Motel/Lodge/Cabins		20
Port Stewart		Bush camping	10	
Musgrave Roadhouse		Developed Camping Area and Motel/Lodge/Cabins	140	28
Saltwater Creek	Lotusbird lodge	Motel/Lodge/Cabins	10	8
Lakefield National Park	Twelve Mile Waterhole	Camping area	10	
Lakefield National Park	Old Faithful Waterhole	Camping area	10	
Lakefield National Park	Mick Fienn Waterhole	Camping area	10	
Lakefield National Park	Dingo Waterhole	Camping area	10	
Lakefield National Park	Kalpowar Crossing Campground	Camp ground	40	
Lakefield National Park	Seven Mile Waterhole	Camping area	10	
Lakefield National Park	Hann Crossing camping area	Camp ground	20	
Lakefield National Park	6 Mile	Camping area	10	
Lakefield National Park	Annie River	Camping area	10	
Lakefield National Park	5 Mile	Camping area	10	
Lakefield National Park	Saltwater	Camping area	10	
Lakefield National Park	Sweetwater	Camping area	10	
Lakefield National Park	Bizant River / Browns Creek	Camping area	10	
Lakefield National Park	Catfish Waterhole	Camping area	10	
Lakefield National Park	Hanuschs	Camping area	20	
Lakefield National Park	Midway	Camping area	10	
Lakefield National Park	Melaleuca	Camping area	40	
Lakefield National Park	Elbow	Camping area	10	
Lakefield National Park	Horseshoe Lagoon	Camping area	10	
Lakefield National Park	Kennedy Bend	Camping area	40	
Lakefield National Park	Lake Emma	Camping area	10	
Lakefield National Park	Old Laura / Dowling Yards	Camping area	10	
Lakefield National Park	Orange Plains	Camping area	40	
Lakefield National Park	Top Whiphandle	Camping area	10	
Lakefield National Park	Bottom Whiphandle	Camping area	10	
Lakefield National Park	Basin Hole	Camping area	10	
Lakefield National Park	Welcome	Camping area	10	
Lakefield National Park	Leichardt	Camping area	10	
Bathurst Head	Combe Point	Bush camping	10	
Bathurst Head	Bathurst Bay	Bush camping	10	
Cape Melville National Park	Cape Melville - Bathurst Bay camping area	Camping area	10	
Cape Melville National Park	Melville Beach	Camping area	100	
Cape Melville National Park	Ninian Bay	Camping area	30	
Mungkan River		Bush camping	10	
Pormpuraaw		Camping with Facilities	50	
Kowanyama		Bush camping	10	
Mitchell River		Bush camping	10	
Old Koolatah Waterhole		Bush camping	10	
Jowalbinna Safari Camp		Motel/Lodge/Cabins		10
Palmer River Goldfield		Bush camping	10	
Laura	Quinkan Hotel	Motel/Lodge/Cabins	120	6
Laura		Camping with Facilities	50	
Hopevale	Elim Beach	Bush camping	10	
Deighton	Deighton River Bush Camp	Bush camping	10	
Endeavour River	Endeavour Falls Tourist Park	Developed Camping Area and Motel/Lodge/Cabins	240	17
TOTAL			**4508**	**947**

NOTE Approximately 3305 of the above camping site capacity is at managed sites where there are basic facilities.

Recent Tourism Planning

Cape York Tourism Forums

Between November 2010 and April 2011 Cape York Sustainable Futures undertook a series of forums throughout the cape to identify tourism futures, opportunities and issues for Cape York.

The five (5) key priorities emerging from all forums were:

> *"1. The need to create a tourism and business organisation to represent Cape York Peninsula interests in order to create a unity of purpose; for all tourism and business interests to 'speak with one voice' to represent the region. Attendees suggested a December 2011 time frame for establishment of the body.*
>
> *2. The need to create a distinctive "Cape York and Torres Strait" brand and to unify support for an easily recognisable image.*
>
> *3. Take actions to expand marketing efforts and increase information and promotion to the travelling public – open Visitor Information Centres and share information across the region.*
>
> *4. Strategically plan for infrastructure improvements:*
>
> > *a. encourage investment in accommodation to meet demand and*
> >
> > *b. progressively improve roads, particularly the Peninsula Development Road*
>
> *5. Resolution of land tenure issues both by the State Government and local Councils, and in the case of Weipa by Rio Tinto; attendees noted that lack of capacity to use DOGIT land is hindering expansion and development."*

Cook Shire Tourism Strategy

As at November 2011, Cook Shire Council had engaged consultants to develop a Tourism Strategy for the shire. The Terms of Reference and potential scope of this have not been evaluated. The key topics the consultants have been looking at during consultations include[19]:

- Product development;
- Camping policy and grey nomads;
- Marketing;
- Cruise shipping industry;
- Mountain biking;
- Tourism related infrastructure; and
- Signage and related policy.

[19] *Pers comm.* James Dunbar, AEC Group

Current Market – Cape York

This section highlights key points that have been extracted from economic research that has been conducted over the last 10 years in Cape York. It is important to understand that the studies consider different aspects of the market. Therefore, the information presented summaries the most recent and relevant information for each sub-section.

Numbers & Demographics

There are no accurate estimates of tourism visitor numbers to Cape York. Studies in 1995 suggested the figure to be 60,000, with 20,000 travelling to the tip. In 2000, estimates were that numbers had increased by 4.5%.

Interviews conducted with tour operators in 2009 suggest that numbers may have dropped slightly. There are reportedly now some 23,000 to 25,000 visitor vehicles, plus the combined tour operators' passengers, which presently run at 3,000 to 4,000. Given that there is a consensus that the majority of Free and Independent Travellers (FIT) are older couples, the average occupancy of private vehicles will predominantly be two only.

Total visitor numbers will therefore be currently in the order of 55,000 to 60,000. This estimate is consistent with the recent downward trend in visitor numbers to the region.

As to international visitors, it was reported that numbers on tours are in the order of 10 – 15%, providing a maximum of some 500 on tours.

As to international FIT travellers, there is a total of some 3,000 rentals of 4WD vehicles ex Cairns / Port Douglas per annum. If an average of 2.5 passengers per vehicle is assumed, this means that the total number of international visitors to the region capable of visiting Cape York during their stay is likely to be far less than 7,000. This includes the consideration that there may be some longer stay international visitors who rent a 4WD vehicle from a centre other than Cairns / Port Douglas.

Tourism Queensland market research in 2001, 2002, 2003 and anecdotal reports provide a consistent view of the sources of visitors. Without trying to be specific as to proportions:

- Approximately half are from interstate, with the overwhelming majority being from New South Wales and Victoria;
- Some 15% – 17% from South East Queensland;
- Rest of Queensland 8 – 10%
- Far North Queensland – 7 – 10%
- International 5 – 7%

At 5 – 7%, if total visitor numbers are around 60,000, then this would place international visitor numbers at between 3,000 and 4,200, consistent with the combined numbers on tour and 4WD vehicle hire figures.

Other findings of the 2002 and 2003 market research are also supported by anecdotal information and local knowledge, which combined provide the following:

- The key age group of visitors to the region were those from 45 to 64 years (54%) and the most predominant household was the **mid-life household** including mature couples and singles (50%);
- The key purpose was for holidays (86%) and the most common travel party were adult couples (46%) and friends and relatives without children (25%);

- Over 50% of all visitors to Cape York spend a total of four weeks or less away from home, with one quarter spending two weeks or less away. Queenslanders have shorter trip lengths, with 72% spending four weeks or less away from home. In 2002, the majority of visitors spent two weeks or less actually in Cape York Peninsula;
- Up to 90% of visitors used their own vehicle or 4 Wheel Drive to travel and 81% used camping as their main form of accommodation;
- Some three quarters of visitors had never been to the region before.

Average Expenditures

There is a considerable divergence between the data obtained in the 2001 market research as compared to the 2002 Tourism Queensland survey of visitors to Cape York. This reflects the reasonably small sample sizes, but does at least provide a range of average daily expenditures as follows:

Item	2001 Survey	2002 Survey
Accommodation	$50 (but 75% reported spending less than $50 / night)	$31
Food & Drink	$154	$43
Guided Tours & Attractions	$200	$100
Other including gifts, clothing & duty free purchases	$92	$51

One pertinent observation is that in both samples respondents demonstrated that while they economised on other items, they seemed prepared to spend on attractions and guided tours.

Target Market Sectors

The contemporary tendency is to define target markets in 'psychographic' terms, rather than by age or socio-economic position. This is intended then to target those with the strongest disposition towards the experience offered by a destination and / or product, across these other demographic categories.

Tourism Queensland defines the primary domestic market of Cape York as ***Active Explorers***, in line with Domestic Market Segmentation research. Active Explorers perceive that holidays are about pushing boundaries through challenging themselves. Active Explorers believe that holidays are about pushing boundaries and challenging themselves. For Cape York, this is achieved by "roughing it", experiencing nature, remaining self sufficient and overcoming adversity.

The secondary market for Cape York has been termed ***Connectors***. These people see holidays as a chance to connect with people – either family or friends in the same travelling party, or people they meet along the way.

The international market for Cape York is defined as ***Global Experience Seekers*** – experienced international travellers who travel for the sake of travelling and who seek out authentic experiences.

The research indicates key international target markets and their priority for the Cape York region to be as follows. The categories are Tourism Queensland defined segmentations that are largely self-explanatory. A priority 1 is high priority, while 5 is low priority:

Sector		Priority for sub region (1 - 5)
United Kingdom	Self challengers	1

	Youth market	3
Germany	Active explorers	1
	Backpacker/Youth	3
Europe (excl. UK & Germany)	Active explorers	1
	Backpacker/Youth	3
USA	Adventure seeker	1
NZ	Active Explorers	3
United Kingdom	Comfort adventures	2
USA	Sophisticated traveller	4

Current Market - Ecotourism

There have been various studies relating to the affect conservation and care for the environment may have on consumer choices and spending on tourism product. These generally indicate strong support from consumers for the concepts of conservation and environmental responsibility. However it is still uncertain as to the proportion of consumers who translate this support into definitive action. How many are content with the overall impression of the destination they visit and its product as environmentally responsible, as compared to how many are more discriminating?

A range of surveys and studies carried out in the US, Europe, Costa Rica and Australia, relevant to this question were considered in a paper prepared by The International Ecotourism Society. Key findings included:

> *…both consumers and travel companies show strong support for responsible tourism, including a willingness to pay more for ethical practices, to contribute to community projects and to support certification. While consumers continue to view cost, weather and quality of facilities as paramount in holiday planning, demand for ethical products, social investment and eco-labels is growing.*
>
> ***Consumer Demand for Responsible Tourism: Strong, growing but largely passive***
>
> *A majority of tourists want to learn about social, cultural and environmental issues while travelling, feel it is important that tourism not damage the environment, and want hotels to protect the environment. However, only a small percentage of tourists describe themselves as "ethical" or actually ask about hotel policies; even fewer report changing plans due to responsible tourism issues.*
>
> ***Operator Support for Responsible Tourism: Widespread, especially among specialist operators***
>
> *Three quarters tour operators surveyed say they have or are planning to produce a responsible tourism policy, designed to educate tourists and/or set operating principles. However, few companies feel external pressure or say their customers proactively ask about social, environmental, and economic issues. Specialist tour operators targeting "green" consumers that superior environmental performance brings them branding and price advantages and that guest concern with social and environment issues increases significantly after a trip.*
>
> ***Travellers' Philanthropy: Rapidly growing corporate & customer commitment to assisting local communities***
>
> *One third to one half of tourists surveyed say they are willing to pay more to companies that benefit local communities and conservation, and majority of tour operators say they are supporting local charities and projects. While still small, both ethical consumption and investment markets are growing rapidly.*

Support for Certification: Consumer demand, industry improvements & benefits constrained by inadequate marketing & too many labels

Majority of tourists say they support eco-labels and are willing to use, if available, but is low consumer recognition of existing labels, confusion from competing labels, a lack of understanding of certification. Businesses say certification helps improve performance, but market differential has not yet been achieved. Surveys show need for better marketing and a consolidation and standardization of labels,

(Source: Consumer Demand and Operator Support for Socially and Environmentally Responsible Tourism January 2004, CESD/TIES Working Paper No.104)

As to the Australian domestic market, a 2004 study commissioned by Department of Industry Tourism and resources (DITR), included testing of six specific product concepts. These are listed in rank order of those attracting the highest to those attracting the least interest, according to the research:

Product	Extreme Interest	Interested	Total
Nature Resort = "a secluded luxurious resort"	23%	23%	46%
Holiday House = "a secluded, scenic place to stay"	16%	29%	45%
Lake retreat = 'a cabin by a lake or waterway in secluded bush"	16%	28%	44%
Socialising with people like me = " a holiday in the bush or Outback where you can meet people like you	14%	20%	34%
Guided educational experience = "a place where you could experience and learn about natural wonders & plants"	11%	18%	29%
Friendly Guides = "a remote location where you could stay in rustic one to two star motel with basic facilities"	7%	13%	20%

This seems to support conventional wisdom in the Tropical North Queensland tourism industry to the effect that Australians are not a strong target market for nature based tours and 'ecotourism'. However even 29% interested in a 'guided educational experience' was estimated to equate to a potential market of 4,142,652 Australians over the age of 18.

(Reference: Demand for Nature-based and Indigenous Tourism Product 2004, Colmar Brunton Social Research)

A reasonably consistent response was found in international survey data on ecotourism. It found that a majority in four countries surveyed, Australia (71%); US (68%); UK (63%) and NZ (67%) agreed with the following proposition:

"I prefer to holiday where I can see nature or be in a natural setting"

However when asked about specific action in relation to ecotourism experiences, interest drops. Only 18% of Australians and Americans, 19% of UK residents and 14% of New Zealanders answered that they "*avoid staying at accommodation that does not have genuine environmental policies".* Positive responses to the question "*for my next holiday, I'd really like a total ecotourism experience", were obtained from 20% of Australians, 16% of Americans, 14% of New Zealanders and 13% of UK residents.*

(Source: The Brand Strength of Ecotourism and the Consumer value of Eco-labelling 2004, Ecotourism Australia 12th Annual Conference – Paper by MacMillan, McInnes & Roy Morgan Research).

Market Opportunities

Due to the remote location of Cape York the major barriers for people travelling to the area are the time and money associated with the trip, as well as the need to coordinate well in advance time off from work for the travel party. The distance, particularly for interstate travellers, is another barrier and the difficulty in finding suitable travel companions. Younger children are also considered an obstacle as families will generally wait until their children are old enough to appreciate the trip, or until they can leave the children behind and go by themselves.

Motivations & Objectives

Market research consistently identifies the same range of motivations and objectives that create the visitor appeal of Cape York.

The research indicates that the underlying reason for the Cape's appeal is its natural beauty, unspoilt wilderness, isolation and remoteness, open spaces, lack of commercialisation and challenging terrain. Many visitors are very protective of the area and would prefer it to maintain its isolation and basic tourist offering.

The primary reason for people visiting Cape York is the sense of adventure associated with it. Other common reasons include:

- A desire to see the top end of Australia / to stand at the tip
- The challenge to get to the top of Australia and to achieve something that
- only a few people have
- To fulfil a long held desire to visit the area / because they haven't been there before
- To see the Outback
- To experience the wilderness, remoteness, isolation and seclusion
- The uniqueness of the area
- For the 4WD experience (including the river / creek crossings, etc)
- To fish the area
- To see Cape York before it is spoilt (e.g. by infrastructure or tourists)
- To have a totally different holiday experience
- Having a personal interest in the area, having read about it or seen videos of the area
- Wanting to visit historical attractions (e.g. WWII relics)
- Wanting to give the children a new experience and allow them to learn new outdoor skills

Preferences

Camping is the main form of accommodation for visitors to Cape York, though there is evidence to suggest that visitors would use accommodation as a 'luxury break' from camping to access better facilities from time to time.

Nevertheless, they would expect such accommodation to be in keeping with the environment and feel of the Cape. It is unlikely that visitors would book accommodation in advance, due to the desire for flexibility in their itinerary.

The most common activities actually engaged in (as opposed to motivations for visiting), were four wheel and adventure driving, though fishing, bushwalking, socialising and relaxing also rated highly among visitors.

Current Gaps

The 2002 Tourism Queensland Market Research report indicated that whilst visitor satisfaction with Cape York remains high, there are some opportunities for improvement:

- Better signage about localities

- Improved camping facilities
- Improved roads
- Information access to the following activities:
    - Aboriginal dance experiences
    - Traditional aboriginal fishing opportunities
    - Learning about traditional foods and medicines
    - Staying in a homestay with an aboriginal family
    - Walking tracks

Further the research project asked participants for suggested activities or attractions that may be offered in the Cape York region. The most common suggestions and responses included:

- Provide a hotel or some form of luxury accommodation
- Shell collecting
- Increased availability of pearl farm tours
- Barramundi fishing expeditions
- Promote the availability of accommodation on Thursday Island
- Indigenous locals to make parks available to tourists and establish native tours
- Cave touring with a local guide
- Ease the restricted access to camping or fishing in National Parks

Projections

Cape York

Projections for tourism numbers are notoriously inaccurate due to the range of global impacts on travel patterns and behaviour outside the control of the tourism industry. Examples are:

- Natural Disasters (Cyclones, Floods)
- Global financial crisis
- Currency fluctuations
- Aviation policy favouring major city airports as hubs
- Collapse of Ansett and Compass 1 and Compass 2
- Carbon miles argument against long haul travel
- Fuel prices
- SARS
- Terrorism risks
- 9/11
- Bird Flu
- Swine Flu
- Asian Economic crisis
- Y2K
- Pilots strike (1989)

As to Cape York, although there are no firm numbers, it would seem that the number of visitors to Cape York generally have been fairly static, with fluctuations up and down at least partly due to impacts from the above. Another local impact has reportedly been the introduction of alcohol management plans, which restrict the carrying of alcohol into areas of Cape York. Anecdotal reports are that this has had a significant impact on visitor numbers. This is especially in relation to fishing and hunting groups and family camping trips. The particular impact has been on visitors from within North Queensland and the rest of Queensland.

This relative stability is probably an achievement, a testament to the appeal of Cape York and the growth of interest in different, authentic and meaningful experiences, further supported by increasing interest in wilderness values and the environment generally.

Further, building on the current market is heavily dependent on successful marketing of Cape York and on putting in place needed infrastructure identified in a number of reports reviewed as part of the literature review for this consultancy.

The market is overwhelmingly domestic, with interstate visitors predominating. In the case of international visitors, **under present circumstances**, there are no strong reasons to believe that numbers will build significantly on the 3,000 to 4,000 currently visiting. This is for a number of reasons:

The high Australian dollar makes it an expensive destination;

- Australia is a long haul destination for most and they have limited time in Tropical North Queensland (average length of stay for international holiday visitors 7.49 days);
- A Cape York experience will take up a significant proportion of their time in Australia.

Where there is potential to build international visitor numbers, this would be in special interest areas to make Cape York a primary destination in Australia, rather than part of a general itinerary.

Those special interest groups will include:

- Sports fishing
- Hunting
- Bird-watching
- Hiking
- Outdoor adventure

Given the above, if gradual improvements are made to infrastructure, attractions, activities available and marketing, it would be optimistic to think numbers based on the current market profile for Cape York will build by more than an average of 3% per annum. This will not be a straight line cumulative increase, but feature fluctuations based on outside impacts.

Two reasons for anticipating growth are:

- Firstly there is a global growth of interest in wilderness and authentic, meaningful holiday experiences.
- Secondly, from now, over the next ten years, the large baby boomer cohort should enter retirement. These are likely to boost the numbers of 'grey nomads' making the trip to the tip. That is if the baby boomers do what their predecessors have done. The reservation is that they have demonstrated throughout their life time that as a group they could well do something different or unexpected.

Finally, Fuel prices and transport costs are likely to continue have a significant impact for tourism on Cape York.

Ecotourism

The growth in the ethical consumption market provides an indicator of the proportion of consumers who act on the basis of their ethical philosophy. It has been calculated that the "ethical consumption market" increased by 15% between 1999 and 2000 and that markets in which there exists an "ethical alternative", ethical consumer purchases increased 18.2% between 1999 and 2000. The sector is growing, though it remains below 2% of the total market share (1.6% in 2000, up from 1.3% in 1999).[20]

It seems reasonable to accept that demand growth will continue in ethical consumption and in seeking real experience and education while on holidays, in view of the broadly held concern with the health of our world environment and broad consumer trends.

This was quantified in unrelated survey research work, which indicated:

> 88% of Australian, 84% of UK, 85% of New Zealand and 74% of American residents believed the statement "*if we don't act now we'll never control our environmental problems'.*

Consistent with this is poor support for the statement that "threats to the environment are exaggerated", with only 23% of Australians, 29% of New Zealanders and 30% of Americans agreeing with the statement.[21]

Key Implications

The key implications of relevance to the development of an ecotourism accommodation hub on Cape York are.

1. The existing market is predominantly domestic, with less than 10% international. An eco-tourism development is likely to need to at least substantially rely on this existing market. To attract a new or additional market, the development would need to be of an exceptional international standard (due to iconic location, service, activities and activities), have direct access via air and be well linked into national and international marketing and distribution systems;
2. There is already strong competition in the Northern Territory for international and domestic visitors seeking an Australian wilderness experience. Kakadu and the Kimberley in WA have been successful in capturing the imagery of Outback, wilderness, adventure. They also have established a reputation for providing authentic, informal experiences of Indigenous culture
3. The existing market is seeking better accommodation standards than available in the past on Cape York. This is not luxury 5 star standard, but good quality comfortable accommodation with good urban style comforts. Successful NT and WA properties reinforce that *it is all about the location and activities* available rather than the accommodation;
4. Successful Cape York accommodation facilities have invariably linked into tour companies to provide regular bookings. This has also provided a link with such companies marketing and distributions systems.
5. Cape York tourism is seasonal and there is virtually no local's market. The West Australian property, Kooljaman, for instance, benefits from a 'locals' market from Broome and the mining centres of the Kimberleys.
6. The short season creates the need to produce a return on investment over a period of less than 12 months each year. This is unless an alternative 'Wet Season' market can be found and the property is accessible during this period.

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[20] Source: Cooperative Bank & New Economics Foundations Ethical Purchasing Index, referenced Goodwin and Francis, 2003

[21] Source: Roy Morgan Single Source research – Continuing Single Source Survey

7. The seasonal nature also raises some staffing issues. It is difficult to attract and keep skilled staff to any position on Cape York. The seasonal operation:
    a. Firstly limits the pool of available staff to those for whom seasonal employment is attractive. This is unless the operators have another property elsewhere at which staff can work during the Wet Season.
    b. Does provide staff members with a break from interaction with visitors. The tourism industry notoriously creates burnout from constant exposure to visitors. This may be particularly important in the case of local Indigenous staff members.
    c. The difficulty of attracting and holding staff suggests that models involving owner / operators, including JV's will be better placed to retain management skills. (Lotus Bird Lodge is an example).
8. Both the domestic and international psychographic market profiles suggest that a successful lodge will need the following core attributes:
    a. Stunning location and views
    b. Other attractions and activities available in the region immediately around the lodge
    c. The ability to interact with locals, especially Indigenous people
    d. Overall provide an experience that is seen as adventurous, meaningful, authentic and to some extent educational.
9. The exception to the last point is a facility that provides an overnight stopover on the regular tour routes. Even so, competitors who provide the fuller experience as above will be more competitive, subject to price points.
10. Interpersonal, informal interaction with Indigenous people, with the sense of an authentic personal experience of Indigenous culture is highly regarded. Maintaining this has been difficult in the past.
11. General industry success factors include:
    a. Good understanding of the tourism industry
    b. Adequate working capital
    c. Access to and focus on attraction and retention of trained, skilled staff
    d. Professional management expertise
    e. Partnering with the distribution trade wholesale network
    f. Partnerhips / joint ventures with tour operators (APT, Outback spirit, AAT Kings etc)
    g. Easy access
12. In the case of projects seeking IBA involvement, this organisation tends to prefer to invest in existing properties, with a JV or management agreement with a professional management entity and an Indigenous organisation. The model typically involves the Indigenous partner buying out IBA equity over time. However the IBA portfolio does not at present include a Far North Queensland tourism property.

Market Overview

There have been a variety of market analyses undertaken for tourism on Cape York over a period of years, with each providing input to the others. Some of these have been as part of a broader assignment. A relatively recent summary of the nature of target markets for Cape York, was incorporated into the 2009 Cape York Camping and national Park Tourism Framework, adopted by Tourism Queensland.

From these and the case studies which follow, the following market observations of relevance to the feasibility of an eco-lodge development on Cape York are drawn.

- Estimates place tourism visitor numbers at 55,000 to 60,0000 per annum, but there are no really reliable statistics overall visitor numbers to Cape York;
- Visitors are overwhelmingly domestic Australian visitors, with international visitors being considerably less than 10%;
- Most visitors drive, either as FIT travellers, or as part of a tour with a tour company;
- Fishing and camping are high priority activities;
- People travel to the Cape for the adventure, with motivations including to make it to the Top, the scenery, unspoilt environment, bird watching and getting away from it all;
- Tourism Queensland market research in 2001, 2002, 2003 and anecdotal reports provide a consistent view of the sources of visitors. Without trying to be specific as to proportions:
    - Approximately half are from interstate, with the overwhelming majority being from New South Wales and Victoria;
    - Some 15% – 17% from South East Queensland;
    - Rest of Queensland 8 – 10%
    - Far North Queensland – 7 – 10%
    - International 5 – 7%
- The key age group of visitors to the region was those from 45 to 64 years (54%) and the most predominant household was the mid-life household including mature couples and singles (50%);
- Domestic segmentation research on psychographics of visitors has identified *Active Explorers* as the primary domestic market, with *Connectors* being the secondary market;
- *Active Explorers*, like to get away from the usual hustle and bustle, whilst at the same time being able to meet and mix with others and locals in a natural and authentic environment. Active Explorers are more open to staying in backpacker hostels, eco lodge resorts or camping beside the road than other segments. They like to get away from the TV, people and their daily routine and stay at accommodation set amongst an untouched environment. Where they stay has to be clean and comfortable;
- For *Connectors*, holidays are about socialising, relaxing, spending time with family and friends, and ensuring everyone is enjoying themselves. They express a preference for a self-contained house, apartment or holiday unit while on holiday. For them, having access to a well equipped kitchen is important to preparing meals.
- Tourism Australia has identified the "Global Experience Seeker" as the primary international target market. According to Tourism Australia, Global Experience Seekers

- are experienced international travellers who travel for the sake of travelling.
- seek out authentic personal experiences they can talk about. They are particularly intrigued by stories of exotic places, people, history and the environment.
- involve themselves in holiday activities, are sociable and enjoy engaging with the locals.
- want to actively experience a destination and its culture, coming away having learnt something.
- are somewhat adventurous and enjoy a variety of experiences on any single trip.
- place high importance on value and hence critically balance benefits with costs.
- place high value on contrasting experiences (i.e. different from their day-to-day lives).

Ecotourism Enterprises Review

Objectives

There are a variety of tourism accommodation products across Australia which can be considered ecotourism enterprises, situated in remote locations. They have a variety of product components, standards, different emphases and a range of target markets. The most relevant will tend to be those with some degree of association with Aboriginal and or Torres Strait Islander people, in recognition of the circumstances and nature of Cape York.

A number which seem relevant are reviewed below, with the objectives of providing insights into contemporary ecotourism markets, components of successful products, key success factors, price points, operational considerations and pitfalls to avoid.

Kooljaman at Cape Leveque

Location & Overview

This facility is styled as a wilderness luxury camp, located 220km north of Broome on the tip of the Dampier Peninsula. The road is unsealed, a three hour drive each way and requires visitors by road to return via the same route to Broome. (http://www.kooljaman.com.au). (Also see Tourism Australia report from 2006: www.indigenoustourism.australia.com/business.asp?sub=0622).

It was established in 1986, is jointly owned by two surrounding Aboriginal communities of Djarindjin and One Arm Point, who have established a Board of 6, with three drawn from each of the communities. Two white managers are employed and according to a 2006 report of Tourism West Australia, there are 17 other staff, of whom 4 were Aboriginal people at that time.

The property has won a number of tourism awards, including four Australian Tourism Awards.

There is a private dirt airstrip, which has up to ten flight arrivals per day in season from tourism charter operations providing tours of the area, including Horizontal Falls. Most international visitors arrive by air.

Accommodation is provided in various levels, with 14 safari tents (4 person capacity), 2 en-suite cabins 5 person capacity), 4 log cabins 4 person capacity), 3 campground units (4 person capacity), 10 dome tents (2 persons), 11 beach shelters and 26 campsites being either powered or unpowered.

Safari Tent

Ensuite Cabin


Log Cabin


Camp Ground Unit


Dome tent


Beach Shelter

Power is provided by solar arrays, with battery storage and generator backup.

Accommodation Rack Rates

All rates have the condition of a minimum to two nights stay

Safari tents:	$260 per night, twin share.
Ensuite cabins:	$165 per night twin share
Log cabins:	$140 per night twin share
Camp ground units:	$110 per night twin share
For all the above:	$25 / additional adult; $10 / additional child
Dome tents:	$60 per night twin share
Beach Shelter:	$65 per night twin share. $18 / additional adult; $8 additional child
Camp ground site:	**$18 per adult**, $8 per child, $5 per outlet for power.

Assets & Activities

The overarching assets are high scenic values in a wilderness and ocean environment. More specifically, guests have the following available:

Snorkelling & swimming	Tag along tours to Swan point (Half day)
Dinghy hire	On site Dinkas Restaurant
Fishing	Bush Butler room service
Glass bottom boat tours	Bird watching
Scenic flights over the Buccaneer Archipelago	Beachcombing
Mud-crabbing with Indigenous guide	Charter boat trips
Cultural tours	Whale watching

Markets

There are some 50,000 visitors per annum, of which approximately one third are day visitors (Approximately 16,500). Many of these are on air charter tours to Horizontal Falls and other scenic attractions on the Dampier Peninsular. There are up to 10 charter visits per day in season. Some are on bus tours. There is a charge of $10 per car and landing fees apply.

There is a luncheon trade for the restaurant from day visitors.

Of the overnight visitors, approximately 50% book accommodation and 50% use the camp grounds.

This translates to approximately 16,600 per annum in either camp or accommodation units.

The facility is open all year, but the season is regarded as Mid-April to Mid-November, a seven month season, with the peak being June to October, which coincides with whale watching. Reportedly there is no need for a boat, with the whales very close to shore. During the low season, the safari tents are dismantled as a precaution during cyclone season. This reduces accommodation capacity by some 50%.

If 16,000 of the overnight visitors were assumed to stay during the seven month season, then the accommodation (with 114 beds), would be achieving some 67% occupancy during the season, with it being virtually empty during the low season.

Some 60% of visitors are West Australian residents, 20% are interstate visitors on a around Australia trip and 20% international visitors. The majority of the West Australian visitors are drawn from Broome, Port Headlands and regional mining centres, wanting a short break.

During the season, one week is not an unusual length of stay. There are many repeat visitors.

Bookings are typically made though the internet, on either the facility's own website, or through other tourism sites. Significant numbers of bookings are also made though the Broome Visitor Information Centre.

Operations & Key Success Factors

The manager is not in favour of safari tents. The need to dismantle during cyclone season is labour intensive and adds to wear and tear on the units, as well as reducing accommodation capacity by 50% during the low season. Air-conditioning is not possible for this style of accommodation, apart from the limitations of the solar power system.

During the low season, the facility loses some $200,000.

The solar system costs around $50,000 per annum in maintenance, according to the manager. It is a $300,000 system, with a $150,000 battery bank. The camp grounds cannot cater for caravans, as they do not adequate power supplies to support them.

In the manager's opinion, the key success factors are:

- Whales close in shore during the season
- Indigenous cultural products and interactions
- No major river systems in the area, leading to an absence of crocodiles and stingers
- The accumulation of word of mouth reputation
- Retention by the Board of a business advisor (Perth) and professional managers

It would seem that the mining boom is also having an impact, due to the level of patronage from regional resources industry staff.

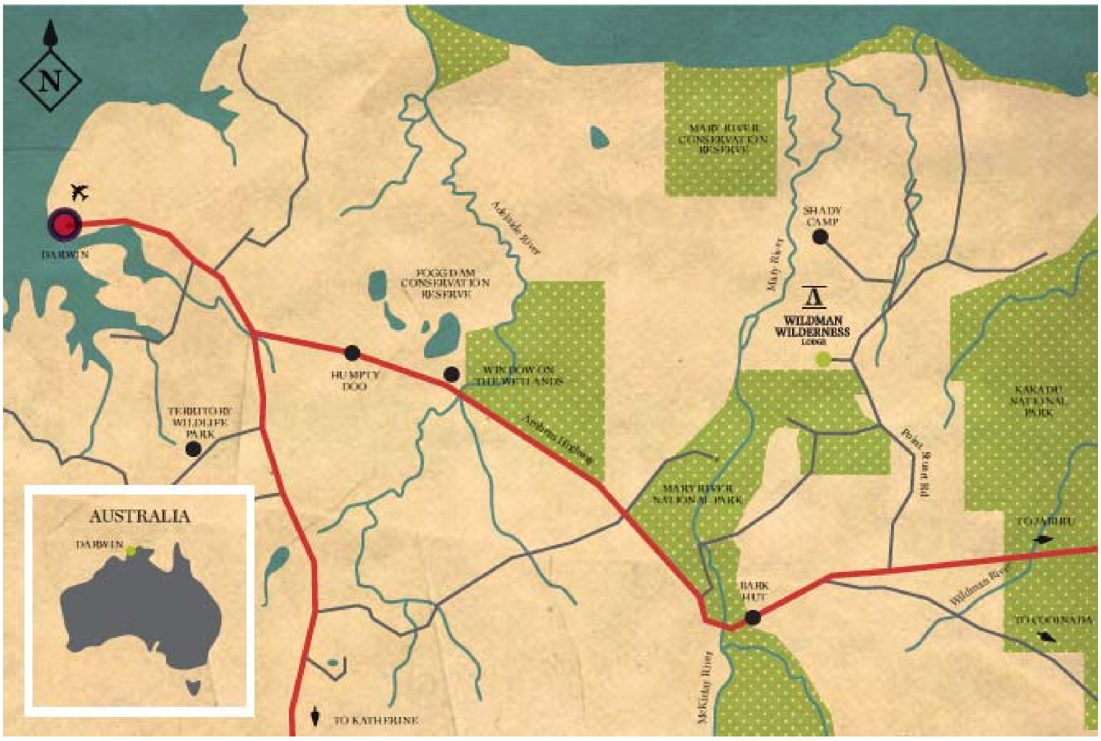
Support

The facility began originally with the help of an ATSIC loan, now fully repaid. More recently, as reported in the IBA 2009-2010 Annual Report, IBA assisted Kooljaman with finance to construct a new restaurant, reception and kiosk building. IBA's construction team also provided building expertise—including quantity surveying, cost-to-complete calculations at each progress stage, and feedback on contracts. This latter aspect raised a potential risk to sacred sites on the traditional lands, which was reportedly addressed successfully.

Wildman Wilderness Lodge

Location & Overview

This is a new Lodge, opened in April 2011, supported by IBA investment. It is located 170km south west of Darwin, in the Mary River National Park Wetlands, half way between Darwin and Kakadu.



Driving time is about two hours, with all but the last 7km sealed. This is reportedly good quality compacted gravel. The Lodge also has a bush airstrip, with flying time from Darwin being 30 minutes. The lodge offers road transfers to and from Darwin Monday, Wednesday and Friday.

The Lodge consists of a central lodge, with a lounge bar, restaurant, swimming pool and meeting facilities for up to 30 people. There are 10 air-conditioned cabins and 15 safari tents. Both accommodation styles have an en-suite bathroom. The air-conditioned cabins have been transported to the site from Wrotham Park in Queensland.

The facility is a partnership between Grant Hunt of Anthology Travel and the IBA.


Habitat (cabin) Interior


Habitat (cabin) Exterior


Safari Tent interior


Safari Tent exterior

Accommodation Rack Rates

The season for the facility is 1 April to 30 November. Rates advertised for 2011 and 2012 are:

		2011	2012	
Cabins:	Double	$285	$315	
	Single	$505	$315	(The 2012 figure is probably a typographical error)
Safari Tents:	Double	$215	$245	
	Single	$365	$375	

Assets & Activities

The key asset is the location adjacent to the Mary River National Park and close to Kakadu, both with existing international reputations. It provides a tropical savannah wetlands experience, with its associated rich wildlife encounters. Specific activities offered are:

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Home Billabong Cruise	1.0	$55 / $35
Mary River Rockhole Cruise	3.5	$95 / $60
Full Day Kakadu Tour	Not stated but vehicle travel component is 6 hours	$220 / $145
Leichardt Point Sundowners	Not stated	$65/ $40
Quad Bike Tour	2.0	$105
Culture Walk	Not Stated	Complimentary

The option of private tours is also offered.

Markets

The initial key target market area is the outback travel companies, such as APT and Inspiring Journeys. These can provide regular guest numbers, especially while the lodge is building its reputation. The lodge noted that it is not possible to link into the international market in the first season of operation. This year, about 20% of guests were international visitors. For the future, it is expected the split will be closer to 50% international, 50% domestic, with a slow build up over year's two to four. There are now strong forward bookings for next year. International targets include US, UK, France, Italy and Germany.

In this initial year, occupancy for the nine month season was 43%, compared with a target of 45%, despite a later than expected opening.

Operations & Key Success Factors

Transfers are offered from Darwin for those who do not self-drive. Transfers are available through Wildman itself, or coach companies. A private sedan transfer is available starting at $480 each way. Fixed wing and helicopter transfers are also available.

The 10 cabin units acquired from Wrotham Park were not considered sufficient to provide the critical mass of accommodation for the facility to be viable, hence the addition of 15 fifteen safari tents.

The site is highly seasonal, with the lodge being closed for three months each year.

A noted above, a key success factor is considered to be linkages with outback adventure travel companies.

It was emphasized that it is all about the destination rather than the accommodation. What activities are available, what other places could guests visit in the region?

The availability to Traditional Owner guides was also indicated to be a key success factor, but difficult to maintain.

Support

In November 2009 IBA purchased the assets of the Wrotham Park Lodge in central Far North Queensland. The core buildings and infrastructure assets were subsequently dismantled and relocated to the Wildman site in the Northern Territory, which IBA had purchased years previously.

IBA reports that the recycling of this facility is estimated to have produced net savings in excess of $7 million.

Jowalbinna Rock Art Safari Camp

The key asset on which this facility is based is access to the Laura Quinkan Rock Art, together with the Trezise family history of association with the rock art since 1960.

The Rock Art is judged as some of the best in the world. It has an established International profile and has been included in the register of the National Estate. An additional differentiating feature is that it is associated with an ancient living culture. All rock art sites outside of Australia were produced by cultures which have passed away. The interpretation of the art and its various meanings is therefore direct from the culture.

The Trezise family is acknowledged experts on the art. Their profile is enhanced due to there being few Aboriginal rock art guides available.

The facility is based on property on which there is a long term pastoral lease. This limits the extent of tourism development possible. Previously Wilderness Challenge wished to invest in development of the facility, but this became untenable due to issues associated with this current tenure.

Crocodile & Welcome Stations

Location & Overview


(Giant Horse Gallery – Laura)

In 2004 Kleinhardt was commissioned by the Indigenous Land Corporation (ILC) to conduct a Feasibility Study on the tourism potential of Crocodile and Welcome Stations in the Laura area.

The December 2004 feasibility report found that an accommodation product which provided as the key attraction, an authentic immersion in Aboriginal culture could be viable. The Quinkan Rock Art was to be the foundation for this.

The location proposed was 'Hidden Pocket' on Welcome Station, adjacent to a lagoon and near an ancient bora ground.

Accommodation infrastructure proposed was:

- 8 permanent accommodation units;
- 20 quality tented cabins in a variety of configurations;
- 10 camping sites with power and water.

Support infrastructure in the form of a hub with restaurant, lounge, merchandising area and a fenced swimming lagoon. The last was expected to be an attractive feature, due to the scarcity of safe swimming locations on Cape York.

Accommodation & Rack Rates

Rack rates per night proposed against which feasibility was assessed, were:

Permanent accommodation units:	$390 – twin share, including breakfast
En-suite tents – 2 person	$185 – twin share
En-suite tents – 4 person	$60 – per person
Camp sites	$25 – per site

Indicative prices for three day two night packages were calculated as $855 luxury and $455 economy.

Assets & Activities

The key asset was access to the Quinkan Rock Art and the opportunity it presented to deliver an experience which would be 'an authentic immersion in Aboriginal culture'.

'Getting there' was proposed as part of the experience, with options to include:

- Light aircraft transfer with views of Coral Sea, rainforest and Outback, plus significant Aboriginal landmarks such as Mt Mulligan and Black Mountain;
- Return by way of Bloomfield Track and Daintree Rainforest for a rainforest experience

Activities suggested were:

Rock Art & bush tour – half day	$55 per person
Guided Fishing half day	$70 per person
Guided fossicking & local history	$55 per person
Spa & mud bath	(Not costed for purposes of feasibility assessment)
Horse riding / station activity	$100 per person
Traditional feast / Dancing /	
Camp fire stories	$70 per person

Markets

The Executive summary of the feasibility report included the following commentary on markets:

International visitors include some 48% of visitors from US, Canada and Europe including UK and Germany, all of which have particular market potential for this type of product.

While the Backpacker segment is currently suffering a downturn in the region, the proposed product is likely to have high appeal to this segment, provided price points were right.

Existing visitor visitors to Cape York number approximately 70,000, but include a high proportion of low yield travellers, including campers, fishing parties and 'Grey nomads'. Tour companies to Cape York do not all pass through Laura and some lead times are necessary if a proportion are to be attracted to the facility for one night package stays. However, due to a shortage of quality accommodation on Cape York, there is some potential to attract tour groups. For the same reason, a provision has been made for 10 serviced camp sites, which are anticipated to be popular with the current Cape York visitor market.

However, existing visitors will not provide adequate demand for the proposed facility. It will need to gain recognition as a destination in its own right. There are reasons to believe this can be achieved, as research indicates strong and unmet demand for Indigenous cultural product. There is also evidence that good quality rock art has market appeal. This evidence includes an Indigenous owned and operated attraction in the Grampian Mountains, Victoria currently attracting some 200,000 visitors per annum.

The following five target market categories have been adopted to describe the primary targets for this product:

- Young, curious and mobile
- Affluent, educated achievers
- Gray nomads and campers
- Study groups
- Cape York tours

From these, 23,126 visitor nights represent an annual occupancy level of 66%. This would effectively be 100% occupancy if the facility is to be open for only eight months per annum. Some 14,016 visitor nights represent an annual occupancy level of 40%, which is felt to be achievable. Visitation potential is placed in the following range:

Low:	9,000
Medium:	14,000
High:	23,000

A competitive analysis of the proposed product indicates potential for a satisfactory position in the market.

Key selling points proposed indicate the points of appeal for the product:

- An intimate, authentic experience of Aboriginal people, culture and life experience, presented in their own words;
- Thirty two thousand years of living history represented in extensive, world renown rock art;
- Opportunity to learn about Aboriginal bush crafts – bush tucker, legendry tracking skills, medicines, making implements;
- A feast set around a traditional bora ground, under the stars, backed by didgeridoos and traditional music, with camp fire stories of dreamtime and gold rush;
- Small, intimate, secluded, tranquil, Australian Outback;
- Safe swimming, with comfortable, modern, air-conditioned facilities;
- Best serviced camp sites on Cape York;
- Wild gold rush days of North Queensland – the people, the places and their stories;
- Opportunity to combine Aboriginal cultural experience with trying a hand at gold panning, horse riding, mustering, sports fishing.

Operations & Key Success Factors

The quality of human resources recruited to deliver the experience was identified as the most important key success factors. As it was to rely on providing an authentic immersion in Aboriginal culture, quality Aboriginal staff would have been required. The risk assessment identified this as a major risk area, as, at the time, no significant interest was identified in the local Aboriginal community.

As second key success factor was the quality and ease of access. This was in recognition of the location being relatively remote. Access was considered to encompass both transfer arrangements for guests and market access as to links into the tourism industry marketing and distribution systems. There was some prospect of providing such marketing and distribution links at the time due to the interest of the Accor Group in the project.

Access by light aircraft was proposed as part of the experience. The 50 minute flight from Cairns would provide scenic vistas over the Coral Sea and rainforests, then merging into Cape York savannah. The flight would take a route to optimise views of significant landmarks. This might include Black Mountain south of Cooktown and / or Mount Mulligan, north of Mareeba. Both of these have significant Aboriginal cultural significance and guests would have material to brief them on what they were seeing.

Pajinka Wilderness Lodge

Location & Overview

The Pajinka Wilderness Lodge was built in 1986, originally under the ownership of Bush Pilots Airways. It was subsequently purchased by the local Aboriginal community.

Accommodation was provided in 24 bungalows, each with bathrooms private verandah, telephone and tea / coffee facilities.

The site is some 400 metres from the tip of Cape York and the rocky outcrop with a sign proclaiming it to be the northernmost point of Australia. It is set in rainforest, with close access to the 2.4km long sands of Frangipani Beach.

The lodge has not operated for some years and the site stands derelict. It is included as a case study due to its high profile and the need for any new project to avoid the pitfalls that caused it to fail. However it is difficult to be definitive as to just what the key factors were that led to failure. The facts are clouded by the passing of time, differing opinion and the lack of people left who have firsthand knowledge. However interviews with a number of different sources of knowledge provided consistent opinions. There can therefore be a reasonably high level of confidence that the following captures the key reasons for failure.

Assets & Activities

The primary asset was location, at the northern most point of the Australian continent, near the plaque proclaiming this. It was and still is a destination. As such the derelict site tends to have a negative impact on visitors.

The location also provided access to excellent fishing, sunsets and sunrises, rainforest experiences and Frangipani Beach, with its high visual amenity.

This is relatively rare on Cape York, due to debris often prevalent on beaches, especially on the western side of the Cape. Due to the prevalence of sharks and crocodiles, Frangipani Beach is not suitable for swimming. The lodge did have a swimming pool, but this was reportedly frequently unusable due to poor maintenance.

The most popular tour from the tip is the day tour to Thursday Island. Importantly, the ferry service to the Island included direct pickups from the Lodge.

The Lodge had for a number of years an older Aboriginal man ('Rusty'), who reportedly provided a well-regarded and popular Indigenous cultural experience. Due to an inability to interest younger people in providing a similar experience at the time, as Rusty aged, the Indigenous experience fell away.

Markets

There were three primary markets. One was the self-drive market with the objective of 'reaching the top'. After the trip up Cape York, with sparse opportunities for good accommodation, these visitors tend to be amenable to expenditure on good accommodation as a treat, whereas they may have camped for much of the rest of the trip. Tour groups are a second major sector on Cape York. While some provide only camping accommodation in their itineraries, most include at least some formal accommodation nights.

The third market segment was as a fishing lodge, especially when under the ownership of Bush Pilots Airways, providing connections for visitors seeking a good fishing experience. However over time, fishing charter boats moved the emphasis of their operations to Seisia and Punsand Bay.

The only local day visitor market tended was people from Seisia, whose behaviour tended to make it uncomfortable for accommodation guests. A number of sources reported that the pool for instance, when serviceable, was often full of local people who were drunk. Local community ownership also meant that the community tended to regard it as a right to take over the resort for special occasions such as 21st birthday parties.

Operations & Key Factors

Poor management was reported as the key overall reason for failure under community ownership. This was not necessarily a reflection of the quality of staff in the role and also flowed on to produce other issues. The key elements cumulatively leading to failure were reportedly:

- There was a succession of managers, apparently due to disagreements with community board decisions and directions to management;
- Community staff members would not take direction from Indigenous supervisory staff when they were not local community members and / or from the same clan;
- Lack of direction led to poor maintenance and the infrastructure deteriorated;
- The behaviour of some local community members, due to their attitude as owners impacted adversely on guest amenity;
- Staff attendance was unreliable;
- The Indigenous experience was a key element of the reasons for guests to stay and this faded away over time;
- Poor management possibly led to a shift to Punsand bay and Seisia as a fishing boat charter base;
- The Lodge was not packaged with other attractions and not well integrated into the industry marketing and distribution systems at the time;
- Resort Bamaga was developed and provided a more reliable facility;
- External market shocks on visitors to tropical North Queensland generally impacted the viability of what was already a weak situation (Airline pilots strike, Ansett collapse, Compass collapse X 2 etc)
- Uncertainty in the market about the stability and future of the facility discouraged tour groups from making long term bookings. Stability and the ability to book well into the future are key elements in attracting and retaining tour companies as clients;
- The Lodge was closed after a walk out by staff members. There were rumours of unpaid wages and revenues from the Lodge going to the community rather than to support operations;
- Subsequently a fire damaged the infrastructure and the site has since deteriorated, been vandalised and become derelict.

Lotusbird Lodge

Location & Overview

The Lodge is located 480km north of Cairns on the Marina Plains Road, close to the Lakefield National Park. Princess Charlotte Bay can be accessed via some 70km of unsealed road, which is 22m in a direct line from the lodge.

There are 10 ensuite cabins, accommodating a maximum of 20 persons. Each cabin overlooks the billabong.

The Lodge is owned and operated by a couple, with the assistance of two casual employees.

Accommodation & Rack Rates

Rates listed are per person per night and include all meals and GST. They remain the same for 2012 and 2013, as follows:

Double or Twin	$275
Single occupancy	$375

Assets & Activities

The primary assets are the location and wildlife, especially the bird life, with some 200 species.

The immediate location is adjacent to a billabong, with its attendant wildlife, with the regional location providing access to the destinations of Lakefield National Park and Princess Charlotte Bay, which have existing profiles and market recognition.

The lodge itself does not offer any formal activities, but guests may be part of a tour group. There are self-guided walks offered along marked trails for bird and other wildlife encounters.

Markets

The lodge is linked with three tour operators who have itineraries which include the lodge. These are:

Outback Spirit

Kirrama Wildlife Tours

Fine Feather Tours

Outback Spirit stays two nights on each tour, fully booking the lodge each time. Typically there are 48 tour visits each season. For a nine month season, with 20 beds, the lodge has some 5400 bed nights available. This means that Outback Spirit alone takes up some 35% of available occupancy for the season.

While the lodge is not presented as exclusively a bird watchers lodge, it is a known destination for bird watchers and is reportedly heavily booked each season with high occupancy levels and strong advance bookings.

Operations & Key Success Factors

The key success factor was reported to be the owners being the operators, on site. It is traditionally difficult to recruit and retain good quality management staff on Cape York. Even when good people are recruited, there tends to be high turnover.

Others are:

- The links that have been forged with established tour companies
- Established reputation with birdwatchers
- Location in relation to high profile destinations – Lakefield National Park & Princess Charlotte Bay
- Visual amenity of the site

A key feature of the operation is the distinct season, with the lodge closed for part of the year. This is in part due to the risk of flooding during summer on this site, which has been flooded a number of occasions. Movable assets are packed up and moved to high ground for storage during the period of closure.

A benefit of the closure is that it will provide the owner / operators with a chance to recuperate each year. Tourism is a people business and burn out due to too much exposure is not uncommon. This would render an owner operator facility unviable over time.

Cape York Turtle Rescue Camp

Location & Overview

The Cape York Turtle Rescue Camp or Camp Chivaree was located at Janie Creek, 14kms south of Mapoon and began operations in 2005. It was reportedly set up on a site without securing permission from all interested Traditional Owners. It was operated by the Mapoon Shire Council, which has now closed the operation due to a native title dispute.

Access was through Weipa, from which there was a pickup service involving approximately an hour's drive to Mapoon, then a 30 minute 4WD beach drive to the site.

The operational season for the camp was June to October, to match the presence of turtles and avoid the Wet Season.

The accommodation was in permanent tents on platforms, with all meals provided in the rates and amenities including hot showers. Maximum camp capacity was 12 guests.

The camp was packaged internationally and had relationships with a range of tourism operators and allied interests.

Tourism Australia listed these as: Conservation Volunteers, Abercrombie and Kent, Australian Tourism and Promotion, ATS Pacific White Label, Pan Pacific, Diverse Travel, Australian Outback Travel, Encounter Cape York Package, Wilderness Challenge, Qantas Holidays, Infinity, Audley, Hands U

The operation was low impact, low volume, with only some 200 visitors per annum.

Accommodation & Rack Rates

The minimum stay was two nights, with a meals and accommodation rate of $425 per person per night. Two, three and five night options were offered. The five night option included transfers to and from Weipa, while the two and three night options required an additional $220 per person for return transfers.

Assets & Activities

The assets that combined to provide a special experience were the turtles themselves, Indigenous Rangers and community Elders, the accumulation of rubbish from foreign fishing boats and the remote wilderness location.

Activities revolved around working with rangers, researchers and scientists, centred on conservation of the turtles. Guests accompanied the rangers on nightly beach patrols, during which they assisted in;

- Counting eggs
- Measuring and weighing the turtles
- Installing exclusion devices to protect the eggs from predators

Day time activities centred on removal of nets and other rubbish from the ocean and beach. This often involved quite strenuous physical work. Informal educational sessions on Aboriginal culture were provided in the camp, together with guided tours of the bush which taught the significance of the land and how the Aboriginal people traditionally lived off of it.

Hand reels were available for fishing and interested guests involved themselves in bird watching.

Markets

The target market was a niche, but growing sector, encompassing people interested in the environment and in actively making a contribution during their holiday. Better informed and educated consumers are generally creating increased demand for new, satisfying, authentic, meaningful and educational holiday experiences. Linking with this is the global drift to city living and a growing concern with the state of the world's ecosystems. A proportion of city dwellers are seeking re-fresh themselves through re-connection with the natural environment.

Primary areas from which these people were drawn were UK, USA, Europe and Interstate Australian domestic.

Operations & Key Success Factors

All Cape York tourism faces the difficulty of a short tourism season, with a total close down for most during the Wet season. Most operations also have no or virtually no locals market. This produces the need to produce a return on investment over a short period and increases the difficulty in maintaining effective, skilled staffing levels.

In the case of the Turtle camp, the infrastructure was low cost and basic and rangers and scientists have an ongoing job function, for which hosting tourists is only an adjunct. Further, whereas the basic nature of the infrastructure would be unacceptable in many markets, in this case it is acceptable as part of the adventure and willingness to sacrifice some comfort level in the cause of contributing to a worthwhile project.

The small scale meant that only a small proportion of what is still a niche market needed to be attracted and this may have also added to a feeling of exclusiveness, of having an experience not available to many other people.

The opportunity to work alongside and informally interact with and get to know Aboriginal people on their country and learn about culture first hand in a very personalized way would have also been a major attraction. This directly addresses the emerging global search for authentic, meaningful and educational experiences.

The feeling of being able to make a worthwhile contribution was central to the experience. The experience of doing some strenuous hard practical work would have also been new and satisfying for a proportion of guests.

Reviews of the experience that have been examined typically rated it very highly, commonly using terms such as 'life changing'.

Bamurru Plains

Location & Overview

Bamurru Plains is located on the edge f the Mary River floodplains, a short distance from the coast and the western boundary of the Kakadu National Park. By air it is 20 minutes by light aircraft from either Kakadu or Darwin. It is a 2.5 hour drive from Kakadu and 3 hours from Darwin. (www.bamurruplains.com)

The property is located within a working buffalo station (Swim Creek Station). Guests are required to leave their vehicles at the entrance, from which they are picked up for a 20 minute drive to the lodge.

The facility promotes the concept of 'Wild Bush Luxury' and has only 9 'safari suites' (pictured). A number are air-conditioned, while others have fans only.

Wild Bush Luxury is a marketing group that encompasses the following properties in addition to Bamurru Plains (www.wildbushluxury.com)

- Arkaba Station, Flinders Range (Sheep Station SA)
- Sal Salis, Ningaloo Reel WA
- Blue Mountains Private Safaris, NSW

The Group adopts conservation principles, with the aim of a minimal footprint. It states its mission as:

> *ultimately to conserve the environment that sustains us and this philosophy guides everything that we do*

Accommodation & Rack Rates

The minimum stay is two nights and rack rates include accommodation, meals, beverages and scheduled activities. For 2012, the rates are:

Adult – twin share A$930

Adult – single occupancy A$1,390

Adult – extra person sharing A$699

Children 16 & under – sharing with adults A$470

Children 16 & under – own room – sharing A$837

There is an air-conditioning surcharge of A$100 per night. A conservation levy of $10 per person per night is included in the rates, which is donated to the Australian Wildlife Conservancy.

A variety of packages are offered, including packaging with partner properties. These partners include:

- Bullo River Station, in the north west of the Northern Territory,
- Longitude 131 at Uluru,
- Southern Ocean Lodge on Kangaroo Island
- Faraway Bay, North West of Kununurra, overlooking the Timor Sea & close to King George Falls

Assets & Activities

The key asset for this property is likely to be being part of the Wild Bush Luxury Group and its packaging with other properties.

The activities offered are:

- Airboat tours – tours of the wetlands
- Bird watching
- Wildlife viewing
- River cruises
- 4WD safaris
- Scenic Helicopter Flights (additional Cost)
- Fishing – guided (additional cost)
- Aboriginal Culture in Arnhem Land & Kakadu (additional cost)
- Swim Creek Station activities

Markets

Price points pitch the market to the higher, luxury end of the market, concentrating on the overall quality of the experience than the accommodation, which is reasonably basic but well-appointed with attention to detail. Like Wildman, international markets will include Us, UK, France, Italy and Germany.

Rather than rely on tour companies, the property relies on alliances and packages with other properties. A prime target would seem to be providing **a range** of high quality, quintessential, iconic Australian wilderness environments for those visitors who wish to and can afford to include a number of diverse locations on their holiday. The appeal to such markets is underpinned by presenting an ethical approach to conservation and impacts on the environment.

Operations & Key Success Factors

This property is also closed for the Wet Season.

The small scale will tend to dictate targeting the high price end of the market for viability.

Like Wildman, it is all about the destination rather than the accommodation, which does however need to be comfortable, with good attention to detail and a sense of luxury in this case.

A key to success is the links and alliance to other properties, as noted above, to provide not just a single dimension, but a range of Australian iconic wilderness experiences. These links also provide added marketing power and increased ability to gain attention in the industry marketing and distribution systems.

Indigenous Business Australia

Locations & Overview

Indigenous Business Australia's (IBA) purpose, embedded in legislation is:

> To assist and enhance the self-management and economic self-sufficiency of Aboriginal and Torres Strait Islander peoples, and to advance their commercial and economic interests by accumulating and using a substantial capital asset for their benefit.

In doing so, IBA has a portfolio of business investments, as well as a variety of programs. Business investments include a number of tourism operations.

IBA preference is to invest in existing businesses, rather than Greenfield projects. It typically establishes a joint venture between itself, an Indigenous organisation and a private sector partner and are structured to enable the eventual divestment of the IBA investment to the Indigenous partner.

On occasions it will invest in an Indigenous business in some difficulty. Current examples of this in the tourism sector are the Gagudju Association, with its two Kakadu properties and Tjapukai Aboriginal Cultural Park in Cairns. Here the strategy is again for the Indigenous partner to redeem their equity share from IBA over time.

In the current tourism sector portfolio, there is one which might be regarded as a greenfield project, being the Wildman Wilderness Lodge, referred to under a preceding section. The portfolio includes, but is not confined to properties that could be considered eco-lodges and is as follows:

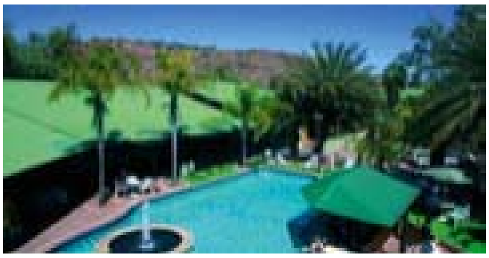
- Chifley Alice Springs Resort, NT
- Cape Don Experience, NT
- Fitzroy River Lodge, WA
- Gagudju Crocodile Holiday Inn, NT
- Gagudju Lodge Cooinda, NT
- Holiday Inn Townsville, QLD
- Mungo Lodge, NSW
- Tjapukai Aboriginal Cultural Park, QLD
- Vibe and Medina Grand Darwin, NT
- Wildman Wilderness Lodge, NT

The next section summaries the position as to each property, with material quoted directly from the IBA Annual Report for 2009 - 10. It provides some case studies in the circumstances in which IBA may invest.

Chifley Alice Springs Resort

Stott Terrace, Alice Springs, NT. (www.chifleyhotels.com.au)

Formerly part of the Voyages Group, the Chifley Alice Springs Resort was acquired by IBA in November 2009 in partnership with Centrecorp Aboriginal Development Corporation and the Sitzler family. Being near the centre of Alice Springs, the resort's location and facilities make it a popular choice for business and leisure travellers.



Cape Don Experience

Cobourg Peninsula, Arnhem Land, NT (www.capedon.com.au)

In March 2007, IBA and the Djuldjurd Aboriginal Corporation (Algada) purchased the business known as Cape Don Experience. The business provides a sports fishing and ecotourism experience in pristine waters off the Northern Territory coastline.

Fitzroy River Lodge

Great Northern Highway, Fitzroy Crossing, WA (www.fitzroyriverlodge.com.au)

The Fitzroy River Lodge was established in 1989, and IBA became involved in July 2001. At the same time, Leedal Pty Ltd, which represents local Indigenous groups, acquired a majority equity holding in the investment, with the remaining equity being held by industry partners.

The lodge, styled as a pastoral homestead, includes 20 hectares fronting the Fitzroy River, and is often referred to as an oasis in the region. The lodge enables Leedal to subsidise groceries sold at its supermarket, sponsor a children's education program, supply computers for the local school, support local sporting carnivals and provide travel opportunities for Fitzroy's Indigenous residents.

Gagudju Crocodile Holiday Inn

Flinders Street, Jabiru, NT (www.gagudju-dreaming.com)

The Gagudju Crocodile Holiday Inn at Jabiru, a 2.5-hour drive from Darwin, is the only 4-star accommodation within Kakadu National Park. The hotel's unique architecture attracts significant worldwide interest. IBA, in joint venture with the Gagudju Association (representing the 10 local clan groups), owns the hotel and outsources the management to InterContinental Hotels Group.

Gagudju Lodge Cooinda

Cooinda, Jim Jim, NT (www.gagudjulodgecooinda.com.au)

Gagudju Lodge Cooinda, located at the southern end of Kakadu National Park, also operates the highly successful Yellow Water Cruises, as well as the Warradjan Cultural Centre. IBA has completed a further equity sell down to its Indigenous partner, the Gagudju Association.

Holiday Inn Townsville

334 Flinders Street, Townsville, QLD (www.holidayinn.com)

In June 2008, IBA acquired the Holiday Inn Townsville. IBA structured the investment to enable Indigenous participation at an ownership level and to leverage supplier, employment and training opportunities. The hotel is managed by InterContinental Hotels Group under a management agreement and was refurbished in 2009.

IBA is currently in discussions with a number of local groups to find an Indigenous co-owner.

Mungo Lodge

Mungo National Park, NSW (www.mungolodge.com.au)

Mungo Lodge was purchased in October 2003. It is situated adjacent to Mungo National Park, within the Willandra Lakes World Heritage Region of New South Wales. The region was granted World Heritage listing in 1981 in recognition of its Indigenous heritage, archaeological values and natural landscape.

The significant 2007-08 multimillion-dollar refurbishment at Mungo Lodge has opened new markets and provides visitors with a luxurious outback experience.

Tjapukai Aboriginal Cultural Park

Western Arterial Road, Caravonica, QLD (www.tjapukai.com.au)

Tjapukai is one of the country's largest private employers of Indigenous Australians, with approximately 60 Indigenous employees. In 2000, Tjapukai was inducted into the Queensland Tourism Awards Hall of Fame and in 2004 was named Australia's best tourist attraction by the Australian Tourism Export Council.

Following the downturn in tourism due to the global financial crisis, IBA decided to acquire all partners' equity in Tjapukai, to enable IBA to support the operation and inject capital to reinvigorate its product offering. Once tourism into the region has recovered to sustainable levels, the traditional owners will be invited to reinvest in Tjapukai.

Vibe and Medina Grand

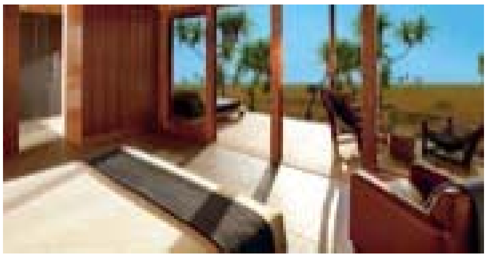
7 Kitchener Drive, Darwin City Waterfront, NT (www.medina.com.au or www.vibehotels.com.au)

The Larrakia Development Corporation (LDC) recently partnered with IBA to acquire a 50 per cent share in the Vibe and Medina Grand Darwin Waterfront Hotels, from the Toga Group. This joint venture is expected to generate ongoing revenue, training and employment opportunities for the local Indigenous community.

The two hotels are located within the grounds of the Darwin Waterfront Precinct, a $1 billion project that is transforming 25 hectares of industrial wasteland into the business, tourism and recreational hub of Darwin. The Medina Apartment Hotel (comprising 121 serviced apartments) and the Vibe Hotel (comprising 120 guest rooms) are perfectly positioned to capitalise on an expected influx of locals and tourists visiting the Waterfront. The Larrakia are the traditional owners of the land on which Darwin is built. The joint venture with IBA and the Toga Group will enable LDC to add hospitality, hotel operations and management courses to those already on offer through its new Trade Training Centre. There will also be scope for local Indigenous business owners to tender for event management, landscaping, art production, cultural tours and other services related to operating and maintaining the two hotels.

Wildman Wilderness Lodge

Wildman Road, Mary River National Park, NT (www.wildmanwildernesslodge.com.au)



In 2006, IBA purchased Wildman Wilderness Lodge, a property located in the Mary River (proposed) National Park just over one hour's drive from Darwin on the way to Kakadu. In November 2009, IBA purchased Wrotham Park Lodge, which was successfully dismantled and relocated for reconstruction of Wildman Wilderness Lodge as a new resort during 2009 -10.

Indigenous Land Corporation

As an independent statutory Authority the Indigenous Land Corporation (ILC) has its operating scope and overall priorities set by legislation. Its overall purpose is '*to assist Indigenous people to acquire and manage land to achieve economic, environmental, social and cultural benefits*'.

As such, its activities have focused on land acquisition and land management, with some emphasis on acquisition, development and management of pastoral properties. The ILC's three priorities are:

- Access to and protection of cultural and environmental values
- Socio-economic Development
- Access to Education

More recent activities have included tourism enterprise development as a means of addressing these priorities. In 2011 the ILC purchased the Ayers Rock Resort in the NT, runs Home Valley Station in WA as a combined tourism and pastoral operation and is currently in the process of completing construction of the Mossman Gorge Visitor Centre (the *Mossman Gorge Gateway Project),* which represents a significant investment in tourism. This will include a training operation, as does both other operations mentioned above.

It is therefore possible the ILC may have some interest in participating in the Mutee Head development, as it would seem to be consistent with its three priority areas, while also developing a productive use for an area of Indigenous land.

The proposed development is consistent with contributing to the three priority areas as follows:

The proposed Lodge would link into existing Ranger and environmental protection activities, while at the same time providing opportunities and incentive for local people to preserve and present their cultural knowledge.

Employment opportunities would be created for local Indigenous people, but perhaps even more importantly in the context of learning about delivering a tourism experience to contemporary industry standards. There is a lack of this opportunity on Cape York at present. The skills and knowledge gained are proposed to contribute to lifting standards and an understanding of the tourism industry generally in the region.

The Lodge proposes to include traineeships in its operation. In addition, the operation is proposed to operate as a meeting and training venue in the 'closed' season. This presents an opportunity for role playing and training in a real commercial environment.

Mutee Head – Considerations

Mutee Head

Location

Located to the west of the northern Peninsula Communities, near the mouth of the Jardine River.

36 km to Bamaga, 44km to Bamaga Airport, 70km to tip of Cape York. Road from Bamaga reasonably all weather.

Tenure and Ownership

Lot 102 SP120089, tenure is Aboriginal Freehold with the Apudthama Land Trust as the trustee (*pers comm.* Bernard Charlie, Chair).

It is assumed that in order to develop an ecotourism facility on the site a separate lease or other title, specific to the site will be required for security for finance and allow exclusive possession. In order to obtain a lease, an “entrepreneur” may express interest to the land trust to create a lease. There is a process which will involve a Development Approval (reconfiguration of a lot) and other subsequent IDAS approvals. Native title may be an issue and an Indigenous Land Use Agreement may be required (this may require additional financial consideration beyond the lease rental paid to the Aboriginal Council).

The process to create a lease on the site is potentially a time consuming process with no certain outcome nor timeframe and cost. The process may require an ILUA and this may involve protracted (or quick!) negotiations depending upon the interest by the claimants or prescribed body corporate. In some circumstances the negotiation of an ILUA may require financial considerations over and above lease payments.

Further, it is most likely to require a development approval under IDAS (for a reconfiguration of a lot and/or material change of use, and then after the lease is granted operational works). Further, other approvals such as under *Vegetation Management, Coastal Management* and other legislation may be required (some of these are integrated into the IDAS process).

Given the underlying native title considerations and the various steps at which IDAS approvals may be required a unique critical path will need to be understood. For each step there are risks the application may be refused as there are dependencies which must be completed before potentially prohibitory processes can commence.

The process is most likely to take at least twelve months and when IDAS and ILUA processes are considered two years.

Opportunity

Mutee Head and the bay immediately to the east is an exceptionally beautiful site.

Behind the white sand beach the site has elevation with a high dune and ridge above the beach. Pleasant woodland with shade on the potential site behind the beach. There are existing cleared areas for major facilities and space between trees for nestling cabins. It would be possible to relocate the vehicle access to the track above site, thus avoiding vehicle access onto beach which spoils the amenity.

There has been a history of some use for camping on the site and development will displace this use. The site could provide an ecolodge with a beautiful coastal setting near Cape York with two potential market foci:

- A short stay accommodation facility for self drive cape York visitors (as a one night or two night stay as part of a longer 7 to ten day Cape York self drive trip).
- A longer term stay (3-5 nights) for fly-in visitors (but would require greater level of facilities and a wide variety of tour options to ensure visitor satisfaction for a longer stay).

One opportunity could be an ecolodge style development with individual cabins (12-20 most likely to be the size with best initial feasibility).

Local attractions for tours include:

- Cape York "Tip", Lockerbie Scrub, Somerset (2 hours each way, a day trip);
- Local rainforest and wetlands.
- Jardine River (crocodile spotting, bird watching, mangroves, rainforest, wetlands etc.).
- Biffin Swamp (wetland bird watching), also potentially other bird watching sites;
- Fishing tours;
- WW2 history with the Radar site;
- Thursday Island day tours (direct or via Seisia);

Considerations

Reliable all season access from Bamaga will allow a fly-in market to be focussed on during the wet season when the Bamaga Road and/or Peninsula Development Road is closed.

Coastal Planning and Management Act considerations: The site has sufficient room back from the beach to allow setback and elevation to be above storm tide levels.

Vegetation Management Act considerations: Not essential habitat, vegetation of least concern.

No local source of staff, however only just over a half hour from Injinoo and Bamaga so some staff can commute.

Appears to be a good site to create a product with significant product differentiation from Punsand Bay and anything redeveloped at Pajinka. The site can offer ecotourism and fishing tours based around the Jardine that other tip of Cape York (Northern Peninsula Area) sites cannot.

Stakeholders

EcoSustainAbility and CYSF have undertaken a presentation to the Apudthama Land Trust Board and taken Bernard Charlie and other traditional owners (including rangers with the NPARC Ranger program) to Mutee Head to discuss the proposal. The Board is supportive and wants to be involved in ongoing planning.

Tourism Planning Context

The *Cape York Tourism Development Action Plan 2008-2011* encourages tourism development with a focus on providing the opportunity for local communities to improve their self sufficiency. The Action Plan recognises the style of tourism as mainly self drive and those on tours or in hire vehicles with a potential for growth of fly-in visitors. The Action Plan recognises 4WD, camping, exploring, fishing, swimming, relaxing and sightseeing as the main activities visitors are seeking... interestingly the Action Plan does not mention cultural activities. The Action Plan identified potential niche markets such as fly in/ fly out sightseeing, self drive international camping and bird watching.

It is noted that the Action Plan does not overtly mention cultural tourism with the visitor being guided through a natural/cultural landscape by traditional owners, a potential focus for the Mutee Head tourism product which has been successful in Kakadu and elsewhere in the Top End of the Northern Territory.

The Cape York Camping and National Park Tourism Framework (2009) focuses on unregulated camping and tourism infrastructure in national parks, and as such is not directly relevant to Mutee Head. However, the Framework does state that: "*There is a lack of 3-4 star quality accommodation on Cape York. Barriers to commercial investment in the region have led to the use of temporary, low quality accommodation facilities that are not reflective of visitor expectations."* The Framework discusses the issues of tenure and how they affect tour operators certainty and constrain development.

The Framework recognises six key visitor nodes, including the Northern Tourism Node, "*This region incorporates three key experiences on Cape York including Pajinka (the "Tip of Australia") and the NPA, the Overland Telegraph Line and the natural wonders of the Jardine River. This is a rugged, adventure destination that is rich in cultural history."* The Framework sets out priorities for development of camping facilities, and includes Mutee Head as a medium term priority (Pajinka and Somerset are listed as sites for priority action).

Whilst the focus of the Framework is on camping it does set out a range of accommodation and camping options, remote bush campsite, accessible non-commercial campsite, commercial campsite, safari camp and ecolodge.

The Tropical North Queensland Tourism Opportunity Plan (2010-2020) identifies a "Cape York Wilderness Experience" as one of eighteen catalyst projects*. "Cape York represents a unique opportunity for TNQ and Queensland to present itself to the world as having one of the last great wilderness adventure and cultural experiences – and tourism represents a valuable economic, social and environmental opportunity for the Cape York community."*

It is concluded that Mutee Head can meet the regional tourism planning context in the following ways:

- Providing 3-4 star level accommodation;
- Providing accommodation for self drive and tour groups in the Northern tourism node, with particular emphasis on the Jardine River.
- Potentially providing an ecotourism/cultural tourism product for fly in/ fly out tourism (meeting the sightseeing opportunity..and potentially also the fishing opportunity recognised by the Action Plan.

Coastal Planning Context

Louise Smyth, Manager, Coastal Planning, Environment Planning Branch with Department of Resource Management[22] has provided a synopsis of the constraints that lot 102 SP 120089 may face in relation to the coastal plan and specifically State Planning Policy 3/11: Coastal Protection. The topography of the site will be critical in whether the site can be developed..., for an eco tourism type development. This is due to the policy generally preventing new development in erosion prone areas.

"Erosion prone area (Part C, 2.3)

From my reading of the erosion prone area plans, the erosion prone area at the location will extend to incorporate land that is up to 0.8m above highest astronomical tide (HAT). I do not believe there is any relevant coastal building line for the location. However, I need to confirm these matters with Sel Sultmann and he is not back into the office until Monday. So I will reconfirm this with you next week. Note that in this part of Queensland, the coastal management district has been declared to equate with the erosion prone area.

I presume there is no existing development on the site. This means the policies under State planning policy 3/11 that otherwise allow for redevelopment of existing developed sites will not apply in your case.

[22] As it was called in early 2012, this has now been disaggregated into a number of Departments and ministerial portfolios.

The erosion prone area policies in the coastal plan generally prevent development within the erosion prone area. This is likely to affect all land that is below HAT plus 0.8 metres. It is true that development in the erosion prone area may occur for temporary, readily relocatable or able to be abandoned activities ((2.2.1) if it is not feasible to locate it outside the erosion prone area. Without further information about the proposed development, it is unclear whether the proposed development may meet this description. Refer to policy 2.3.2 (a) of State Planning Policy 1/03: Coastal Protection.

Any development within an erosion prone area needs to meet policy 2.3.8 that relates to maintaining vegetation on coastal landforms, sediment volumes in dunes, coastal processes etc.

Development in high and medium coastal hazard areas (Part C, 2.5)

Coastal hazard area mapping has not been completed for this part of the coast at this stage. However, the default coastal hazard areas to incorporate storm tide inundation extend to HAT + 2 metres. The high hazard area is any land that would be inundated by 1metre or more depth of water during a defined storm tide event. So, this would incorporate land up to HAT + 1.0 metres.

In your case, policy 2.5.5 would be relevant.

"2.5.5 Despite policies 2.5.1 to 2.5.4, development within a maritime development area, or for small to medium-scale tourist development, that is also in a coastal hazard area, may occur if:
a) built structures for accommodation purposes are located outside the high coastal hazard area; or
b) the development is consistent with a relevant adaptation strategy prepared under policy 1.6 of this SPP; or
c) a risk assessment (as outlined in the SPP guideline) demonstrates that adverse coastal hazard impacts that will affect the development (including its operation) are avoided
through location, design, construction and operating standards; or through existing coastal protection work."
Note that no adaptation strategy would have been prepared for the location yet.

Medium-scale tourist development means: development catering for short-term accommodation for tourist activity that contains no more than 300 persons and any associated ancillary facilities and is consistent with any applicable state planning regulatory provisions or regional plan.

Any development within a high or medium coastal hazard area needs to meet policy 2.5.7 that relates to maintaining dune crest heights, protective natural features such as mangroves, structural integrity to cope with flooding and protecting people and property from a defined storm tide event. Refer also to PO17 and A17.1-17.4 within the code that directly relates to this.

Nature Conservation Policies (Part C, 3.)

There are no known areas of high ecological significance mapped for the site. Development would need to minimise adverse impact on the areas of general ecological significance and other ecological values. There may also be additional requirements if threatened species are present on site.

Scenic Amenity (Part C, 4.)

Without further information, it is difficult to determine the extent to which the scenic amenity policies affect the development. The scenic amenity policies can generally be met by setting development back from the coastline and using vegetation to screen the view of built structures from the foreshore. The scenic amenity policies only apply to development that is located within 500 metres of the coastline. Note that we have a digital dataset that shows the coastline for Queensland if you require this.

Public Access (Part C, 5.)

The policies that require maintaining public access to and along the foreshore are not anticipated to prevent the proposed development.

Coastal Dependent Development (Part C, 6.)

I don't believe these policies are relevant to your enquiry.

Canals and artificial waterways (Part C, 7.)

I don't believe these policies are relevant to your enquiry.

Part D – Acceptable circumstances for not fully achieving the overall policy outcome.

I don't believe these policies are relevant to your enquiry."

Climate

The rainfall and temperature data for Bamaga is included at Table 11. Importantly the average minimum for all but four months exceeds 24⁰C and thus climate control is likely to be required for guest rooms and December to April comprise the wet season, although rainfall does occur during the "dry".

Table 11: Bamaga Climate[23]

Climate data for Bamaga, Queensland													
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Average high °C	30.8	30.4	30.4	30.3	29.8	29.2	28.6	28.8	30.0	30.9	31.8	31.8	29.9
Average low °C	25.2	24.9	25.0	25.2	24.7	23.9	22.9	22.8	23.6	24.8	25.6	25.7	24.7
Precipitation mm	356.9	497.2	353.5	244.0	67.9	16.8	8.9	5.2	2.7	9.3	46.4	196.8	1,805.6

Conclusion

Further investigation is recommended with Mutee Head being the preferred site from this analysis.

[23] http://en.wikipedia.org/wiki/Bamaga,_Queensland

Figure 1: Mutee Head

Figure 2: Mutee Head Tenure

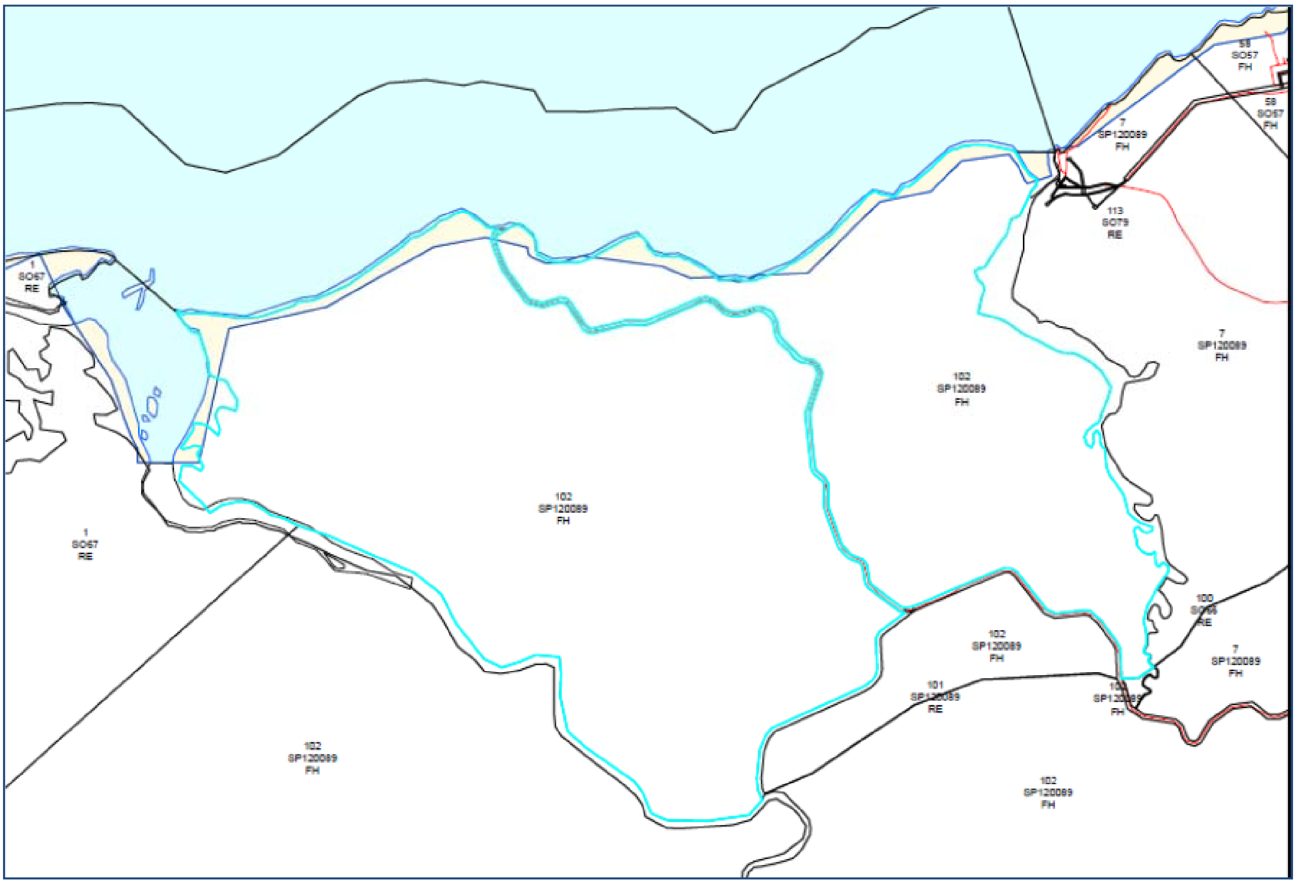


Figure 3: Mutee Head Google Earth Image

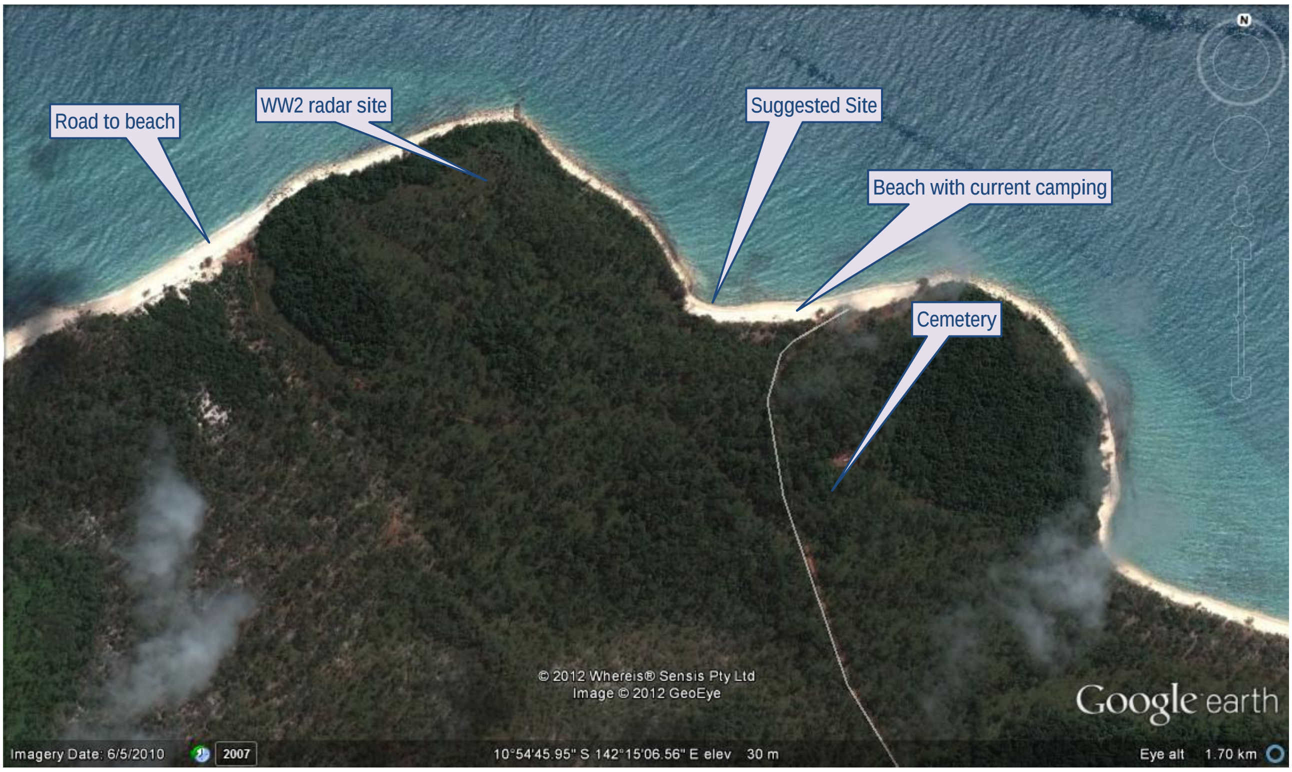
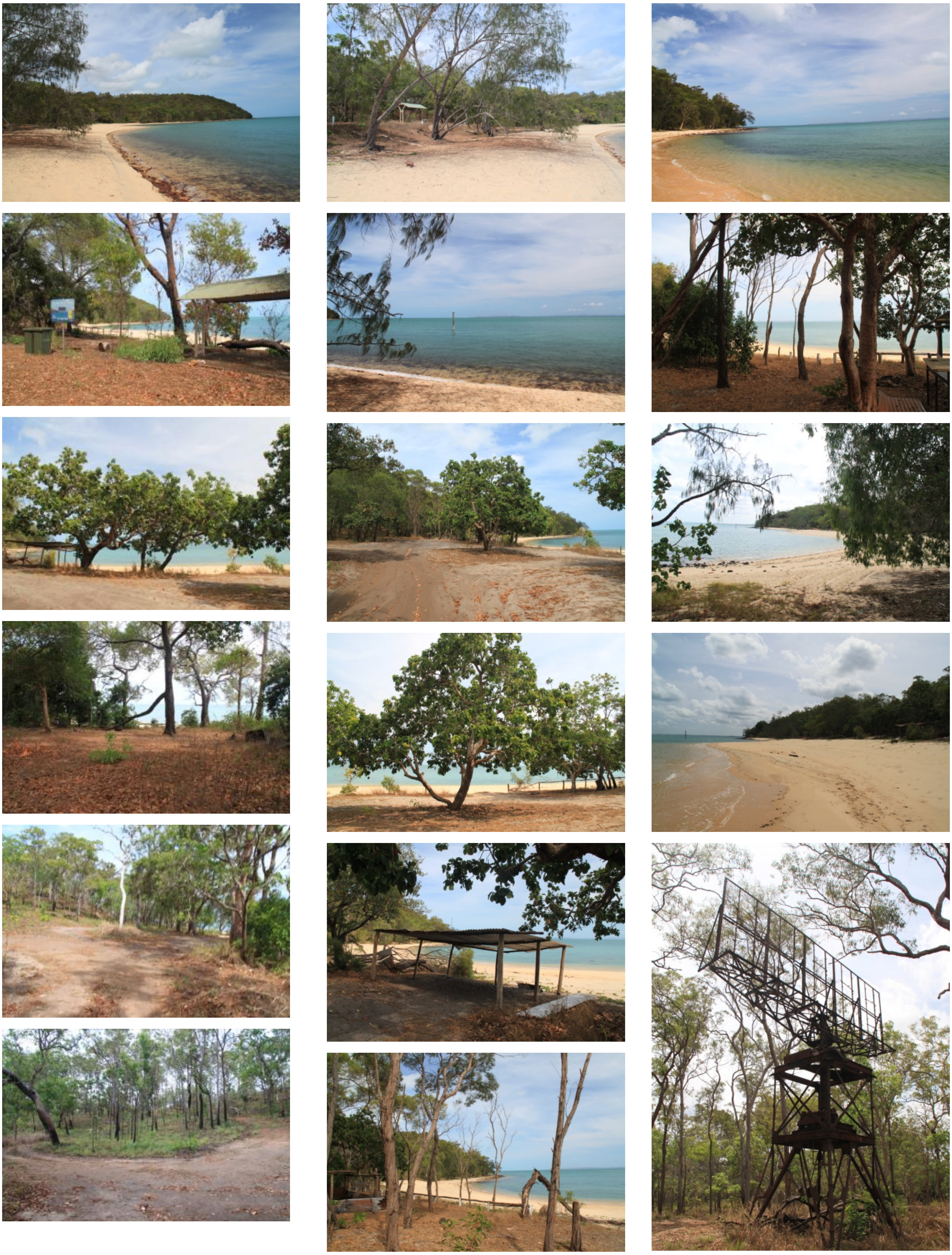


Figure 4: Mutee Head Picture Gallery



On site meeting with Traditional Owners, Rangers and Board members of Apudthama Land Trust March 2012.

Mutee Head – Feasibility

The Potential Tourism Product

The potential tourism product is an ecolodge style product which is established to meet a number of specific and distinct markets. The ecolodge could have a modest standard of hospitality, more than a campsite/bushcamp but not that of a luxury resort. The potential is for the focus of the ecolodge to be ecotourism and cultural immersion activities rather than leisure/recreation amenities.

Target Markets

The proposed Mutee Head Ecolodge could target the following markets:

- Self Drive (Cape York Adventure): This group may seek a night or two of relatively luxury as a respite from the 4WD camping trip up the Cape. The group would be somewhat attracted by the accommodation and food/beverage/amenities, although the key attraction for this group would be a tour or activity which is unique and adds to their Cape York experience (such as a guided crocodile spotlighting by boat on the Jardine River or offshore or fishing tour, etc.).

  Usual stay expected would be one or two nights.

  NOTE Given that there are numerous camping facilities in the Northern Peninsula Area, additional camping product is not proposed initially. The potential remains for a camping area to be developed into the future along the Beach to the west of Mutee Head should overall demand for a camping product for self drive visitors grow substantially (possible managed by NPARC or the Ranger Program or Land Trust).
- Safari Bus Group Tour: Tour companies may be attracted to a location with tour/activities products that offer good accommodation and services for their guests. Tour bus capacities vary, up to about 22 passengers. As such 10-15 double/twin rooms would be required to meet tour groups needs. One or two night stay is likely.
- Fly in Tourists: There is the potential to develop markets for various interests this could include bird watching, more general ecotourism/cultural tourism and sport fishing. None of these are mutually exclusive markets/activities, however specific marketing approaches and activity offerings would be required and as such some focus on one or two of these markets may be best initially. This market is likely to stay for 3-5+ nights

Cabin at Seisa.

Competitive Position

Northern Peninsula Area Tourism

Within the NPA there is a range of accommodation at present. An overview investigation of accommodation by EcoSustainAbility in 2011 found 68 beds at Punsand Bay, 31 at Loyalty Beach, 85 at Seisa and 90 at Bamaga. In terms of campsites, these are 450 campsite spaces in total for Mutee, Umagico, Bamaga, Loyalty, Nanthau, Somerset, Punsand Bay and at least another 400+ for Seisa.

With the closure of Pajinka there is no accommodation with an ecotourism/cultural tourism focus on in the Northern Peninsula Area. The two equivalent coastal camp/lodge style developments, Punsand Bay and Loyalty Beach have more of a fishing focus.

Anecdotally, accommodation in the NPA for tourism is in high demand in the peak season. There is further unmet demand as it is considered likely that many self drive tourists will use accommodation if it is available, whilst happy to camp when travelling up the Cape, some will enjoy a break with quality accommodation (particularly if the experience include unique activities they would otherwise not experience independently).

It is considered that an Ecolodge at Mutee Head will have a good competitive position within the NPA. It could offer an ecotourism and cultural experience which would give it a unique selling position when compared to existing accommodation offerings. It would appear that in peak season, there is unmet demand for lodge accommodation.

There is the potential for Pajinka to be re-developed at some point. It would appear that if this were to occur there would be some overlap in target market, few visitors would be expected to stay at both Mutee and Pajinka, but would select one. Pajinka has the Cape and nearby sites, and if boat trips are offered some islands and fishing, Mutee has a diverse coastal landscape and the Jardine. In essence it is considered that there would be some competition between the products, but they are sufficiently differentiated and potentially somewhat complementary.

Cape York Tourism

There is limited other accommodation for self drive tourists "doing the Cape", to the south is Bramwell (30 beds) and Moreton Telegraph Station (70 beds). There is a range of commercial accommodation at Weipa (although anecdotally, there is little available capacity with business and government demand from mining, defence and refugee/detention centre activity). Further south there is accommodation at Archer River (12 beds), Coen (56 beds) and Musgrave (28 beds) and Lotus Bird Lodge (Saltwater Creek, 8 rooms)

It is concluded that an Ecolodge at Mutee Head would complement existing accommodation to the south.

Tented hut at Punsand Bay.

Branding

The branding of Mutee Head ecolodge has the opportunity to promote the nature and cultural experiences and quality of accommodation. Mutee Head itself does not need to be a part of the lodge's name/brand. Nor does "ecolodge". It may be that there are other traditional names for the area which could be investigated and adopted. "Lodge" or "Ecolodge" is likely to be the best positioning statement in the brand as far as the style of accommodation (in preference to resort, motel, hotel, guesthouse etc.)

Cape York has very good awareness as a destination for Australia, which most likely evokes the 4WD style experience. Given Pajinka was at one time branded Cape York Wilderness Lodge and that Mutee is still 70km away from the actual "Tip", Cape York should not be included in the name. It may however be used as a tagline for the marketing to tour operators and self drives as the "gateway to Cape York" or similar.

An important part of the branding the experiences and activities should be presented. The emphasis on culture, the aboriginal tradition and the WW2/settlement history, the coastal landscape, Jardine River and local wetlands, vine forests, etc.

Mutee Head and beach.

Mutee Head - Resort Scope

Overall Tourism Scope

Average Stay

It is proposed that, the Mutee Head Ecolodge could offer two styles of experiences:

- A short stay accommodation facility for self drive cape York visitors (as a one night or two night stay as part of a longer 7 to ten day Cape York self drive trip). One or two keystone activity/tour experiences should be offered as the attraction to encourage stay.
- A longer term stay (3-5 nights) for fly-in visitors (but would require greater level of facilities and a wide variety of tour options to ensure visitor satisfaction for a longer stay).

Tour groups tend to be in the 12 -22 passenger range (plus driver). As such in the range of 12 rooms is required for twin/double share basis.

Accommodation

It is suggested that the Ecolodge have two types of accommodation:

- 12 cabins, which are convertible twin/double configuration with a modest size/amenity level ensuite and a small verandah.

  These cabins meet the market needs for tour operator guests and self drive visitors who are selecting a one or two night stay in lieu of camping.

- 8 lodges, which are larger and more luxuriously appointed with a larger verandah to suit a day bed and deck chairs/small side table, larger room with built in robe and larger ensuite (preferably a well appointed semi/outdoor experience. Depending upon further investigation of the market, a small spa may be fitted in the deck with views or in a screened outdoor area. These lodges meet the potential longer stay fly-in market and can be upsold to self drive passengers. The lodges are more suitable for a longer stay experience.

Activities

The focus of the Mutee Head ecolodge should be nature and cultural experiences. As far as possible these should be unique and quintessentially “Cape York” experiences.

Beach at Mutee Head looking west with current day use shelter at road terminus.

Ideally some key unique tour products and experiences should be integrated into the product. For instance a short night spotlighting tour on the Jardine and a short cultural activity (e.g. Elder campfire chat, short walk outlining bush skills/bush tucker/hunting skills experience) could be offered for all guests included in the tariff. Other ecotours would be additional cost.

An experienced Cape York tour operator has advised that it is essential to have easy departure for a Thursday Island Day trip from the lodge. This could be achieved through off beach access straight onto a Ferry or through a bus transfer to Seisa.

Local attractions for tours include:

- Cape York (2 hours each way, a day trip);
- Local rainforest and wetlands.
- Jardine River (crocodile spotting, bird watching, mangroves, rainforest, wetlands etc.).
- Biffin Swamp (wetland bird watching), also potentially other bird watching sites;
- Fishing tours (e.g. Albany/Possession);
- WW2 history with the Radar site;
- Thursday Island day tours (direct or via Seisia);

Figure 6 presents some of the potential tour products from Mutee Head.

Amenities

Other accommodation in the NPA is self contained. It is not proposed for the rooms to have cooking facilities, it is intended that guests use the food and beverage services of the ecolodge. To have self contained facilities minimises the "cultural immersion" activity aspects which are proposed to be integrated with the dining experience, further it may reduce the profit from each guest if revenue is restricted to room rate only.

The market for self contained is mostly business travellers, or longer term stays mostly centred around fishing. Given this there would be appear to be a niche for a lodge without self contained rooms.

Figure 5: Mutee Head Tour Opportunities

Mouth of the Jardine from the east bank.

Cultural Activities

The cultural immersion aspects of the Lodge should include a range of casual activities which present the culture. This can include:

- discussion of the WWII history at the Radar Bar during sunset drinks; a campfire setting with perhaps some stories/interpretation by a (guide) WWII soldier *("G'day, where's you folks from...I just joined from Timor to look after this Radar, just on smoko now, we gotta watch that green screen day and night..those bloody Japs, nothing happening here though, still, they could come at us from either side..we may be pushing them back at Kokoda and the yanks won the Coral Sea but there's no luck in Borneo, they say the boys there are done for....my brother in Darwin wrote that the bombing there was much worse than the newsreels showed...")*;
- campfire chats about the history of aboriginal communities settlement etc. in the NPA/ Torres Strait area, campfire chats about the traditional culture, some legends etc;
- short walks on the beach and in the vine thicket about bush tucker, hunting techniques, bush medicine and handicraft making;
- if there is a dance troupe a traditional dance/culture evening presentation can be arranged for groups or on special nights.

Guest Experiences

It is suggested that the resort offer a range of potential guest experiences.

Tour Group One Night

For tour group staying one night, the attraction for the tour operator is good accommodation with a keystone activity. If northbound, the tour will then move toward the Tip the next day and most likely stay at another NPA accommodation the next night (or vice versa is southbound).

Upon afternoon arrival, guests are shown rooms (if mid afternoon guest use lounge/deck pool in free time) and invited to a sunset drinks at the Radar Bar. Guest walk to the Radar Bar and offered a complimentary punch "Jungle Juice", they are then met by a WWII soldier who outlines the WWII history of the site and/or a local (Aboriginal or islander) guide who talks about the settlement of Mutee Head in the 1950's and the subsequent establishment of Bamaga New Mapoon etc. The sunset drinks relax into casual group conservations...having had a taste of an interpretive experience.

Now dark, guests are taken back to the Lodge by the guide/bar staff.

Guests are served a set menu meal in the dining room/deck.

A crocodile spotlighting tour is offered at 8:30pm for an 11pm return. This can be included in the tariff or offered at an additional cost (depending upon arrangements with the tour operators). The tour drives to the boat landing at the mouth of the Jardine and then proceeds around the estuary with an interpretive commentary focusing on the wildlife and local ecosystems.

Guests overnight and depart on their tour the next morning.

The Jardine River offers a unique, cape York experience, to see the river, the lower estuary and nearby wetlands, crocodile spotlighting may become a quintessential tour product.

River trip from water pump station to river mouth supported by John Chalmers (CYSF Board Member and Tour operator).

Tour Group Two Nights

The initial arrival and first evening/night are similar to the above. On the second day the tour group may be offered a Ferry trip to Thursday island and/or taken to Cape York/Lockerbie and Somerset.

An additional option for individuals can be a fishing charter/ or Crab Island instead of the Cape or Thursday Island trips. A sunrise bird watching trip can be offered to guests.

Self Drive One Night

Upon afternoon arrival, guests are shown rooms (if mid afternoon guests may use lounge/deck pool in free time) and invited to a sunset drinks at the Radar Bar. Guests walk to the Radar Bar and offered a complimentary punch "Jungle Juice", they are then met by a WWII soldier who outlines the WWII history of the site and/or a local (Aboriginal or islander) guide who talks about the settlement of Mutee Head in the 1950's and the subsequent establishment of Bamaga New Mapoon etc. The sunset drinks relax into casual group conversations...having had a taste of an interpretive experience.

Now dark, guests are taken back to the Lodge by the guide/bar staff.

Guests are served a set menu meal in the dining room/deck.

A crocodile spotlighting tour is offered at 8:30pm for an 11pm return. It is suggested that the room rate is offered with the first night croc spotlighting tour always offered "complimentary". The guide takes guests in the lodge's 4WD to the boat landing at the mouth of the Jardine and then proceeds around the estuary with an interpretive commentary focusing on the wildlife and local ecosystems.

Guests overnight and depart on their way the next morning.

Self Drive Multi Nights

The initial arrival and first evening/night are similar to the above. On the first evening, a guide joins the group and goes through the tour options for the next few days. These may be those provided by the resort or other local tour operators. The Ecolodge will have a commission basis established with local tour operators such that there is an incentive for the resort to sell a wide variety of tours. As an example, they can be offered a Ferry trip to Thursday Island and/or taken to Cape York/Lockerbie and Somerset, a fishing charter, a Crab Island day trip or an expedition b y boat down the Jardine River. The guide should go through the commercial trip options, but also be helpful in allowing the self drive guests to develop their own self drive days (e.g. the Cape "Tip" day trip).

Beach in front of proposed Lodges, rocks exposed in March 2012, but were covered in late 2011.

Fly In – Multi Day

These trips will be booked by the resort directly or by an agent. Where possible particular interests need to be determined, these are likely to be bird watching, fishing, culture and/or wildlife. The arrival day/afternoon can be as described above with the first evening similar to above with a guide setting out the various activities and tours. In addition to the at cost half and full day tours offered. The Ecolodge should offer complimentary low key guided interpretive experiences daily..such as the croc tour, a morning bird watching tour a morning/afternoon bush tucker/medicine/skills walk etc.

Hospitality

In order to differentiate from other products in the NPA area, the hospitality should be "quality comfort". Service standards should be good with a high staff to guest ratio.

The level of hospitality is luxury bush resort with the essential points being: lodges/cabins fitted with ensuite with hot water showers, overhead fans, air conditioning, quality/ unique style furniture with quality soft furnishings;

Food should be of a high standard with quality food (cooked/buffet breakfast, 2 course lunch with two-three course dinner). Meals can be set menu (whilst catering for differing diets) and should be based on Australia cuisine using fresh produce as far as possible. If at all possible use of local wild caught seafood and Cape York beef should be encouraged.

Dining options should include some communal dining (baronial tables) some private dining, with perhaps the "honeymoon" option of a pre-ordered *ala carte* service served on the Beach or at the Radar Bar.

Trained guides should have the opportunity to interact with guests informally (i.e. eat with groups etc.) as well as provide a formal interpretation program (i.e. slide shows, guided walks etc.).

The feeling upon entering into the Lodge should be one of being hosted, all about the experience of the nature and culture, with the rooms/amenities to support the experiences, not the focus.

Track on ridge behind proposed cabins and central facilities.

Resort Area

Figure 7 depicts a potential lease area for the resort. Importantly, the lease area should not just cover the footprint of the ecolodge but also adequate lands surrounding it to provide security and for a fire break and fire management of the lands near the lodge.

Figure 6: Suggested Lease Area

Lodge Layout

Figure 8 below, sets out a preliminary layout for the site. Key aspects are:

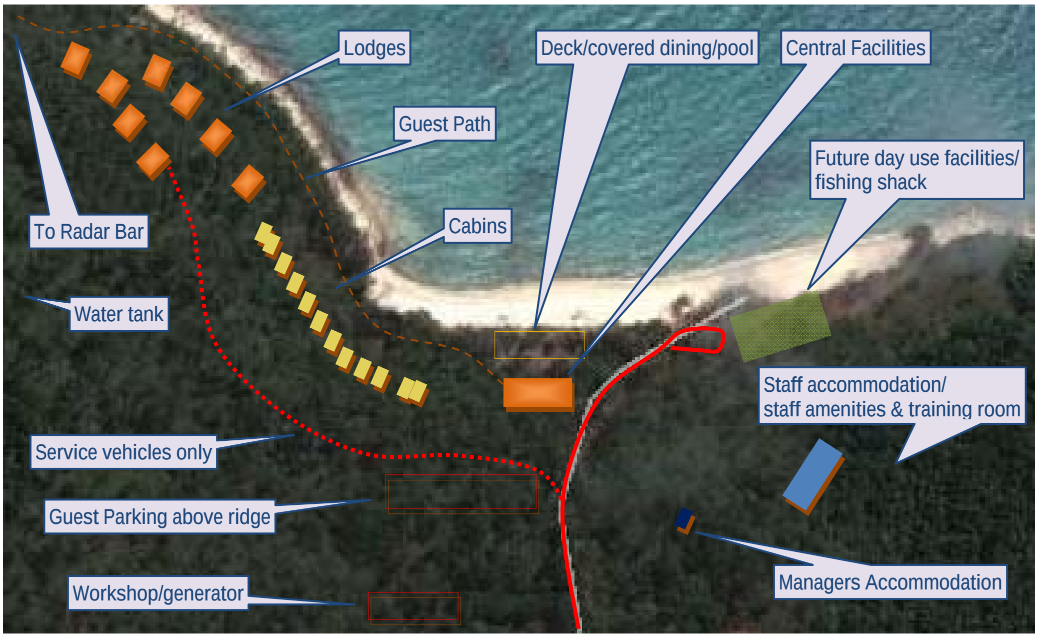
- Accommodation and facilities are to the west of the access road.
- A day use area is provided on the beach to the east of the access road.
- Staff accommodation includes an amenities/training space and is located back from the guest areas.
- Workshop should be behind the beach ridge and ensure any generator noise is muffled and away from guest areas.
- All major buildings are behind the 1m above HAT (highest astronomical tide) contour and with a design floor level of 1.5m above HAT (further consideration of coastal planning law will be required to confirm level). A verandah, pool, patio with shade sails covering is suggested on the presently cleared area between the beach and central facilities.
- Denser (cabin style) accommodation is close up to the resort central facilities. The cabins can be relatively closely spaced, perhaps dense vegetation planting to preserve some privacy. A few cabins should be common wall with an adjoin door to allow for families and a two bedroom unit option.
- Lodges could be more spaced and laid out to preserve privacy. With the lodges needing to be above 1.5m above HAT, it is suggested to placed them on the toe of the hillside, with the verandah 2m above ground level, this means folk walking along the beach side path will not see straight into rooms. A low pitched roof will ensure the roofline remains below the tree line.

Base of slope at western end of proposed cabins, lodge proposed to west of this point main area of cabins in existing clearing, rest nestled between existing larger trees.

- Guest vehicle parking should be behind the lodge area behind the ridge, With a path down the ridge to the central facilities.
- A day use area can be accommodated to the east of the present road terminus. This is not critical to the resort, although it may provide a focus for independent travellers to visit Mutee Head lodge and use facilities. This area could be a good location for a "fishing shack" activities hut.

NOTE: One option for consideration during design is to space all accommodation units out well and have the cabin a smaller footprint but upgradeable to lodges... this would allow future flexibility to steadily upgrade cabins to lodges if the market proves to support the higher end.

Figure 7: Indicative Site Layout



Proposed Lodge

Key attributes of the Lodge are:

- A central facilities building including reception, restaurant, bar, lounge, and kitchen and office of 300-430m^2 (plus 200-270 m^2 decking/outdoor lounge dining areas and a small pool);
- A "Radar Bar" located atop Mutee Head with a westerly outlook, styled as a WWII camp (timber ridge pole, tented roof, circa WWII army boxes as tables, canvas deck chairs, lots of khaki!). Operated without facilities based on a simple drink selection from an esky brought to site daily.
- 12 cabins (30-40 m^2) each with ensuite, bar fridge, fan, air conditioning lighting, bedding king/spilt to allow double or twin configuration.
- 8 premium lodges (55-70 m^2) with ensuite, bar fridge, fan, lighting, outdoor shower in screened area behind lodge (and perhaps plunge pools), bedding king/spilt to allow double or twin configuration;

Shoreline in front of proposed lodges.

- staff accommodation for 10-15 (using prefabricated/portable buildings), and including an amenities/training room;
- access Road and car park (removed from guest cabins;
- internal paths and landscaping; and
- power, water, sewerage and communications services.

Design

The lodges and cabins could be tropical with a bush influence incorporating a casual feel with luxurious amenities.

Cabins can be prefabricated/simple buildings or even solid floor/door tent style (although need to be able to air-conditioned). A design challenge is to allow adequate natural ventilation to avoid reliance on air-conditioning, but then be able to seal to space for when air conditioning is needed.

Lodges, should be larger and bit higher quality finish than the cabins. They could use materials such as rough sawn timber, unbraced plywood panel walls, screened timber louvers, mini-orb corrugated iron, canvas and stone. They should have a point of interest in their perspectives… "WOW" factor. Lodges could have cross-ventilation and natural cooling principals (but will also need to be sealed and allow for air-conditioning at times).

Overall the design theme for the building could be bush/WWII focus with the interior design and artwork celebrating the local Aboriginal and Torres Strait Islander culture with many artefacts etc.

Figures 9 and 10 show some indicative ideas for the lodges and cabins. Figure 9 includes some example of products no longer on the market ("Aussie Outback Lodges"), however the manufacturer "Valley Kit Homes" is still thriving and could provide similar products.

It is expected that flat pack style prefabricated kits will be the most cost effective method of building the cabins and lodges. Many companies can advise on efficiencies relating to building material sheet sizes and use of standard fixtures and fittings. Whilst it may not be necessary to just pick an off-the shelf design from a manufacturer, developing the design involving a flat pack/ kit manufacturer will enable construction efficiencies to be embedded within the design.

Cleared area where central facilities is proposed (against hill to left of picture, flat land for proposed outdoor dining/pool etc.

It is most likely that the cabins can be sourced from a standard design with the Lodges having an architectural input to modify or adapt an existing design.

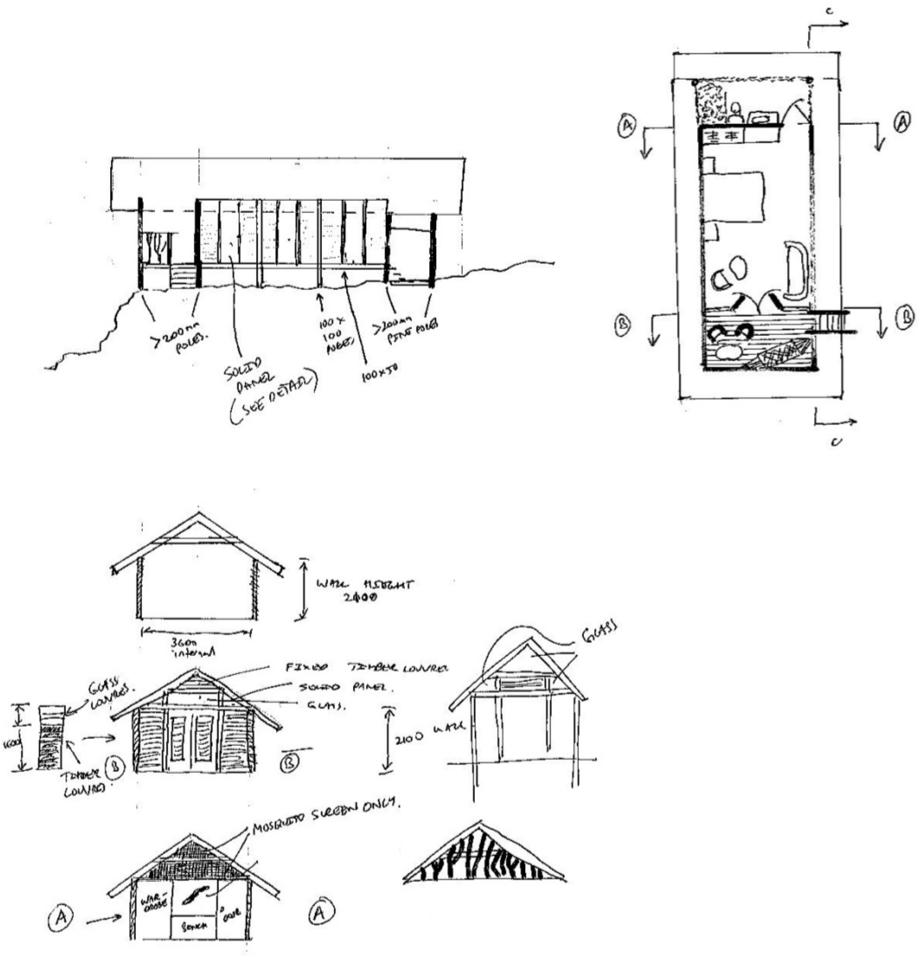
The central facilities building can be site-specific design. The building should face the beach/bay and have high ceilings lots of overhead fans and relatively seamless movement from main room to veranda to covered patio. The floor of the main facilities will be at 1.5-2.0m above HAT and therefore there can be wide stairway to drop down to the patio area such that from the central facilities level there is a view over the patio (and its roofs/shade sails).

View to point (where lodges are proposed) from patio area on shore near proposed central a facilities.

The central facilities building will not be air-conditioned. However a small lounge/library should be provided which is air-conditioned, to offer guests a cool retreat!

Figure 8: Examples of Potential Cabin Designs

Figure 9: Concept Sketches for Lodges



Beach near proposed fishing shack.

Figure 10: Example Pricing and Options for Prefabricated Cabins

BACKYARD cabins

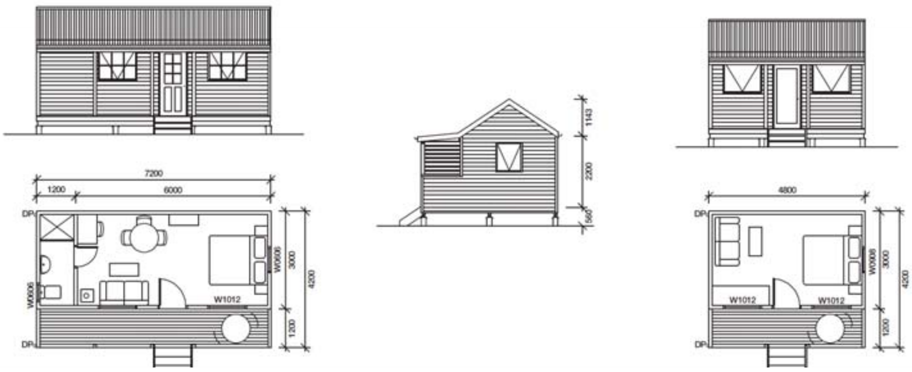
Price List - Cabin Series

Classic Beach & Country Style 2010/11 (All prices are in Australian Dollars and include GST)

Size (metres)		Price (AUD)				Options		
Width	Depth	Kit*	or	Erected*	Windows	interior lining for kits architraves & skirtings	interior lining, installed, architraves & skirtings	Guttering, downpipes for kits
Cabins								
3.6m	3.6m	$8,900		$13,789	1	$990	$2,290	$463
4.2m	3.6m	$10,497		$15,747	1	$1,110	$2,442	$497
4.8m	3.6m	$11,332		$17,316	2	$1,175	$2,584	$540
5.4m	3.6m	$13,125		$19,684	2	$1,237	$2,723	$576
4.2m	4.2m	$13,137		$19,684	2	$1,237	$2,723	$629
4.8m	4.2m	$13,900		$19,900	3	$1,302	$2,863	$540
5.4m	4.2m	$15,745		$23,620	3	$1,366	$3,003	$576
6.0m	4.2m	$16,937		$25,586	3	$1,434	$3,154	$609
7.2m	4.2m	$19,913		$29,900	4	$1,928	$4,242	$679

Note:
* Erected price supplied and built is to lockup stage and includes ceiling lining & insulation, and steps up to 3 treads.
* Kit - Materials supplied - ready to assemble to lockup stage and includes ceiling lining & insulation, and steps up to 3 treads.
* Country Style, erected or in kit, additional 5% to list price
* Overall sizes include 1.2m verandah
* All prices are for Sydney Metropolitan area. Other areas POA

Additional Options	
Bathroom Fitout (To include Tiling, Taps and PC Items)	Approx $11,550
Lights	$174 each
Powerpoints	$174 each



The graves are important cultural heritage, no development is proposed in this area.

Mutee Head - Infrastructure Scope

Ecoefficiency

It is proposed that the lodge use best practice ecoefficiency to reduce both capital costs and ongoing operational costs. Further analysis of initiatives is required during design, however, potential initiatives which could be considered are set out below.

Areas for Investigation

It is suggested that the following areas be considered:

Energy Demand

- Reliability of Service
- Design parameters
- Lighting
- Pumping
- Hot Water
- Refrigeration
- Air Conditioning
- Fans
- Office
- Cooking
- Laundry
- Guest Cabins/Lodges
- Central facilities
- Staff
- Workshop Area

Energy Supply

- Fuel(s) supply logistics, storage and reliability
- Peak Generation
- Demand or Load Management
- Base load
- Generation Options
- Benchmarking
- Monitoring and control
- Heat Recovery
- Noise
- Renewable Options
- Cost benefit (Optional)

Water Demand

- Design Parameters
- Central facilities
- Back of House
- Front of House
- Guest Facilities
- Staff
- Landscaping
- Fire

Current access road to Mutee Head, well constructed and 6m wide gravel.

Water Supply

- Supply, Storage
- Treatment
- Pumping
- Reticulation
- Wastewater
- Overall requirements

Wastewater

- Options
- Sewage treatment requirements
- Key design priorities
- Effluent disposal
- Disinfection
- Recommended approach

Solid Waste

- Building design aspects
- Onsite disposal options
- Recycling

Ecoefficiency Concept

It is suggested that an ecoefficiency concept be developed concurrent with detailed engineering and design, which addresses:

1. Review of existing design/master plan relative to energy, water, and waste components.
2. Market, guest profile, service, and staffing descriptions and their relation to energy, water, and waste elements.
3. Analysis of options and opportunities for ecoefficiency in energy, water, and waste areas given the resort site's tropical and remote environment.
4. Types of technology and design options that will fit the resort's site, guest profile, and staffing elements and give ecoefficiency advantages.
5. Analysis of advantages and disadvantages of various sustainable technologies and equipment in the relevant energy, water, and waste areas and their fit with the resort's tropical and remote environment with referrals of proven installed systems.
6. Cost/benefit analyses (qualitative, quantitative optional) of sustainable technologies and equipment that look like a good fit with the resort's tropical and remote environment.
7. General strategies that can be incorporated in the resort design to increase ecoefficiency in the areas of energy, water, and waste.

Table 12 outlines some key approaches to ecoefficiency.

View from day use area. Terminus of current road.

Energy

Air Conditioning Decision

The key design driver for energy demand/supply is the use of air-conditioning for guest cabins, staff accommodation and other key spaces, this results in relatively high energy use and precludes reliance on renewable energy as a cost effective option.

Given the hot climate air conditioning of rooms is considered essential. There is likely to be a reluctance by potential guests to pay the desired price for the ecolodge rooms if air-conditioning is not offered.

Electricity Source

There is a power line from Bamaga to the water supply pumping station on the Jardine some ten or so kilometres away. It may be possible to bring reticulated power from this power line to Mutee Head. This is likely to only be feasible if there is more than adequate capacity in the Ergon power line. Further, there will be additional development approvals required for the construction of the power line.

This option should be fully investigated. However the discussion below is based on a “worst case” basis of diesel (or LPG gas) generation with three phase reticulation (phases will need to be balanced).

Table 12: Ecoefficiency Aspects

Aspect	Recommendation	Budget Comments
Lighting	Avoid over lighting (320Lux max). Use low wattage LED lights, Use movement detector lighting control in outdoor/security areas.	Energy efficient lighting generally has a payback period of less than twelve months.
Pumping	Use super efficient pump motors, pressure transducers variable speed drives and off peak duty cycles.	Up to 33% energy saving.
Hot Water	Use heat recovery from diesel/gas generators with a ring main, otherwise use solar hot water for guest cabins and staff, heat pump for central facilities and possibly instant gas boiling for kitchen.	Significant energy savings.
Refrigeration	Use specially designed, cold room with excess insulation, located in a shaded and ventilated location. Use efficient compressors, condensers and intelligent control.	Significant energy savings.
Air Conditioning	Use movement controllers with multihead, inverter type air-conditioning. Consider cabin design to allow natural ventilation and light to minimise lighting & AC use, but ensure cabin can be sealed for efficient air conditioning.	AC will be 20% or so of daily energy use. Efficient AC units save up to %30%, movement detection can have less than 18 month payback periods.
Other	Use electronic fan control, energy efficient computers and office machines, LCD displays and cook with gas. Consider in room energy metering.	
Power Generation	Use three (LPG Gas?) generators, of equal size (same model) with synchronising capability, load sharing and demand scheduling With one generator used for low load, two for peak and the third for standby. More work is required but load likely to be 85-125 kVA generators. Use heat recovery and provide good acoustic insulation at power plant.	Fuel cost about 70% of peak load sized twin generation system, (over $100,000 potential fuel saving) payback likely within one to two years.
Battery Hybrid	Some opportunity to use battery store for UPS or times of low load. The potentially high baseload with AC etc. makes this less viable.	Additional capital cost, however can payback in terms of increased data security (UPS) and reduced fuel use.
Wind Energy	Consider installing a wind generator if sufficient wind (needs assessment). *NOTE: Wind is unlikely to produce adequate power to ;provide a cost effective payback.*	Will be additional capital cost and could payback in 10+ years.
Solar (PV)	Potential to use for charging UPS. PV not cost effective for baseload supply.	
Water Demand	Use water efficient taps, showers, waterless urinals, flush toilets with treated effluent, small sinks, use native species in landscaping.	Cascading cumulative savings as smaller pumps, smaller capacity water treatment, smaller hot water units and smaller storage reservoirs are required.
Water Supply	Use groundwater augmented by rainwater, with common reservoirs. Desalination may be required?	
Wastewater	Use Aerobic Sand Filter with effluent disinfection and irrigate effluent in landscaped areas. Use effluent for toilet flushing. 75 EP likely to be adequate size.	Significant capital and operational savings compared with other package treatment systems. ASF Budget $50,000 – $70,000
Solid Waste	Implement waste minimisation measures and consider organic waste composting. Worm farm composting may prove adequate if sufficient management resources can be applied (and loads kept constant).	Worm farm $6,000,
Ventilation and Light in Design	Consider increasing natural ventilation and lighting in central facility and guest cabins, yet ensure areas to be air conditioned can be sealed..	
Materials	Consider using Easiboard for internal partitioning, and Ecoply as sustainable plywood. .	
Pumping	Use super efficient pump motors, pressure transducers and variable speed drives.	

Mouth of Jardine River.

Design Parameters

At the present level of concept some important power needs have not been precisely determined, therefore quantitative load calculations have not been developed.

- Main Building
- Kitchen: freezers (2-5 amps), ice maker (3 amps), cool room (outside dimensions?) (2-10 amps), microwave 3.75 amp, exhaust fan (4 amp), under bench cooler 3.5 amps, industrial mixer.
- Bar 3 lights, 3 fans, small freezer, 2 wall fans, blender, stereo, (cappuccino machine?)
- Kitchen/reception/Office retail/ toilets/restaurant/lounge 20+ GPO, 3 exhaust fans, 8 ceiling fans, 22 wall lights, 12 pendant feature lights, 20 or so wall lights, 20 recessed deck lights, 20 boardwalk recessed deck lights, cash till EFTPOS?
- Cabins: 2 wall lights, 1 pendant feature light, 14 down lights, 2 ceiling fans, 8 GP outlets (games, shavers, etc.), 2 exhaust fans bar fridge (?), air con.
- Staff Quarters: fans, lights, GPO outlets (radio, kettle etc.).
- Laundry: 2 lights, 2 washing machines (1/2 HP), iron.
- Generator: shed lights.
- Workshop: lights, outlets 15 amp.
- Water pumping: bore to storage (2 main pumps 3 phase 2.1 Amp (15 Amp start).
- Water treatment and or desalinator
- Pools.

Seisa is currently the centre of Fishing charter and Ferry operations.

Estimate of Load

Below is a very preliminary (and probably not comprehensive) estimate of power consumption requirements. This has been undertaken on a typical set out, as a worst case.

NOTE: With good ecoefficiency and modest approach to the fit out and appliances needed substantial reductions may be able to be made in peak and baseload requirements. Consideration of the peak demand in design can and embodying strategies for load sharing during the 24 hour day can also reduce peak demand and hence minimise generator requirements.

Note: that this is based on a proportion of the energy efficiency measures, proposed in this report, being implemented. If the full suite of potential energy saving measures are used and there is baseload may be able to be reduced to around 100 kVA or less.

On the basis of the above, and purely for the purposes of this report it is assumed that with demand management, overnight baseload can be managed to be within 100 kVA, and maximum load 150-200kVA.

We strongly suggest that a more detailed power demand be developed and some load management be implemented to reduce the peak load.

Whilst energy efficient lamps are available for most fittings, there is now a range of attractive light fittings that are designed to take compacts fluorescent lamps.

Maximising Energy Efficiency

Lighting

- Specify lights to only provide 320 lux, avoid overlighting.
- All lights should use the latest LED technology.
- Where down lights are specified, use LED instead of electronically ballasted IRC halogen down lights.
- Avoid flood lighting large outdoor areas, however where this is required, use LED compact floodlights rather than high pressure mercury rather, quartz halogen or tungsten halogen spot and flood lights.
- Lighting control:
    - Where possible, lighting should be on movement detectors, particularly for outdoor areas, hallways, the workshop and toilets.
    - Alternatively time based controls allow more precise control for areas with regular lighting requirements.
    - In outdoor areas where overnight lighting is used, install daylight control.
    - Ensure only a minimum of essential lighting is on during the early hours of the morning.
    - Ensure that hallways, offices, stores etc do not have their lights on all day if not required and are off whenever not needed.
- Paint walls ceilings, and floors in light colours for better light reflection, for the main building roof, use a light coloured (e.g. pine/ “ecoply”) plywood.
- Use gloss if ceilings are clear finish over natural timbers, consider use of white reflective surfaces (is some ceiling panels and walls with timber feature trim to enhance reflectivity.

Jardine estuary, eastern bank looking upstream.

- Consider using self contained solar powered lights for paths (away from reticulated power, these work for about 8 hours per night… so will be illuminated till at least 2 AM). The main saving is the ability to locate without reticulation, however reliability is an issue and their life expectancy is only 3 years or so. Otherwise use bollard lights along pathways which use LED.
- Consider movement detector switching for pathway lights and external lighting.
- Consider using skylights in the back of house areas, kitchen, dry store, liquor store, toilets, laundry, reception, manager's office and the bar, etc. The use of angular selective sky lighting reduces the heat input from the skylight, with the best type being the sky tube (although this relies on a space between the roof and ceiling).
- The reduction of lighting loads during the day is important as this reduces peak demand (when refrigeration units will be operating).

Pumping

Pumps will be required for the bore, possibly main potable water pressure reticulation, the sewage treatment (primary to sand filter), effluent irrigation and any pool filtration. There may also be other pumping requirements for diesel handling.

- If available, use efficient motors instead of normal motors on pumps and compressors.
- The most energy efficient method is to utilise a pressure transducer and a variable speed drive instead of the traditional pressure switch control system (such as the packaged Grundfos water pressure/pumping systems). This could reduce energy usage significantly, by up to one third.
- As far as possible off peak use of pumps (pool filter, bore, effluent irrigation etc.) should be implemented. The bore/well pump, any water treatment system, and sewage treatment should be set up with timers so that they operate at times when other large induction loads are not running, the late evening/early morning when the refrigeration and lighting loads are minimal.

Hot Water

Hot water will be supplied to the kitchen (staff, laundry?) and to each guest room.

Solar hot water is one option for heating water for guest cabins.

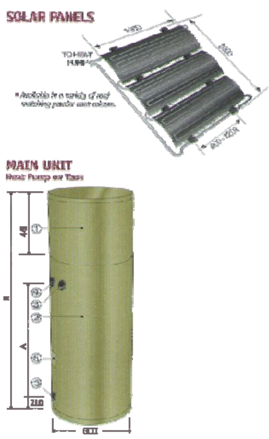
It is not unusual for hot water to form up to 30% of energy consumption, particularly when heating or air-conditioning are not used.

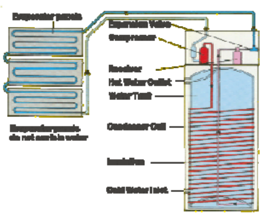
- There are three main options suggested for hot water:
  - a mix of solar in guest cabins with solar, gas or heat pump, for the kitchen;
  - use heat recovery from diesel generators and reticulate hot water throughout the lodge; or
  - use heat recovery just for the kitchen/ staff laundry and use solar for each cabin.
- Given that generators are most likely to be running constantly, and that about one third of the energy from diesel in a generator is lost as heat to the water jacket and another third is lost as heat on the exhaust, it is suggested that recovering this for hot water is the most effective option.
- It is recommended that heat is recovered through heat exchangers fitted to the water jacket and exhaust flue on each generator. Hot water could be reticulated using a pressurised, circulating ring main of around 30-50mm and include at least the laundry and main building with all guest cabins possibly included.
- It is expected that the demands for hot water will be modest and that the capacity of the heat recovery will be sufficient, if not an instant gas booster can be added to the heat recovery for those instances when hot water demand exceeds the capacity of the heat recovery system (given the tropical location, this is unlikely to occur).

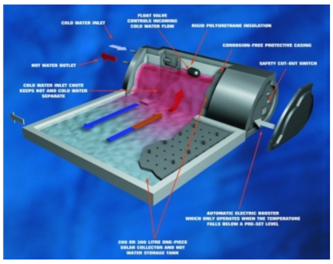
  At the time of construction, adding a ring main for hot water circulation is unlikely to pose a significant cost. The cost of the heat recovery equipment and reticulation system will increase capital costs, however it is expected that this will be favourable compared with 25 or so separate solar hot water collectors. Noting of course, that other than a recirculation pump, there is no ongoing energy cost for this system.
- Should a heat recovery/ ring main system not prove viable the use of solar hot water units and heat pump or gas units for the kitchen and staff laundry is recommended as the most ecoefficient. 120-200 litre solar hot water units should be viable for each cabin.

The heat pump is the most efficient for water heating, where demand exceeds the capacity of solar.

Heat pumps can have solar augmentation.







The are many available solar hot water heaters, one example is the Solartech Genius which is a low pressure unit, making it ideal for remote sites with low pressure supply.

- Where larger use is required (e.g. for the kitchen), the demand on solar systems often proves to exceed solar capacity and the electric booster operates… in these cases the use of a heat pump or instant gas is suggested. Heat pumps use the refrigeration system in reverse and use far less than the power required for gas or electric hot water (and less than electric boosted solar hot water when the booster operates frequently).

  Heat pump water heaters are more efficient than direct electric immersion element based water heaters. Heat pumps have been tested to have an efficiency of 230% compared to 100% for direct electric systems.

- Flow restrictors should be fitted to the showers and taps in the cabin, kitchen and other uses. This will significantly reduce the hot water usage in the resort and will also produce savings in both the water pumping and water treatment plants from the reduced water volumes.

- A major use of electricity and/or gas in the kitchen is often for boiling water, the use of a gas instant boiling water unit can significantly reduce this energy cost. It's payback period is likely to be in the order of a few years, however it is more convenient and over the long term it will save on constantly using electric jugs or kettles on gas stoves.

The Inncom e4 or similar controllers can be used for smart digital control of lighting, fans and air-conditioning in guest rooms.

Refrigeration

Refrigeration will be a major user of electricity, this should be a prime area of focus.

- It is strongly suggested that a specifically designed cold room system consisting of compartmentalised (if required) freezer and compartmentalised cold room be used rather than the numerous freezers and cold room combinations often used.
- The cold room should be located in a well ventilated and shaded place. Specify more than usual insulation, at least 300mm is recommended.
- For any stand-alone refrigeration, rack mounted compressors with digital (electronic) TX valve, pressure and temperature controlled evaporators can offer major savings.
- Ensure any under bench bar fridges, mini bar fridges etc. are installed with more than adequate ventilation around the unit, and for external compressors etc. ensure they are in well ventilated and shaded areas.
- Regular inspection and replacement of refrigeration seals will reduce compressor and defrost cycling run time.
- An ice machine is often a major user of power, if it is essential, it's compressor system should be integrated and rack mounted with the cold room etc, an energy efficient ice machine will cost about $3000 and use about 1550 kWh per year.
- Specify 5 star rated fridges. An efficient mini bar fridge will use about 240+ kWh per year, and cost at least $300. It is important to ensure that any surrounding cabinet has adequate ventilation around the fridge, and avoid placing it against a west facing wall or in the sun. Many high quality resorts avoid the need for mini bar fridges by the provision of ice into well insulated ice bucket twice daily. It is suggested that mini bar fridges are not provided into the cabins at Mutee Head, and strategies such as ice provision could be used to avoid needing mini-bars in the Lodges.

Air Conditioning

- Air-conditioning each guest cabin will use between 15-20% of daily kWh and be a major user of electricity, In order to reduce the demand, we suggest a movement detector control system with door switch(es) to ensure the unit does not operate when the room is not actually occupied by guests and/or the doors are open.
- Install a movement-controlled air conditioner in the office and library/guest lounge to ensure that the air conditioner is off when no person is utilising these spaces office area, savings of up to 50% may be achievable.

The use of natural light minimises lighting loads when other loads, fans, refrigeration etc are at their maximum, thus reduces overall peak demand.

NOTE: this example is in closed canopy rainforest, Mutee Head would need more diffused light from a peak skylight which could also allow ventilation.

Use a three phase multi-head, inverter type air conditioner to reduce the expected energy usage by up to 30%.

- In all areas to be air conditioned, use movement controlled split system air conditioners. Whilst some package split systems, do have a movement detector in built this generally only changes the temperature range settings, an independent digital controller with infrared door switch(es) and a movement detector will significantly reduce power consumption and still achieve guest comfort.
- Any spaces which will or may be air conditioned need to have window/louvre designs that provide a sealed space without compromising views and natural light.

Suggested Air Conditioning Control Solutions

EcoSustainAbility has searched the market for cost effective control of Air Conditioning systems to reduce energy consumption whilst maintaining comfort levels.

- We suggest smart movement /door control of air conditioning wherever it is used.
- The current design of guest cabins has good natural ventilation, including roof line ventilation and a turbine ventilator. It is important that all this ventilation can be easily (better still automatically) closed by guests when they activate room air conditioning.

Fans

- Ensure fan control units electronically regulate fan speed, the traditional fan control boxes waste electricity as heat for low fan speeds.

Office

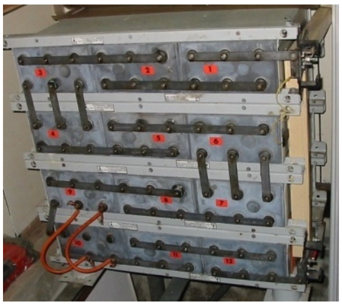
- Chose a 5 energy star rated computer with LED display, this will significantly reduce power consumption. Ensure the screen sleep and processor sleep modes are set up on each computer.
- When purchasing photocopiers, printers or fax machines, chose those with auto sleep/ wake modes which will significantly reduce power consumption.

Cooking

- Gas for is the most efficient, possibly with the addition of a gas instant boiling water system.

Laundry

There will be a need for an onsite laundry for housekeeping and staff laundry.



The use of solar and diesel RAPS hybrid (diesel with battery backup for periods of low load) was considered but is not recommended owing to the relatively high baseload required and poor rate of return.

It is suggested to co-locate the (staff) laundry and the generators to allow the generator waste heat to be used in a drying room. At this concept stage of design, this is easily achieved, by installing the engine cooling radiators in a room separated from the generator room and cooled by electric fans to provide a clothes drying facility.

- If possible, purchase front loading washing machines as they usually consume far use less energy than top loading machines.

Guest Cabins

- Some form of energy control of lights and fans in each cabin will substantially reduce energy consumption, key tag switches are useful, or motion sensors/ door switch combinations are far better. A budget of $200-400 per room will be required.
- "In room metering", such as that used at Couran Cove could be used to focus guest interest on energy conservation.

Energy Supply

The load demand data developed to date is incomplete and it has not been possible to estimate a full load demand using the energy efficient alternatives set out above. However the choice of generator size and control system is crucial to realising all the potential savings listed above, further work on this will be required during design.

It cannot be stressed how the correct choices with generation and control will make for operational efficiency gains, both in operating costs, staff time and reliability (hence providing the expected level of service to guests).

- Demand management and load management at start up will enable vastly reduced overall peak loads and consequently smaller capacity generators can be used with resultant fuel consumption savings.
- The power reticulation, cabling and switching system needs to allow for centralised control so that major loads can be turned off, then phased in at generator start up. To avoid any doubt, it is vital to avoid a situation where the entire resort must be started under load.
- Similarly, the use of a centralised control allowing some major power loads to be operated on timers and/or even better, on the basis of current loads, will allow smaller capacity generators to meet the needs of the ecolodge.
- It is assumed that the daily load profile will not be even and that there will be peaks in demand. Establishing a generation system which uses one generator sized to meet the potential peak demand, or start up, with all loads "live" (a common approach) will in-build fuel consumption wastage, and increase operational costs significantly.

Smart Generator Control

There are a number of options listed below which may be used (some of these may be combined), all assume redundancy provision for (at least) baseload generation capacity):

- Two large peak generators with no demand or load management;
- Two generators, one large one small (one peak, the other baseload) with manual or automatic changeover;
- Three equal sized generators with automatic synchronisation;
- Hybrid, battery storage UPS for overnight essential services; and
- Solar/battery storage UPS for essential (data) power needs.

Option 1: Large Peak Generator no Demand or Load Management

1. Chose a generator which meets all peak power demands and start up demands, have another of same size as stand by. This is inefficient and will result in larger capital costs and significantly increased operational costs.

   - A generator operating stand-alone gives no opportunity for scaling of supply and has limited supply management options.
   - Without having undertaken any reliable load assessment it is likely that in the order of 100-150 or even more kVA would be required, although if start up loads can be managed less than 100 may be possible.

Option 2: Peak Baseload Generator System with Load and Demand Management

2. Have two generators, one which meets baseload requirements, the other somewhat larger which meets peak power demands. Have the start up loads minimised though centralised control of the major loads.

   - Manual change over can work, with late evening/ early morning change (by staff), with the small generator running the low baseload of the early morning, along with some baseload such as cool room or pool pumps. Ideally the generators should be synchronised, allowing change over without “blackout”.
   - Further, intelligent control which starts the other generator (larger for increased load and smaller for reduced load) whilst the duty generator is going, synchronises then shuts down the other generator is the most effective and allows for many changes throughout the day as loads dictate. Cost effective switchboards with this control are available.
   - It is likely that the Mutee Head Ecolodge could be run with one 75-100 kVA and one 150kVA generator.

The use of multiple generators to achieve maximum efficiency for any given load is best practice for larger resorts and has the best life cycle costs.

- In the event of breakdown of the larger unit, loads can be managed manually to ensure demand is within the peak capacity of the smaller unit (i.e. cool rooms turned off overnight, pool pump then water pumping etc).

Option 3: Three Equal Generators - Peak/ Baseload with Demand and Load Management

3. One option in the long term is three generators, of equal size (same model). The concept is similar to above, with one generator used for low load, two generators synchronised for peak and the third for standby. Given the relatively small size and (hopefully!) low energy demand for the Mutee Head ecolodge, this option is unlikely to be viable as the control and synchronisation systems are relatively expensive and pay-back is much longer for small units.

Hybrid, battery storage for overnight essential services

This option involves electricity from the diesel generator to be used to charge batteries via a battery charger, stored in batteries and then put back into the power supply, via an inverter during periods when the diesel generator isn't running. Design of the system would be for a maximum period per day (say 6 or 8 hours).

Estimated pricing for a 30kWh battery storage system is around $100,000.

The system would rely on batteries which have a limited life, ten years is a reasonable assumption, however battery life can range from 8 to 15 years.

With the loads from guest cabin air conditioning, it is unlikely that it is cost effective to have overnight battery storage in this form.

It is unlikely that the resort can be managed every day with an overnight load of 30kW, making this option unlikely to be practical. The only consideration which makes this option even worth consideration is in the event that the (natural ventilation aspects of the) design of the cabins and main guest areas render air conditioning unnecessary during evenings for 4-5 months in winter. In such an event a 30kW UPS has a reasonable rate of return, but is likely to have insufficient capacity.

A supply storage option which may be more practical is the establishment of a UPS system which runs all data/IT equipment including computers, tills, fax machines, EFTPOS, fax, modems and radios. This can be charged by diesel generator, or alternatively by solar (photo voltaic) panels.

A solar/battery store 2kW UPS set up would cost in the order of $20,000.

Tropical, open style architecture which could be the basis for the central facilities at Mutee Head, this example, Sanctuary Retreat at Mission Beach.

Benchmarking

Two examples of other tropical resorts give good benchmarking of generation use and fuel use:

- Before energy efficiency measures, a medium size resort with 34 cabins uses about 230,000 L of diesel and 55,000 L of LPG. Peak demand is 280kW and average daily fuel consumption about 630L. This includes a lot of air conditioning and inefficient refrigeration.
- Before energy efficiency measures an 18 cabin resort (no air conditioning) with 88kW peak load and average load of 58kW uses 120,000L per year of diesel and 10,800 kg of LPG. To handle the 88kW peak, 110 and 100 kVA generators are used.

Cost of Onsite Generation

The potential costs of diesel generation at the ecolodge are current generation, (usually) turbo charged diesel generators have an efficiency of about 11 MJ/kWh. At $1.50 per litre of diesel (landed at Mutee Head as bulk supply), correctly sized, and efficient diesel based generation, (with 38.6 MJ/L) will cost about 42.8 cents per kWh. This is a significant cost and will need to be carefully considered in developing the energy approach and overall concept for the resort.

Monitoring and Control

- Each generator should be electronically governed and have basic engine management including voltage, amperes, overheat circuit protection and low oil notification. As stated above, the ability to synchronise is important to allow change over without "blackout".
- As the majority of the loads will be single phase, it will be important to ensure phases are balanced to ensure the generator alternator is not damaged.

Heat Recovery

- As suggested in the Energy Demand, Hot Water section, heat recovery from the water jacket and the exhaust is proposed. The key aspects are:
  - water jacket heat exchanger,
  - exhaust heat exchanger,
  - generator radiators (using electric fans) to be located in laundry drying room located adjoining the generator room.

Noise

- With good acoustic louvres and residential level exhaust mufflers, sound levels outside the building should be able to be reduced to around 55 dBA 10 metres from the building. Typical installations without these precautions often result in sound levels of 75-90 dBA, causing substantial nuisance noise in nearby guest rooms, at the central facility's outdoor areas and in other outdoor areas.

It is recommended that a purpose designed generator shed be used, however if the proposed existing shed is used is used, add acoustic louvres and use a residential level exhaust muffler to enable maintenance of the natural soundscape around Mutee heads. These louvres are quite cheap.

- The present open sided generator shed should be replaced with a purpose built insulated generator shed.

Gas Option

The generation options above have all been based on diesel generation, however gas generation would be preferable as it offers significantly reduced fuel use, reduced greenhouse gas emissions and somewhat reduced maintenance requirements.

Renewable Alternatives

Wind

With a modest "trade" wind for most of the year, and the relatively prominent headland, there is some potential to use wind power. It is one of the most efficient renewable energy resources available. A 40-80 kW wind turbine could be used, potentially this could supply a proportion of the resort's energy requirements for some of the time.

Wind power would reduce diesel fuel consumption, and green house gas emissions. Payback on the capital cost of such a wind generator is likely to be in the order of 5-10 years.

Solar

Given the high power demand of the proposed resort, solar is not going to be a cost effective option. It may however be used to augment a data protection UPS (see above).

Water

Municipal Supply

There is the main water supply from the Jardine which is piped to the NPA communities. However as the pipeline is around 10km or more away, it is unlikely to be cost effective to obtain the necessary approvals for and install a pipeline from this supply to Mutee Head.

Rainwater

With 1800mm of annual average rainfall, and if 500m^2 of total roof area for collection is assumed this offers a potential annual water supply of 900,000 Litres. This is unlikely to fully meet the ecolodges needs unless very drastic water conservation measures are adopted.

Groundwater

There may be the possibility of a bore water supply which is adequate or can augment rainwater.

Desalination

A modest sized desalinator to augment rainwater could be a suitable approach. Given the good rainwater and ability to design in roof catchment systems it is unlikely to be cost effective to run desalination without rainwater supply as well.

Using "lite" construction techniques, tent/huts can still have a reasonable level of comfort and provide for a unique experience.

NOTE: desalination would require water being pumped from the sea and a brine discharge, this requires various environmental approvals and whilst there is a good likelihood of obtaining them, the marine studies may involve significant costs.

Supply Solution

An initial investigation into a bore supply should be undertaken. If successful, water supply solution should be rainwater (off major roofs) and groundwater to a large storage tank on the hillside above the lodge.

If no groundwater is available water supply could be rainwater off all roofs and with augmentation by a small capacity desalinator (which runs much of the day when required to fill storage tanks but is only used for ..say 30-50 days a year). If desalination was the only source, it is usually more efficient to have a much larger capacity unit which runs about 6 hours per day to meet daily demand.

Demand

If most water efficiency measures are implemented, it is estimated daily usage will be 125-250 L per person or about 9.6kL per day (32 guests, 12 staff).

Water Conservation

The making, storage, pumping, treatment, heating and reticulation of water throughout the lodge is going to be a significant cost. Water conservation can significantly reduce demand and hence reduce the cost of supply.

Specification of fittings and fixtures should include:

- Shower roses to have maximum flow rates of 9 L/min, use AAA rated shower heads (there are attractive high quality units suitable for guest showers, e.g. the Raymoor Torrential Rail Shower).
- Taps generally (in kitchens, toilet vanity basins, guest cabins, bar, staff quarters to have maximum flow rates of 6 L/min, where practical use water saving "two step" flick mixers, which have a low flow water saving setting (e.g. Caroma Nordic Sink Mixer).
- The main kitchen sink should have a flow rate of no more than 9 L/min, with some form of flow control (faucet straw, elbow lever action etc.).
- All other tap valves should have pressure reducing restrictors, or AAA rated tap valves, meter beaters, flow controller aerators or flow regulators.
- Toilets should have dual 6/3 L flush as opposed to the traditional 11L flush, the 6/3 L uses an average of 3.8 L per flush and saves in the order of 67% water.

The water efficient vanity below looks just as good as the 24 L inefficient example above.

- Consider using waterless urinals in the public toilets in the main facility and staff toilets. The surface of the waterless urinal is specially coated so that it is resistant to accumulation and bacterial residue. Urine flows into a trap, usually a specially constructed cartridge, where it is immersed through a floating layer of air seal liquid.
- Toilet vanity sinks should be the smallest possible (3-4 litre capacity maximum).
- "Jemflow" and "Aqualoc" provide useful flow restrictors that can be added to many fittings, however as this is a new ecolodge many fittings will be able to be purchased as low flow.

Guest Cabins

- Guest bathroom sinks should have a maximum capacity of 5 litres.

Laundry

- Purchase water efficient washing machine(s), whilst a bit more expensive, front loading washing machines generally use significantly less water and energy.

Garden

As far as possible chose (preferably native) species which can thrive with local rainfall patterns and don't need too much additional watering. We propose effluent irrigation (reuse) from the Sewage Treatment Plant, this will enable some "lush" garden beds.

Effluent Re-use

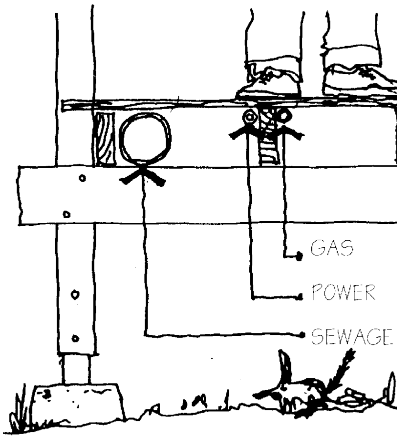
The is the potential to re-use treated effluent for garden irrigation. The effluent reuse system, which would comprise a pump located in a well (after the treatment system, and include some form of disinfection) and then a simple irrigation piping distribution throughout the gardens.

If any form of irrigation of gardens is envisaged, then effluent re-use must be considered. Having said that, DEH has very stringent assessment requirements relating to wet weather storage and nutrient assessment of soils which will need to be considered.

Saltwater Flush

Some coastal and island resorts use a saltwater (seawater) flush for toilets to reduce freshwater consumption. Some sewage treatment systems can cope with a saline effluent, however it must be understood that the effluent cannot then be used for any form of land disposal or garden irrigation, it would have to be discharged at sea. This option should only be considered for Mutee Head should there be a soil analysis/nutrient balance issue which precludes effluent irrigation of the nearby forest or gardens for effluent disposal.

Timber boardwalks between huts and the main buildings can be used to carry sewage, water and power supplies.



Effluent Toilet Flush

There is also an opportunity to reduce water use by reusing effluent for toilet flushing. Effluent must be disinfected and of an adequate standard for toilet flushing. The addition of an additional reticulation line to cabins and staff accommodation is unlikely to add significantly to the construction cost.

Wastewater

The wastewater system for Mutee Head Ecolodge will need to cope with all effluent loads from the resort. The overall requirement is for at least secondary level sewage treatment that meets the following key parameters and enables effluent reuse (irrigation of the gardens), rather than direct disposal to local waters (surface or ground).

Target effluent quality should be at least (with lower values preferable):

- **BOD_5**=15 mg/L
- **Suspended Solids** =15 mg/L
- **Thermo tolerant coliforms** = mean <150 cfu/100mL

Effluent disposal should be via garden irrigation, using a network of coarse droplet sprays or drippers.

Effluent that is going to be used for irrigation of gardens must be disinfected to avoid health problems. Whilst effluent with 100cfu/100mL is acceptable for what is termed "secondary contact", disinfection is recommended for any primary contact. As it will be difficult to ensure guests and staff don't enter the garden areas that are irrigated, disinfection is recommended.

A decision needs to be made regarding wet weather, during periods of heavy rain, ponding may occur from the irrigation and rainfall combined. This is not good as the resultant overland flow will carry the effluent to the beach and /or groundwater.

Best practice, and what is required by law in some jurisdictions in Australia, is to have wet weather storage for three days (with no irrigation during periods of heavy rain) or to have an approved effluent discharge (effluent outfall to a local water body.). A 45,000L HDPE tank is likely to be sufficient for wet weather storage, it can double as a balancing storage for the effluent irrigation if only the first two thousand litres or so are used for this purpose.

There is also an opportunity to reduce water use by reusing effluent for toilet flushing. Effluent must be disinfected and of an adequate standard for toilet flushing. The addition of an additional reticulation line to cabins and staff accommodation is unlikely to add significantly to the construction cost.

The direct reuse of grey water may be considered, however the proposed treatment system, the ASF, prefers a weak waste so it is suggested that all grey water sources will be directed to the sewage treatment plant.

Recommended Approach

The recommended approach is to:

- collect all effluent via gravity to a centrally located treatment plant (one or two pump stations may be required);
- use a treatment plant which meets BOD_5=15 mg/L, Suspended Solids =15 mg/L, Thermo tolerant Coli forms = mean <150 cfu/100mL;
- have disinfection to ensure effluent quality is acceptable (<10 cfu/100ml for primary contact;
- have garden irrigation under pressure through coarse droplet sprinklers;
- use treated effluent for toilet flushing;
- have a wet weather effluent storage tank (also useful in the event of pump failure, overload or maintenance).

Sewage Treatment Plant Capacity

If a planning maximum for Mutee Head of an ultimate 20 cabins with an average occupancy of 2.2, plus a maximum of 12 staff is adopted (therefore 56 population). As such a 70 EP plant is suitable for guests and staff (with some allowance for day guests). To accommodate occasional peak loads we suggest a 75 EP plant.

Sewage Treatment Plant Key Design Priorities

In selecting a sewage treatment plant for the ecolodge the following aspects should be considered:

1. capital cost;
2. operational costs including the need for replacement parts, consumables (such as chlorine) and power consumption;
3. local availability of working/moving parts;
4. complexity of user management requirements (is training required);
5. effluent quality (including reliability of this);
6. major servicing aspects (e.g. desludging);
7. recovery in the event of biological failure; and
8. future scalability.

Suggested Wastewater Solution

We recommend that an Aerobic Sand Filter be used. These are a generic design based on the Dakota Mound approach. In Queensland they are provided by Envirotech. They will require a source of screen “sand” (actually 5-10mm gravel) supply of this from within the NPA would need to be determined.

Existing shack, Mutee Head.

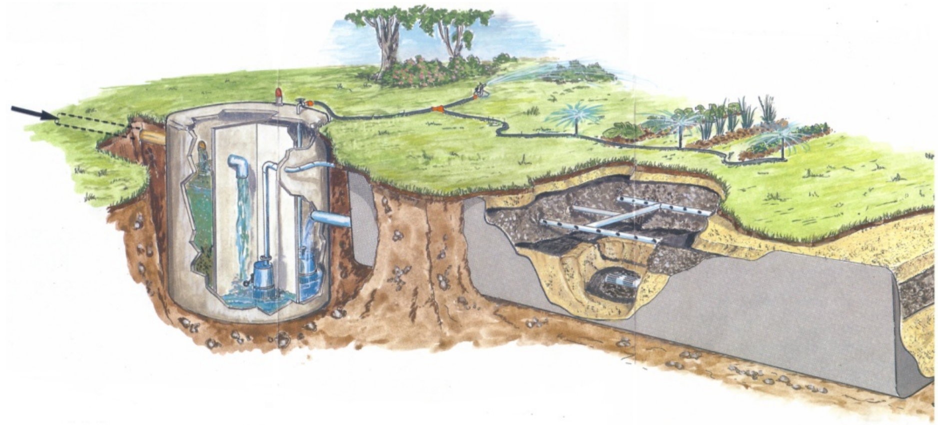
NOTE: EcoSustainAbility discloses that it has had previous (very successful) commercial dealings with Envirotech, and have installed ASF systems in five Fijian resorts. That said, we have recently reviewed the market in Queensland and continue to find the ASF system the best outcome for a Mutee Head type ecolodge, particularly when the energy requirements of activated sludge type plants are considered. Our original identification of the ASF system was based on its successful use in two locations within the Wet Tropics World Heritage Area. Nonetheless our recommendation may have some implied bias and further investigation could be warranted!

In relation to the key design priorities above, the ASF has:

1. modest capital cost (particularly if the kit option is implemented);
2. low energy requirements (pump operates 10-12 times per day… rather than the constant blower required for some package treatment systems), low cost for disinfection, using readily available chlorine tablets (or other options) and the only moving parts are easily replaced pumps;
3. the pumps required can be repaired and/or replaced from local suppliers;
4. easy operation based on a simple manual, no detailed training is required, the ASF is the only plant approved in Australia for only annual inspection (most others require weekly or monthly inspection);
5. effluent quality is reliable (provided there are no prohibited inputs);
6. major servicing is rarely required, desludging is only required every 2-5 years (less often if the primary tanks is of sufficient size);
7. the anaerobic process in the primary tank ensures more rapid recovery in the event of any failure;
8. the opportunity is available for expansion, of any magnitude, at any time, through the addition of primary tanks and/or sand filter beds.

Beach west of Mutee Head.

Figure 11: Aerobic Sand Filter Layout



Elements of an ASF:

1. Plastic Liner – sides and floor to contain effluent and to protect the System from surface and groundwater intrusion.
2. Underdrainage – within a layer of coarse aggregate placed on the floor of the ASF – to channel -out the treated effluent.
3. Media / Sand layer – 600mm thick – the media to which the active biomass is attached.
4. Pressure Distribution Pipe work – placed on top of the media to ensure uniform distribution.
5. Primary Effluent Pump Station – to distribute on A.S.F™.
6. Final Effluent Pump Station – to irrigate effluent from A.S.F™.

The following effluent quality is typically achieved:

- BOD_5=10 -15 g/m^3 (mg/L)
- Suspended Solids =10-15 g/m^3 (mg/L)
- Thermo tolerant Coli forms = mean <150 cfu/100mL

The ASF has a primary tank, which is usually built below ground on site using reinforced concrete block and slab construction. The main tank shown can be constructed on-site and the three chambers, the primary tank, pump well and under drainage well can be located separately if desired.

A primary tank is used for settling out of gross/settleable solids and for the anaerobic decomposition of settled sludge and retained scum. This process usually reduces solids and sludge to 5% of initial settled volume over time (6 months – several years). The primary tank will need to be desludged periodically (as a rule-of-thumb every 3-5 years).

The primary tank has a recommended minimum liquid depth of 1.6m and maximum of 2.2m (if rectangular the length to width ratio should be 3:1 min).

The inlet and outlet should be fitted with square junction to encourage formation of scum layer and to reduce carry-over of solids.

Mutee Head from the east.

The following is a summary of the estimated costs:

- About $20,000 for an 75 EP ASF kit (plus freight);
- As part of construction of the Mutee Head Ecolodge the building contractor builds and/or provide:
    - main primary settlement tan , the supply of the aggregate, sewage delivery to the system and treated effluent reticulation/disposal ;
    - the sand filter media for the sand filter (97.5 m^3 of 2-5 mm aggregate and 67.5 m^3 of 20-40 mm);
    - installation of the unit (we can provide project supervision if required);

Total budget for the ASF system will be about $75,000+ depending on availability of sand filter media in the NPA and freight costs.

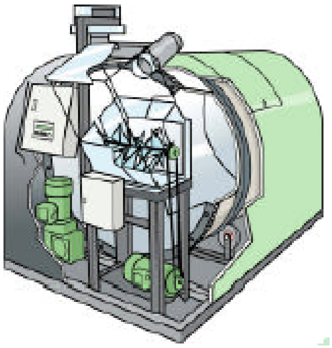
As a comparison a 75 EP OzziKleen system is quoted as at April 2012 at $156,255 (ex Brisbane). This is a containerised activated sludge plant which requires a blower running about one in each two hours using 1.5kW in addition to the pumps which would have similar loadings as the ASF.

Effluent Reuse

Suitable disinfected effluent can be irrigated to landscaped areas and areas of natural vegetation. It is suggested that effluent irrigation be undertaken during dry weather only in the resort grounds. It is important that areas irrigated not have public contact (garden beds are OK, but lawns where people may lounge/ sunbake are not).

For wet weather, some storage will be required to avoid effluent irrigation during heavy rainfall periods. An alternative effluent irrigation site nearby but away from the resort proper (and where any overland flow will not flow onto public contact areas) would be desirable, or alternatively an approved wet weather disposal to nearby surface waters may be appropriate.

NOTE: It is likely that occupancy will be lower during the hot and rainy monsoon months, so this may reduce effluent storage amounts.



ALE Truman composting unit.

Solid Waste

Solid waste will be a cost for Mutee Head Ecolodge as all materials are transported by barge or by road from Cairns (or further). Waste needs to be handled, stored and disposed of. It is suggested that the following measures be implemented where they are practical:

General Measures

- To minimise packaging, food and materials are purchased in bulk where feasible.
- Disposable items (e.g. drinking cups, plates) should not be used.
- Bulk materials are obtained in reusable containers, and the containers are returned and reused.
- Any litter encountered is collected and removed (by the operator);
- Organic kitchen waste should be composted.
- Recycled and/or unbleached paper is used for printed materials.
- If recycling is possible, staff and customers are encouraged to participate in recycling programs.
- The use of a post mix machine will substantially reduce the number of plastic bottles collected.
- Landfill of plastic, metal and glass is far preferable to burning. Burning plastic creates toxic and green house gas emissions which should be avoided.
- Small batteries (AAA, AA, B, C and D etc) should not be disposed of to landfill at Mutee Head, the heavy metals they contain will readily contaminate soils and groundwater.

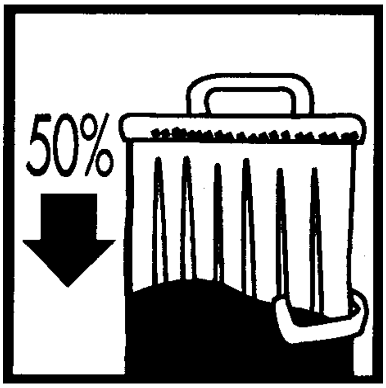
  Specific disposal of batteries (to NPARC landfill), waste oil (to oil company) and bulk storage items 200 L drums etc (back to supplier) should reduce the amount of waste kept on site.

For a remote site such as Mutee Head, probably the greatest waste challenges will be storage of empty bulk supply containers (e.g. fuel drums), and the return of waste oil to oil companies.

Composting

Composting of all organic waste is recommended. This can essentially be undertaken using three options, onsite composting, vermiculture (worm farm composting) and using a proprietary composting unit.

- On site composting requires ongoing management and has odour, insect and rodent problems which must be managed. To some extent these problems can be mitigated by the use of specially design HDPE bins (however many are likely to be required to cope with the expected load. Fish and meat wastes are unlikely to be able to be processed.



Waste minimisation can substantially reduce the costs of supplies and consumables…

- Vermiculture has similar problems, but is more efficient. Constructed worm farm composting systems are available. A 340 L unit is around $300 AUD including the HDPE bin and worm stock, between ten and twenty are likely to be required. As number would be required and as the process relies on worm biomass, there are problems with fluctuating loads. A few low occupancy weeks can reduce worm biomass such that the systems can't cope with the next full occupancy period. Fish and meat wastes are unlikely to be able to be processed.
- A specially designed composting machine which can process fish and meat wastes, has little odour and no vermin problems such as the *ALEtrumman* on site composting system could be considered, however it is likely to be prohibitively expensive for such a small ecolodge and will require electricity to operate.

Building Design Aspects

There are a number of building design aspects which could assist in the ecoefficiency of the resort:

Main Building

An elevated peak on the main roof peak, which allows ventilation and natural light will aid significantly in reducing temperature and the need for daytime lighting in the restaurant and bar areas.

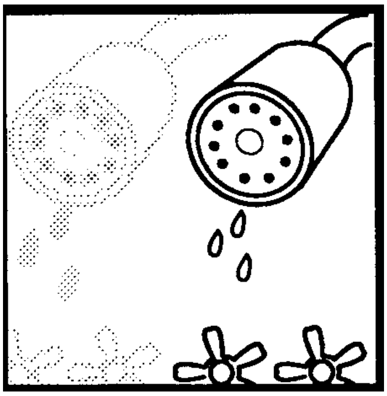
Guest Cabins (Units)

The use of timber louvres is great for guest units for aesthetics and natural ventilation, however, for those units with air conditioning, glass windows or glass louvres are recommended as otherwise guests often leave louvres open (for light and a view) whilst running the AC, this is very inefficient (and in many resorts is responsible for a major waste of electricity).

Workshop/ Generator/ Laundry

There are some design notes that are suggested:

- The generator room needs to be well sound insulated, its location near the beach and at ground level will result in reduced guest amenity if not well sound proofed.
- With good acoustic louvres and residential level exhaust mufflers, sound levels outside the building should be able to be reduced to around 55 dB 10 metres from the building. Typical installations without this often result in sound levels of 75-90 dB, this would cause substantial nuisance noise to guests on the adjoining beach and often in their units and on the main buildings outdoor areas.



Water conservation will assist in reducing demand on groundwater supplies.

- A small drying room co-located with the laundry/generator will allow use of waste heat from the generator (using the radiators) to dry laundry. Whilst for most of the year, outdoor line drying will be effective, some form of drying will be required in wet periods throughout the year and in the monsoon season.

Materials

- Consider specifying the use of Easiboard (50mm thick in lengths up to 4.8 metres) as a plasterboard replacement (replaces the traditional timber/steel framing and Gyprock outer. Easiboard is 11 times more impact resistant than plasterboard, is fire resistant, an excellent noise barrier and provides thermal insulation. Easiboard comes in a variety of finishes, contains no toxins and does not requiring painting.
- Consider using wool insulation (instead of fibreglass) in roofs and west facing walls.
- Specify timber veneer that is sourced from sustainably managed plantation forests (as opposed to veneers sourced from old growth forest). If available in the products needed, specify Ecoply or Easiwall.
- Consider using a light coloured roofing to minimise radiation (e.g. Colour bond XRW off-white).

Infrastructure Costs

The "guesstimated" overall infrastructure costs are set out in the following table. These are preliminary and based on EcoSustainAbility's experience on similar projects in the Northern Territory, Fiji and PNG. Having said that, the assumption is that the cabins, lodges and even the central facilities can be purchased as flat pack kits based on existing designs only slightly modified. Staff accommodation it is assumed will be portable buildings or cheaper pre-fabricated options. Thus design and per square metre building costs are quoted as very much lower than if a full architectural treatment and unique design were to be implemented.

The additional costs of Cape York construction and transport are probably not adequately considered.

For all of the above reasons the costs should be assumed to be a minimum.

Table 13: Preliminary Costs

Item	Description	Unit	Quantity	Rate	Budget
Allowance for clearing site		item	1	$5,000	$5,000
Central Facilities					
Central facilities building		m2	265		
Restaurant	Seating for 60 pox	m2	100	$1,000	$100,000
Lounge	Seating for 20 pax	m2	50	$1,000	$50,000
Bar	Seating for 20 pax	m2	50	$1,200	$60,000
Reception		m2	20	$1,200	$24,000
Office		m2	12	$1,200	$14,400
Shop		m2	8	$800	$6,400
Kitchen		m2	25	$1,400	$35,000
Cold rooms	based on 5 x 3 x 2.4m high	item	1	$15,000	$15,000
Deck	Elevated with shade cover	m2	125	$300	$37,500
Shaded courtyard	Sails as per architect and pavement.	m2	50	$350	$17,500
FFE	Include kitchen, restaurant, office etc.				$150,000
Grounds					
Pool	5 x 6m		1	$35,000	$35,000
Pool filter/pump house			1	$12,000	$12,000
Landscaping	Use native locally sourced vegetation, screen between lodges and along pathways, around pool	item	1	$15,000	$15,000
Lodges					
1 Bedroom AC cabins	Cabin and FFE		12	$30,000	$360,000
1 Bedroom AC lodges	Lodge and FFE		8	$45,000	$360,000
Footings and connections	footings, power, telecom, water, sewerage	no	15	$5,000	$75,000
Boardwalk access		m	200	$150	$30,000
Staff Accommodation					
Manager's Residence	2 bedroom based on transported home erected		1	$100,000	$100,000
Staff accom	12-15 staff dorm style accommodation (total $500-600m2).		1	$200,000	$200,000
Transport					
Access road	grade and dust seal near lodge.				$20,000
Traffic Signage	Allow for traffic, directional and promotion.		10	$500	$5,000
Carpark	suit 25 cars	m2	500	$35	$17,500
Internal signage	Budget		80	$100	$8,000
Pathway lighting	Bollard style (some should be solar?), 10-15m spacing		150	$100	$15,000
Water					
Bore	Assumes bore/spring close by.		2	$25,000	$50,000
Water tanks	225KL (includes fire fighting store)		1	$22,000	$22,000
Reticulation	Based on approximately 1250m	item	1	$50,000	$50,000
Solar hot water	in each unit and staff quarters	item	1	$50,000	$50,000
Instant gas hot water	kitchen	item	1	$7,000	$7,000
Power					
Generators	75KVA by 2, budget on Diesel but will investigate Gas	no	2	$35,000	$70,000
Generator shed	Block construction, acoustic louvres, includes laundry and workshop	m2	18	$600	$10,800
workshop	20m2 open one side (lean to off gen shed?)	m2	10	$600	$6,000
laundry	next to or near gen shed	m2	12	$600	$7,200
Laundry FFE		item	1	$10,000	$10,000

Item	Description	Unit	Quantity	Rate	Budget
Fuel storage	10KL tank plus bunding plus pipework? Subject to final design. Usually is supplied by oil co.	item	1	$8,000	$8,000
Switchgear	as required, note intention is for smart control of generators using auto start and synchronising	item	1	$20,000	$20,000
AC units	All staff quarters and 16 guest units (reverse cycle). Main building included in total building rate	item	1	$25,000	$25,000
Cables	as required.	item	1	$20,000	$20,000
Sewerage					
Sewerage treatment plant	150EP use ASF		1	$75,000	$75,000
pump stations	Assume 3		1	$2,000	$2,000
reticulation	assume 500m	m	290	$85	$24,650
effluent irrigation		item	1	$5,000	$5,000
Communication					
Phone /data		item	1	$25,000	$25,000
Vehicles					
4WD Ute	Services	lease	1	$20,000	$0
4WD Troop Carrier	Tours and staff transfer	lease	1	$50,000	$0
Courtesy Coach	Coaster Bus (transfers???, local tours??), will lease	lease	1	$100,000	$0
Jardine Tour Boat	25 seat river barge style covered, outboard powered	lease	1	$75,000	$0
Jardine punt	4 passenger punt style for small group tours	lease	1	$7500	$0
Fishing charter/crab island tours boat	8 seat offshore capable charter vessel (initially cross hire an existing NPA based vessel)	lease	1	$100,000	$0
Consultants and Design					
NOI	Planning and environmental applications				$50,000
Design and Project Management					$75,000
Governance	Legal for business establishment etc,			$0	$50,000
Contingency					$250,000

TOTAL $2,679,950

Ecotourism Positioning

The Australian EcoCertified logo has become one of the most successful ecotourism branding tools with over 500 companies around Australia using the program.

Ecotourism Australia sets out ten aspects which then have supporting criteria for their ECO Certification program:

1. Business Management and Operational Planning Business Ethics
2. Customer Satisfaction
3. Responsible Marketing
4. Natural Area Focus | Indigenous Cultural Focus
5. Environmental Management
6. Climate Change Action
7. Interpretation and Education
8. Contribution to Conservation
9. Working with Local Communities
10. Cultural Respect and Sensitivity

In essence, in order for the proposed Ecolodge to meet market expectations as ecotourism (and potentially become certified) it will need to:

- Business Present (and interpret) the nature and culture of the local area:
- Have best practice sustainability in its design, construction and operation:
- Contribute to the local community and conservation of the local area.
- Key aspects of the approach are set out below (broadly in the framework of Ecotourism Australia's aspects.

Management and Operational Planning Business Ethics

Clearly a successful tourism development at Mutee will need good business planning and management and operate with a sound compliance and business ethics approach. Without discussing the details of these aspects here, it is noted that for the Mutee Head proposal to become a model for cape York and indeed offer training, significant effort will be needed to establish the approach with capacity building toward governance and integrity processes.

Recognising capacity building will be required, Mutee could become a model and the business planning and operational management and hospitality could become a major focus of the role of Mutee in training.

Customer Satisfaction

From the outset, mechanisms to understand Customer expectations and satisfaction will be necessary. These can range from during visit interviews, departure feedback mechanisms, post trip surveys and working with tour operators and travel agents to ensure complaints and disappointments are known and resolved.

Responsible Marketing

A major tool to ensure customer satisfaction is to only present an accurate image/description of the likely customer experiences. In this way customer expectations are realistic and likely to be met.

Beach to the south-west of Mutee Head toward mouth of Jardine river.

From the outset, marketing materials (brochures, websites etc.) should only include images and outline experiences, facilities and activities which are likely to be experienced by visitors. Aspects which are specific to a tour type, time of year etc. should be clearly presented as such.

Natural Area Focus | Indigenous Cultural Focus

The Mutee Head product can be clearly presented as a tourism product with a clear focus on the natural landscape and the culture of the area.

This focus on the nature and culture of the area will provide a clear market positioning and product differentiation from other existing products in the northern cape York area.

An example of the need for this is African safari lodges...whilst often luxurious.. the attraction to most is the wildlife and tours offered...the quality of the resort/hospitality is secondary to the wildlife focus.

Environmental Management

Ecotourism needs to have best practice sustainability embodied in its management, the infrastructure requirements for such management are set out above.

Climate Change Action

Ecotourism Australia has recently embedded a need for carbon accounting and even in some cases offsets.

Interpretation and Education

A key part of the experience proposed for Mutee Head is the integrated interpretation and education. A library and limited signage displays can provide a static interpretation/education role and the tour guides can provide a more formal interpretive experience on tours..more relaxed interactions around the campfire and Radar Bar.

Contribution to Conservation

Best practice ecotourism involves providing a contribution to conservation of the areas visited. A program for this will need to be developed. There are likely to be many opportunities for the resort to offer conservation management of the Apudthama lands around the resort. One major issue may be able to be fire management of the area of land from the water pipeline north to the resort... which could have both biodiversity and fire safety/security for the ecolodge.

Working with Local Communities

With the Apudthama Land Trust being the proponent and most likely a major owner of the Mutee Head Ecolodge, there is a potential for best practice in this area.

Area of proposed central facilities.

Cultural Respect and Sensitivity

Obviously the development of Mutee Head Ecolodge will need to have great cultural respect and sensitivity. In addition to presenting and being sensitive to the traditional land owners, the cultural heritage of the WWii use as a radar station and also the post WWII settlement of people from the Torres Strait before the present Bamaga was established needs to be understood and can be presented as part of the respect for culture.

Ecotourism as a Competitive Position

Ecotourism *per se* is not necessarily an aspirational experience for many tourists and in its own right is unlikely to create demand. However, it is the product and activities which will create the competitive positioning and the elements of ecotourism which support the ecological/social and cultural appropriateness of the product.

All the proposed potential markets are interested in tourism products which offer wildlife and cultural tour activities, most potential tourists are also interested to ensure the cultural sensitivity, social responsibility and ecological sustainability aspects have been addressed.

Having identified that the ecotour style activities and the "eco" sustainability are key drivers for holiday experience selection, the level of hospitality and amenities are always an important driver in choice of products.

Clearing in are proposed for central facilities.

Mutee Head - Management Aspects

Governance

A key issue will be the corporate entity and approach to the development of the Ecolodge. Some potential options include:

- A Private Company that leases the land from the Apudthama Land Trust with the only commercial arrangement being a commercially set lease rent and perhaps a commitment for local employment.
- A Private Company that leases the land from the Apudthama Land Trust with modest rent and a profit/equity sharing arrangement toward the end of the lease such that the Apudthama land trust ends with a proportional equity in the whole business towards the end of the lease.
- Apudthama land Trust established a corporate entity) e.g. the "Mutee Head Ecolodge Company Limited") which leases the Mutee Head site from the Land Trust (but with major or total equity the Ecolodge is essentially owned by the Apudthama Land Trust).
- A Joint Venture be established with two or more partners, which leases the site from the Land Trust. In this case, one partner would be the Apudthama Land Trust. The others may be IBA and / or a private investor, who may or may not also operate the Lodge. If IBA were to participate, this is a common model adopted. Typically the arrangement is for the Indigenous partner to buy out the IBA share over time.

This last model seeks to incorporate the advantage of engaging experienced business management and industry skills in the corporate entity from the outset, as well as the financial contribution the investor brings. It can also facilitate the transfer of governance skills to the Indigenous directors over time, if established with this in mind.

The key to success is identification of the right investor. There needs to be a process of mutual evaluation involving more than financial considerations. The organisational objectives, operating style and culture, together with the personalities of directors require exploration to ensure a harmonious and fruitful collaboration can be developed and maintained.

Forming a Joint Venture without the participation of a third party such as the IBA can be more difficult, depending on the attitude of the parties. An investor will want to be assured his investment is secure, with least risk possible. They therefore often want to exercise some control, especially if the Indigenous partner is inexperienced and has little or no business track record. This might involve seeking to have a controlling share in the JV, or at least a casting vote in Board decisions. On the other hand Indigenous partners often feel very reluctant to hand control over land assets to an investor, especially in view of the long and difficult history they have experienced in regaining some control over their lands. An answer may be an independent, mutually respected and trusted chairperson, or the first option of a third party such as IBA joining the JV.

There are numbers of variations on the above options available. What might be the optimal model rest on the experience, attitudes, needs and resources available to the parties involved.

For this Feasibility Study, the factor which essentially needs to be resolved is the source of capital funding for the Ecolodge. If a private investor can be identified and the Apudthama Land Trust considers that the Mutee Head Ecolodge is a priority for the Trust and they wish to pursue the project as the proponent , it is suggested that a variation on the last option discussed above be the first investigated.

If the Apudthama Land trust wishes to proceed with the project, potential funding from the Indigenous Land Corporation or Indigenous Business Australia may facilitate the project. If this isn't possible, and funding needs to be sourced from commercial banks, discussion with bankers on the preferred corporate entity and lease options should be undertaken early to decide on the corporate structure approach.

For the purposes of the financial model developed to test project feasibility, an amount of $10,000 per annum has been assumed as a lease payment to the Apudthama land Trust. Depending on the corporate structure, the profitability levels indicated in a final, specific project plan and negotiations between the parties, the Trust may also have some level of participation profit distribution.

Management Arrangements

Once the corporate structure and lease arrangement are resolved, then a decision must be made as to the management of the Ecolodge. Many projects of this type have the land owned by a "developer" the resort built and then a management company commissioned to manage the resort.

Such an example is Wildman Wilderness Lodge which is managed by Anthology (who also project managed the building of the Lodge including transfer of buildings and infrastructure from Wrotham Park). The land owner is indigenous Business Australia and the operator is Anthology.

It may well be that the best model is for a 'Mutee Head Ecolodge Company Limited' to directly manage the ecolodge, employing a manager and all staff directly, running the "business". This will depend on the level of experience and skills held by whoever the directors might be, either as a JV or other structure.

One advantage of engaging a contract manager is the linking in with a chain marketing approach. This allows the use of a centralised sales and marketing system and has the benefits of scale for marketing and attendance at the all-important tourism exchanges. A small stand-alone Lodge will be unlikely to have these links, nor will it have the senior skills necessary to engage effectively. For most tourism operations, effective engagement with the industry marketing and distribution system is essential for success. In this case, the nature of the market may reduce this imperative. A good proportion of the market is anticipated to be existing Cape York tours and FIT travellers already committed to travelling to the tip of Cape York. It is in the Fly in market segment in particular that good engagement with the marketing and distribution will be required. As to training and meetings targets, there are a limited number of points of marketing that will need to be addressed, revolving around NPA, Cape York and Cairns agencies and enterprises.

The management arrangements and potentially engaging a separate "resort manager" will need to be decided early in the projects further development.

Staffing

The staffing of the Mutee Head Ecolodge will need a range of positions and skills:

- Manager
- Administration/book keeper (including "night auditor" function)
- Reception/reservations clerk
- Chef/cook
- Kitchen hand
- Wait staff (2 during peak periods)
- Housekeeper
- Tour Guides
- Engineering/maintenance/gardening
-

It is likely that an initial opening staff of six to eight covering all the above roles is the maximum that can be supported for a 20 room lodge. Some positions may be part-time or casual.

A small staff for a small ecolodge requires much multitasking and flexible working hours. The manager may start early and serve breakfast, whilst the tour guide may also maintain the gensets and do some gardening. The days works for the wait staff may be to help the cook prepare lunch, serve lunch, help prepare dinner then serve dinner, then back to the kitchen for final clean up whilst the cook sets out the breakfast for the morning....

This multitasking is usual in remote small tourism resorts/lodges.

For the purpose of the financial model testing feasibility, Full Time Equivalent (FTE) positions have been assumed, which combine a number of functions. The numbers assumed are 5.2 FTE for the first year of operation. 7 for the second year and 8.2 for the third. It is not possible to arrive at a really accurate figure at this feasibility stage. To do so would require a 12 month staff roster to be developed, taking into account seasonality, spread of hours over 7 days per week, any period of closure etc. However based on the knowledge of staff requirements for like operations, the assumptions are considered reasonable for the purpose of feasibility testing.

The principal modern award applicable to the operation would be the *Hospitality Industry (General) Award 2010.*

(https://extranet.deewr.gov.au/ccmsv8/CiLiteKnowledgeDetailsFrameset.htm?KNOWLEDGE_REF=216303&TYPE=X&ID=13605659892132100888889912894&DOCUMENT_REF=347140&DOCUMENT_TITLE=Hospitality%20Industry%20(General)%20Award%202010&DOCUMENT_CODE=MA000009)

The classifications and ordinary wage rates set out in Clause 20 of the Award are as follows:

Level	Classification	Minimum weekly wage	Minimum hourly wage
		$	$
Introductory		589.30	15.51
Level 1	Food and beverage attendant grade 1	606.40	15.96
	Guest service grade 1		
	Kitchen attendant grade 1		
Level 2	Clerical grade 1	629.70	16.57
	Cook grade 1		
	Door person/security officer grade 1		
	Food and beverage attendant grade 2		
	Front office grade 1		
	Guest service grade 2		
	Kitchen attendant grade 2		
	Leisure attendant grade 1		
	Gardener grade 1		
	Storeperson grade 1		
Level 3	Clerical grade 2	651.30	17.14
	Cook grade 2		
	Food and beverage attendant grade 3		
	Fork – lift driver		
	Front office grade 2		
	Guest service grade 3		
	Handyperson		
	Kitchen attendant grade 3		
	Leisure attendant grade 2		
	Gardener grade 2		
	Storeperson grade 2		
	Timekeeper/security officer grade 2		
Level 4	Clerical grade 3	686.20	18.06
	Cook (tradesperson) grade 3		
	Food and beverage attendant (tradesperson) grade 4		
	Front office grade 3		
	Guest service grade 4		
	Leisure attendant grade 3		
	Gardener grade 3 (tradesperson)		
	Storeperson grade 3		
Level 5	Clerical supervisor	729.30	19.19
	Cook (tradesperson) grade 4		
	Food and beverage supervisor		
	Front office supervisor		
	Guest service supervisor		
	Gardener grade 4 (tradesperson)		
Level 6	Cook (tradesperson) grade 5	748.80	19.71

Mutee Head Beach

Clause 20.2 refers to managerial staff as follows:

> **20.2 Managerial staff - hotels**
>
> [20.2(a) varied by PR997888, PR509040 ppc 01Jul11]
>
> **(a)** The minimum annual salary payable to employees within the Managerial staff - hotels classification level within Schedule D, will be $39,005 per annum.

Rates and loadings assumed in the financial model have taken the above into account. As to the manager position, a rate considered appropriate to attract and retain a suitable person has been assumed.

As a training function, if funding support for traineeships etc. can be procured there may an opportunity to increase the positions to have more focus and specific roles, subject to maintaining the required service standards.

Initially the small number of staff should essentially live on site. Some from the local NPA communities may commute from home only staying overnight at the resort staff accommodation when required to be on duty early morning or late evening. If staff numbers grow commuting could be more common, it may even be possible for a staff transfer schedule early morning and early evening.

Tenure Arrangements

Mutee Head is Aboriginal freehold land, held by land the Apudthama Land Trust. The land trust has been established as the trustee for the lands. The *Aboriginal Land Act 1991* allows leases for a variety of private, public and commercial uses to various entities. Relevant to Mutee Head leases can be issued to an aboriginal person or another person for a commercial purpose for up to 30 years without Ministerial permission and up to 99 years with the Ministers permission.

NOTE: Based on an understanding of its application, the process below has been adapted from the DERM DOGIT leasing manual.

Under Section 10(1) of the *Sustainable Planning Act* the granting of a lease for more than ten years over land that is part of a larger lot is defined a reconfiguring a lot (subdivision) and is therefore assessable development. Therefore for any application for a lease that is for more than ten years a development approval to reconfigure a lot is required.

Based on the DERM DOGIT leasing manual (see Appendix 9)[24] and given the land trust has responsibility under the *Aboriginal Land Act* but the relevant local government (Northern Peninsula Area Regional Council) will have the responsibility under the Local Government and Sustainable Planning Acts. A potential process is described below (modified after the DERM Manual to focus on a commercial lease, presumably what Mutee Head will require) with the key steps being set out below:

[24] http://www.derm.qld.gov.au/indigenous/land/pdf/manual_aboriginal_dogit.pdf

- **1 Expression of Interest (EOI)**: The potential lessee submits an EOI to the trustee. The trustee acknowledges receipt of the EOI.
- **2 Receipt and review of the EOI**: The trustee reviews the EOI to check that form has been correctly completed by an eligible person and any required supporting information or documents have been supplied. If the EOI has not been correctly made, the trustee advises the potential lessee to correct the EOI.
- **3 Consideration of the EOI**: After receipt of a correctly made EOI, the trustee takes actions to confirm:
    - the proposed lease would benefit Aboriginal people particularly concerned with the land; and
    - there are no known conflicts with existing interests in the land.

  Additional processes:
    - For all leases over 10 years over land that is part of a larger lot, the trustee must seek development approval (from the relevant Council) to reconfigure the lot.
- **4 Confirmation to proceed**: After confirming Step 3, the trustee should advise the potential lessee that the EOI consideration can continue.
- **5 Preparation of the Conditional Agreement to Lease (CATL)**: The trustee takes action to:
    - assess whether native title exists and, if so, identify how it should be addressed
    - identify local government services to the land and their indicative costs
    - determine the annual rent
    - identify any further registration requirements, including survey of the lot.

  The trustee then records the outcomes of these actions in the CATL.
- **6 Offer of the CATL**: The trustee offers the CATL to the potential lessee, which:
    - confirms Step 3 considerations and the outcomes of Step 5 actions
    - identifies any further actions required of the potential lessee prior to the grant of the lease
    - identifies the costs and conditions of the lease if it was to be granted.

- **7 Consideration of the CATL**: The prospective lessee considers the CATL and advises the trustee whether they accept the CATL and intend to undertake the actions required by the CATL, if any, (such as an ILUA, survey or preparation of a business plan). If the prospective lessee does not accept the CATL, they should advise the trustee and withdraw the EOI.
- **8 Fulfilment of the CATL**: After advising the trustee that the CATL is acceptable, the prospective lessee fulfils actions required by the CATL, if any. If the prospective lessee is unable to fulfil the requirements of the CATL the trustee must reject the EOI.
- **9 Execution of the lease**: After fulfilment of the CATL actions the trustee and prospective lessee must execute the lease by endorsing the lease document.

  Additional processes: For leases for a commercial purpose for between 30 and 99 years the trustee must seek and receive Ministerial approval for the grant of the lease before the lease can be executed and the lessee registers the lease.
- **10 Registration of the lease**: The prospective lessee registers the endorsed lease with DERM.

For leases over 30 years for a commercial purpose, must provide to the Minister a business plan for the commercial purpose, evidence that the return on investment will be more than 30 years and other information required by the Minister. The Minister must then obtain an independent assessment of the business plan and the proposed lessee's financial and managerial capacity.

Native Title

The *Native Title Act 1993* still applies and whilst the land trust is trustee for the land they do not necessarily act for nor represent all/any native title holders of the land. Where there has been a native title determination the land trust is not necessarily the prescribed body corporate. The trust must make a native title determination and if native title has not been extinguished an ILUA may be required.

Competition

It would appear that the Land Trust needs to consider an expression of interest on its merits, however it is conceivable that in some instances the consideration of benefit to the aboriginal people particularly concerned with the land may involve putting the proposal to market (e.g. tender) to ensure the greatest benefit can be obtained. Close liaison with the Land Trust at the early stages of project conception would help to ensure that expenditure on feasibility and developing intellectual property about a project is not wasted in a site being put out for tender.

Other Approvals

Once a lease is granted further approval for commercial development may be required under the *Sustainable Planning Act 2009* for building work, plumbing or drainage work, operational work, reconfiguration of a lot and material change of use. Constraints on use of land and/or permissions may also be required by the *Wild Rivers Act 2005*, *Vegetation Management Act 1999*, and *Aboriginal Cultural Heritage Act 2003*.

Mutee Head Ecolodge Tenure Solution

A key decision will need to be made regarding the overall commercial and corporate governance structure. Assuming that Mutee Head is established by a limited liability company (owned by the land owners and possibly an investor) the lease will need to be made to the Company.

As such the tenure solution requires that the corporate entity must be established before it can make application for the lease. The lease will need to be 30 years or more. It may be that the process of having financial plans and other aspects approved and Ministerial approval granted is worth a longer lease. To some extent this will depend upon preliminary discussion with financiers.

Given the above the solution is to work towards a lease of 30 years. However further consideration to the additional work towards getting a longer lease may be worthwhile.

The Lease rent is determined by the Land Trust, in this light and given the Land Trust may be a major equity partner or 100% owner of the "Mutee Head Ecolodge Company Limited" the rent could be a sliding scale. With minimal rent being charged for the first three to five years and then a scalable rent with a fixed portion and perhaps a percentage of turnover or profit.

Training

There are opportunities to deliver training and education associated with the Wilderness Lodge concept as developed for the Feasibility Study. These opportunities are at a number of levels. These are described under the headings:

- Show Case
- Training Venue
- Staff Development
- Traineeships

However for these opportunities to be implemented effectively, they need to be cognizant of the particular social, cultural, economic and historical environment in which they are to be delivered.

Environment

The experience for many Indigenous people of training on Cape York has been of gaining a qualification without the outcome of securing a job. Trainers also experience difficulty in translating written learning material into practical lessons that are meaningful to students given their level of education and/or life experience on which they can draw.

Students include those who have never had a 'mainstream' job and nor perhaps have their family members. In some communities it is not 'normal' to have a job.

In the case of the tourism industry, most will never have been tourists themselves in the usually understood sense.

It is therefore very difficult to build skills, without the background knowledge of what it is to have a job or what the industry is in which they are employed. Not understanding acceptable job performance standards and responsibilities and the standards of service and type of personal treatment a tourist might reasonable expect can be the result.

On the job training to fill a job, accompanied by mentoring, is seen as an answer to these issues.

In the case of the particular development proposed, there will be only some 8 full time equivalent positions available, including that of manager. This will tend to define the scope for on the job training available.

Firstly, to be successful, the Lodge must be able to maintain an acceptable standard of service. If the ratio of experienced staff to trainees is too high, service standards will suffer, firstly because experienced staff will be devoting too much time to on the job training and secondly because inexperienced trainees cannot be expected to deliver the standards required.

However, if the right balance can be struck and trainees are clearly identified as such to guests, it can be presented in such a way that guests are likely to be very supportive and forgiving of trainees.

The other limitation is the number of jobs that might be available elsewhere for graduates of whatever training might be provided. The Lodge itself has a limited number of jobs available, which need to be filled from the outset with mostly experienced personnel. There will be little or no expansion of the staff complement, so vacancies will be primarily to address staff turnover.

In immediate NPA area, there will be limited job vacancies in which the skills developed at the Lodge can be utilised. On the other hand, if a collaborative framework can be developed, the Lodge may serve as a training facility to lift the standards of other existing and proposed tourism services in the area.

An issue here will be that the Lodge would be training potential competitors' staff to compete more effectively with them. This will only be practical for as much as the competitors target different market segments and / or there is strong demand for accommodation in the area to the extent that competition for guests is minimal.

Beyond that jobs market, graduates of on the job training would need to leave the area to secure employment. This has been an issue in the past, with community members being very reluctant to leave their family and community in search of employment.

However, as a hub concept, the opportunity could be to establish a facility that draws on a training market beyond the immediate area to encompass Cape York as a whole. In that case graduate trainees would return to their area of origin hopefully with enhanced skill sets and levels of understanding, depending upon delivery methods adopted.

The following opportunity areas accordingly take into account the above environment.

Show Case

Provided the concept of the Lodge can be delivered to the standards proposed, it could provide an important show case for demonstrating how a successful wilderness lodge experience should be delivered.

This would contribute to meeting the need to increase the understanding of people and communities on Cape York with aspirations to enter the tourism industry, yet have little knowledge of the industry and may not have been a tourist themselves.

The objective would be to provide an informal education and training experience delivered during the tourism season. Due to the proposed scale of the operation, only very small groups would be possible, due to the need not to disrupt operations. If carefully presented, it is likely that guests would be supportive.

The experience would involve observation of operations, accompanied by explanation by staff engaged at the Lodge. This would extend to accompanying tours to observe and hear the commentaries.

Key benefits of this approach include:

- Cape York people demonstrating and explaining directly to Cape York people their experience of working in a professional tourism operation
- Delivery of the experience on Cape York itself, increasing the relevance and likely to reduce travel costs
- The practical nature of the delivery, not requiring translation by professional trainers to transmit the training messages

The qualification to this is that the Lodge is unlikely to have excess staff capacity during peak times and would be unlikely to be able to support sufficient capacity to provide this training unless supported by funding for training. This is perhaps with the exception of occasional visitors accompanying tour groups.

Training Venue

It is proposed that the Lodge be utilised as a training venue during the Wet season. It would be made available for hire as a residential training venue for whatever courses training providers may wish to present. This would contribute to offsetting the limitations of the short tourist season on Cape York. The isolation of the site from any community may also be seen as an advantage in maintaining attendance levels at courses offered.

The venue would also be available for agency led meetings and training sessions.

It would certainly present some particular advantages as a training venue for ranger training, environmental management, eco-tourism guide training, accommodation management and hospitality services.

This is due to the ability to provide practical training segments by utilization of the venue and the Lodge's usual operations.

For ranger training, environmental management and eco-tourism guide training, the practical segments would engage with the local rangers and the work they undertake. This would facilitate the translation of classroom presentations to practical applications, especially if it includes trainee interactions with local rangers.

For accommodation management and hospitality services training, role playing could be introduced for practical training sessions. Both trainees and some staff members could be enrolled to play the part of guests, with trainees in these areas undertaking staff functions. The interaction with and feedback from experienced staff would be very useful, but also the staff involved would gain the perspective of being a tourism guest, which could be used as a staff development tool.

The scope of training opportunities would include:

- Land and Sea Management Training – Certificates III and IV
- Tourism and Hospitality Training – Certificates III and IV
- Residential Care Courses – HACC and nursing staff

Currently, these and other courses require Cape York people to travel to Cairns for blocks of training. There are travel cost savings for training providers in conducting the training in blocks at the lodge. However equally importantly, the training would not require the mentoring and supervision often required of trainees visiting the unfamiliar and sometimes distracting environment of Cairns. Better training outcomes are therefore likely.

Staff Development

The Lodge will have only a small staff complement, with Full Time Equivalent jobs requiring performance of multi-functions. There should therefore be some ability to provide staff with experience in a variety of job functions and offer staff members more responsibility to provide personal growth opportunities, supported by more formal study courses.

The extent of funding support available will dictate the extent to which these activities can be undertaken.

However, regular staff meetings can be structured to provide enhanced on the job experience, by reviewing team performance, 'what went well', 'what did not go well', discussing suggestions for improvements and the inclusion of short training elements in the meetings.

Traineeships

As noted above, opportunities for inexperienced staff on site will be limited by the ability to provide adequate supervision while at the same time maintaining service standards. This is not a funding issue, except to the extent that support is available for the trainees.

At this early stage, it is considered that two trainees at any one time will be the capacity of the Lodge.

In addition, for a suitable candidate, there may be an opportunity for an 'understudy' position for the manager role. Preferably, this candidate would be drawn from Lodge staff, rather than from outside, to provide a staff development path.

The desired experience profile of the initial opening team will need to be determined. One option is to engage a team experienced with tourism (probably not locals thus reliably delivering quality tourism, but not achieving local employment). Alternatively, the ecolodge could be opened with one or two experienced tourism professionals and the other team members relatively unskilled local folk with limited tourism experience and trained "on the job".

There is of course the potential to establish a more significant training role for the Ecolodge, with say ten trainees engaged in a formal tourism training program (perhaps in association with a TAFE) and placed on site for ..say, six months at a time under the guidance of a training manager (integrated with the ecolodges management but not part of the hospitality management team.

One key part of training is the tour guiding aspects, and certainly the Ecolodge can develop tours and have a lead guide who trains other local guides, or as discussed above, the Ecolodge could develop a commercial relationship to involve Rangers as tour guides.

Social and Cultural Context

Tourism in the NPA

There are only a few tourism facilities in the NPA. There is little other hospitality employment and as such there is little local capacity. There is local interest in working in tourism, probably stronger interest for tour guiding than service roles in hospitality, but having said that there is a strong prospect of attracting local staff to the

Ranger Programme

The local Aboriginal ranger program could potentially have major role in the Mutee Head Ecolodge. They could, if suitable arrangements were made between the Ecolodge and NPARC be the guides, either on a placement/secondment arrangement where they work directly for the Ecolodge or there could be a commercial arrangement where the Ranger Program provides some of the tours on a contract basis to the Ecolodge.

By way of background, the following is a summary of the Ranger Program:[25]

> *The NPARC Ranger Programme is jointly run with Custodians of the land, The Apudthama Lands Trust, to manage our local natural resources. The area patrolled covers approx 250, 000 Ha, including 300km of coast line.*
>
> *The program currently employs 9 rangers who undertake activities including camp ground management, removal and recording of ghost nets, weed and fire management. The rangers also undertake pest management through sampling, collection, identification and removal and are responsible for the signage and fencing of culturally significant sites.*
>
> *The program has a strong focus on education, with regular school visits and the Junior Ranger Program to ensure a sustainable future for our natural resources. Program resource partners include The Australian Quarantine and Inspection Service (AQIS), Ghost Nets Australia, Customs and The Great Barrier Reef Marine Park Authority (GBRMPA).*
>
> *The Land Trust provides guidance from Traditional Owners about what is important for a healthy country. NPARC is the manager of the ranger programme and funding. NPARC has responsibility for contracts. The ranger programme is funded by Commonwealth (70%) and State Government (22%) and assisted by other funding sources, including fees for service (combined 8%).*

[25] http://www.nparc.qld.gov.au/web/guest/ranger-programme

Context

In scoping any ecotourism location assessment of the cultural and social context for the development will be an essential component. The notes below relate to the Injinoo community as for the purposes of the study, Mutee Head, north of the mouth of the Jardine River has been identified as being the most suitable location. The Mutee Head site is within the Injinoo community boundary and is under the control of the Apudthama Land Trust.

The information included here relies heavily on theses and publications by Greer and Fuary[26] and Simonsen[27]. Information was also gleaned from a number of web sites.

Prior to the arrival of white settlers in the mid 1860s the Aboriginal tribes were hunter gatherers, living in loose knit groups, connected by alliances, trade, marriage and confrontations, a complex network that extended across Cape York and into the Torres Strait. The different tribes shared a common language, with different dialects.

The failed attempt of the Queensland Government to establish a white settlement at Somerset on the Albany Passage in the 1860s, the establishment of the OTL telegraph stations, the establishment of missions and reserves and the trepan and pearling industries were the catalysts for change and conflict. All, particularly the pearling industry, had a detrimental impact on the Aboriginal groups. As evidence of the long term impact of the pearling industry on the north western Cape York communities, in 1898, the Aboriginal protector, Walter Roth wrote that Aborigines were '*being recruited principally from the western coast of Cape York Peninsula, along that tract of country known as the 'Seven Rivers' [i.e., the coast district between the Jardine River and the Batavia].* (Parry- Okeden 1898: 4 from Greer[28])

Around the turn of the century, the remnants of the semi-nomadic tribes who had survived the impact of white settlement and who occupied the northern areas of Cape York Peninsula, came together voluntarily and settled at the mouth of Cowal Creek.

An Aboriginal man, Alec Seven Rivers is said to have organised the Seven Rivers, McDonnell Rivers and Red Island people into a settlement at Cowal Creek (also known as 'Small River'), because of its proximity to cargo supplies at Red Island Point.

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[26] Greer, S and Fuary, M, 2008; Community Consultation and Collaborative Research in Cape York Peninsula, in Archaeological Heritage 2008

[27] Simonsen, M.R, 2005; Researching Indigenous Australians in Tourism, submitted for doctoral decree University of Victoria 2005.

[28] Greer and Fuary, 2008; *Op Cit*

Today, the Injinoo population comprises essentially the descendants of 5 main indigenous groups – the Wuthathi (from Shelburne and Margaret and Temple Bay), the Atambaya (from the Macdonald River country), the Yadhaigana (from land stretching from the north bank of the Escape River to Captain Billy), and the Anggumuthi (Seven Rivers country in which Mutee Head is located). Two other Aboriginal groups were also predecessors of today's Injinoo people, – the Unduyamo and the Gumakudin, however the descendants are unable to be traced today. It is not surprising then that the Injinoo community traditionally lays claim to virtually all the land that comprises the NPA.

Greer[29] reports that in the 1980s, community members offered the following classifications to describe three key pre-settlement Aboriginal or mainland groups:

1. 'Seven Rivers people' who occupied the land on the west coast of the Peninsula from the Dulhunty River north to somewhere between the Jardine River and the location of the present settlement,

2. 'McDonnell people' who occupied the central part of the Northern Peninsula from the Jardine River to the

3. 'Sandbeach people', comprising 'Whitesand', Cairncross-Somerset', and 'Red Island' peoples. Their land is Newcastle Bay to Cape York, continuing down the west coast to meet the Seven Rivers boundary. In addition, Cowal Creek community members recognised their strong historical and continuing connections with the Kaurareg, whose traditional land and sea territories focused on Muralag (Prince of Wales Island) and other islands immediately to the north in the Torres Strait.

By the late 1920s the Cowal Creek village was made up of Seven Rivers, McDonnell and Sandbeach people, and this was reflected in the village layout.

Greer[30] reports that border skirmishes appear to have occurred between Seven Rivers and Red Island people from time to time and there are accounts of at least one major fight occurring just south of the Jardine River, not long before European contact and settlement:

> *'That's where they used to fight. The Seven Rivers mob used to chase the Red Island mob back. The Red Island people couldn't go any further south than Ichera (Gel Point), and no further north or north-east than Somerset.* (S. Greer & M. Fuary interview with JT May 1987)

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29 *Ibid*
30 *Ibid*

According to Greer[31] the dynamics of the 'Old Village' were complex and in some ways followed pre-settlement patterns of enmity and alliance. For instance, McDonnell and Seven Rivers people maintained marriage links, whilst the enmity between Seven Rivers and Red Island people continued, the latter building their bark and palm-trunk houses on stilts with removable ladders, for fear of surprise attack (Greer, S & Fuary, M interview with MC May 1987).

Cowal Creek entered a new cultural and social phase in the 1920s and 1930s with the arrival of a teacher (Jomen Tamwoy) and an Anglican priest, (Francis Bowie) with their respective families from the Torres Strait.

Although self-sufficient, through fishing and gardening, the community made requests to the Anglican Church to establish a mission and school. Government officials allowed the community to function through an elected council. By 1919 the community was under control of the government with a body of men occupying the role of 'Councillors'.

The mission and school structure encouraged the adoption of Islander styles especially in gardening and village structure. This Torres Strait Islander influence and presence continues today, through the descendants of these people and through more recent immigration and marriage.

In the 1940s when the theatre of World War II encompassed New Guinea, Cape York and nearby Torres Strait became Australia's wartime frontline, and with the influx of American and Australian troops and their heavy machinery and artillery, local people retreated into the surrounding bush for security. At Cowal Creek, the three main groups established separate settlements, returning only for supplies. Many local men were involved in transportation of goods and services between the Torres Strait and the mainland

An Army/Airforce base was set up in the scrub adjacent to Jacky Jacky Creek while smaller installations of equipment and personnel were scattered throughout the area. Infrastructure to support the war effort, such as jetties and roads were constructed. The remains of aircraft and tent encampments can still be seen today near the current Bamaga airport. During World War II the No 52 Radar Station moved from Mascot in New South Wales to Townsville in north Queensland and finally to Mutee Head on Cape York in far north Queensland. No. 52 Radar Station was based at Mutee Head from 29 March 1943 until 29 September 1945. The Injinoo people in the Mutee Head area actively assisted with the war effort. They helped with the construction of facilities and in the water transport unit to New Guinea. The remnants of the radar and some installations can still be seen at Mutee Head and will be incorporated into the ecotourism resort design.[32]

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[31] *Ibid*
[32] http://www.ozatwar.com/raaf/52radar.htm

The establishment of the large airfield at Higgins Field (now Bamaga Airport) impacted greatly on the aboriginal community. Many of the community moved to bush camps to escape the soldiers who they were suspicious of, particularly the young women. Only the older people remained in the village. Many children worked as runners carrying messages from Mutee Head to the wharf at Mutee Head (Ukumba), to Higgins Field airfield, the hospital, and the communications base close to the tip.[33]

Over time the composition of the Injinoo population has changed. In the 1995 census, only 25% of the residents identified as being only of Aboriginal descent, while 34% identified as Torres Strait Islander and 39% as mixed Islander/Aboriginal descent, highlighting the long term intermarriage between the original inhabitants and the later arrivals from the Torres Strait.[34] After the Second World War, many Torres Strait Islanders began moving into Injinoo.

Between the late 1940s to the mid 1960s, four new settlements were established in the NPA area on Injinoo lands - Seisia and Bamaga established to accommodate Saibai Islanders relocated following a very high tide that impacted their home and two additional Aboriginal communities, Umagico (Lockhart River)and New Mapoon (displaced by the government from Mapoon near Weipa). These four new communities were issued Deeds of Grant in Trust (DOGITs) over their respective town areas in the mid 1980s, a move that angered the Injinoo community.

In the late 1940s the Queensland government established the Northern Peninsula Area (NPA) as an Aboriginal and Torres Strait Islander reserve following which numerous groups of Aboriginal and Torres Strait Islander people were relocated to this area under government programs.

The Queensland government made Bamaga the economic and political hub for the delivery of government programs to the region. Infrastructure such as a sawmill, brickworks, slaughterhouse, farm, baker, shops, post office, bank and government offices were all established there under the direction of government managers. On the NPA reserve each of the communities (Cowal Creek, Umagico, New Mapoon, Seisia and Bamaga) had their own council of elected members who met collectively on matters of common interest as the Combined NPA Council.

By the 1980s while people who claimed traditional affiliation with the NPA area through birthright and marriage could be found in almost all northern Cape York communities, Cowal Creek retained the historical and emblematic focus of the pre-colonisation groups, retaining their knowledge and practices.

33 *ibid*
34 Simonsen, M.R; *Op Cit*

Small River (Cowal Creek) settlement 1916 (Greer[35])

In the late 1980s, the State government introduced the Deeds of Grant in Trust (DOGIT) system which was a watershed in Indigenous land tenure arrangements in Queensland. In the 1990s, a raft of legal decisions and legislation fundamentally changed the socio-political landscape of the NPA.

By the 1990s, Cowal Creek had taken a leading role in negotiations for indigenous rights in the region. The name 'Injinoo' (a Seven Rivers name for the place on which the village was located) had been added and the Injinoo Lands Trust had been established. The latter had jurisdiction over 'cultural matters' such as consultation and comprised traditional owners from all the major groups. For instance, consultation would no longer be undertaken by the community council but rather by the Lands Trust[37].

As any development will probably require an ILUA, it should be noted that in 1992, Greer and Fuary were approached by the Injinoo Land Trust to organise a large body of data about the social history and composition of the community, including relationships of community members to each other and to country. They synthesised and critiqued the following:

- genealogical and land affiliation material documented in 1987,
- genealogical material gathered by Susan McIntyre-Tamwoy in 1991-1992
- additional material collected by Maureen Fuary at Injinoo (with the assistance of Margaret Genever) in 1992 and
- published and archival materials.

The report was finalised to the satisfaction of the Land Trust. If the Mutee Head development proceeds, the Land Trust has available the detailed documentation of the relationships of particular Injinoo people to each other, and to particular areas of country.

Market Analysis

Product Capacity and Sustainability

Small River (Cowal Creek) settlement 1916 (Greer[36])

The product capacity initially is proposed as 20 rooms (12 cabins and 8 lodges. The potential exists for growth to around 30 rooms in total. This may include a few more cabins and additional lodges. In terms of site layout, additional cabins should be behind the initially proposed ones, on the hill slope and further lodges to the west around Mutee Head.

As such the approvals and planning for some key infrastructure (e.g. the required bore flow rates etc.) should be based on a total capacity of 30 rooms, which would require up to 20 staff.

[35] *Ibid*
[36] *Ibid*

[37] Greer, S and Fuary, M, 2008;*Op Cit*

SWOT Analysis

Strengths	Strategic Implications	Possible Responses
Location & access to the site	▪ Provides an ability to attract patronage of Cape York tour companies ▪ Increases ability to attract fly in fly out guests (through Bamaga airport with daily services to and from Cairns) ▪ Provides the opportunity to extend the season with airport access ▪ Increases the pool of local labour available & potentially stability in the labour force ▪ Provides an opportunity to extend the season through use of the facility for training & meetings ▪ Provides the opportunity to attract fishing parties during the low season ▪ Increases ability to access supplies, spare parts & repair services (through Bamaga itself & airport connections) ▪ Provides day trip opportunities for visitors to popular & well-known destinations in the area ▪ Provides an ability to link marketing with other high profile / well known destinations ▪ Increases the possibility of providing a direct ferry service to TI - a highly popular activity with visitors to the NPA	▪ Early engagement with Cape York Tour companies in project planning & development ▪ Include fly in fly out, training segments and fishing parties in marketing strategies ▪ Discuss needs with targets for meeting & training functions ▪ Negotiate arrangements with fishing charter operators ▪ Review source of reliable repair & maintenance services ▪ Negotiate site as departure point for ferry service to TI ▪ Engage with other operators / attractions to develop collaborative marketing ▪ Include day trips in marketing
Beautiful site in a pristine wilderness environment	▪ Provides THE key attraction for major target markets, ranking above accommodation amenity ▪ Enhances ability to effective market the Lodge	▪ Professional high quality photography and videos in marketing collateral ▪ Professional marketing word pictures ▪ Evocative, memorable name for the Lodge

Strengths	Strategic Implications	Possible Responses
Proposed accommodation standard	▪ Increases ability to attract key target markets ▪ Differentiates the Lodge from existing accommodation in the area ▪ Meets market research indications of unmet demand	▪ Pitch marketing as comfortable accommodation in a stunning setting
Potential to deliver a diversity of experiences	▪ Increases ability to attract longer stay visitors (more than one night) ▪ Increases ability to differentiate visitor experience from existing and potential competition ▪ Increases ability to attract return visitors	▪ Marketing targeted at suitable segments / demographics ▪ Develop packages around experiences
Strong interest expressed by Traditional Owners, who are the Landowners	▪ Increases potential to build authentic, meaningful, personal cultural experiences – key attractants for major target markets ▪ Likely to increase the likelihood of securing appropriate tenure arrangements ▪ Likely to reduce the time and difficulty involved in securing appropriate tenure arrangements ▪ May increase ability to access programs & funding to support project development	▪ Early & ongoing engagement with Traditional Owners ▪ Clearly identify TO's needs and aspirations ▪ Build understanding of the tourism industry & its requirements ▪ Provide selected TO's with direct experience of tourism
Existing Ranger Program with 9 Rangers	▪ Increases potential to build authentic, meaningful, personal cultural experiences – key attractants for major target markets ▪ Likely to increase ability to gain eco-certification ▪ Provides potential to provide conservation volunteer experiences for guests ▪ Likely to increase ability to access areas of interest (e.g.: turtle nesting grounds) ▪ Provides a pool of existing knowledge & skills ▪ Reduces the need for a stable workforce, pressure on individual rangers & likelihood of burnout	▪ Early & ongoing engagement ▪ Clearly identify individual needs, aspirations, level of interest & capacities ▪ Build understanding of the tourism industry & its requirements ▪ Provide selected Rangers with direct experience of tourism

Strengths	Strategic Implications	Possible Responses
Concept supports existing Tourism development strategies for Cape York	▪ Likely to increase support for the project & facilitate gaining the necessary approvals ▪ Likely to increase the profile of the project & attention attracted from tourism bodies	▪ Engage with Tourism Queensland & TTNQ ▪ Refer to strategies in business case for investment / funding support
Concept has a track record of success in the NT & WA	▪ Likely to increase ability to attract investment / project proponents ▪ Reduces apparent project risk ▪ Increases competition & the need to differentiate from NT & WA attractions ▪ May provide an opportunity for joint marketing with other properties	▪ Further research NT & WA key success factors ▪ Investigate collaborative marketing

Weaknesses	Strategic Implications	Possible Responses
Site constraints on scale of development	▪ Reduces ability to gain efficiencies from operational scale ▪ Limits ability to expand with increases in market demand ▪ Increases need for high yields from each accommodation unit ▪ Decreases ability to support training activities from revenues ▪ Increases the need for high staff productivity & close management of operational costs ▪ Emphasises the need to provide a superior guest experience	▪ Develop high quality activities to increase yields ▪ Utilise assets during shoulder & ‘closed’ seasons ▪ Secure funding support for training activities ▪ Recruit high quality professional management
Process required to secure tenure / lease	▪ Increases the development costs of the project, rendering it a less attractive investment ▪ Requires a significant lead time, so reducing the attractiveness of the project for an investor ▪ Produces uncertainty for an investor, so reducing attractiveness of the project for an investor ▪ Significantly increases risk for an investor, who may spend significant time and money to find the project tendered out at the end of the process	▪ Secure support to progress the process before investment sought ▪ Present the project to IBA and / or ILC as to its wider benefits for Cape York people

Weaknesses	Strategic Implications	Possible Responses
Lack of local staff with sufficient hospitality / tourism skills	▪ Increases the need for key staff with good skills in supervision, training & understanding of local people ▪ Increases the difficulty of delivering & maintaining professional service standards ▪ Increases the difficulty of building reputation with target markets	▪ Recruit high quality professional management ▪ Secure onsite training programs prior to opening ▪ Clearly stated & communicated job descriptions & standards
Limited tourism season	▪ Increases the need for high occupancy rates during the season ▪ Increases the need to build markets in 'shoulder' and 'closed' seasons	▪ Significant marketing budget & effort ▪ Attention to in 'shoulder' and 'closed' season market targets
Remote location	▪ Increases operational costs ▪ Likely to increase establishment costs ▪ Increases risk of disruption to operations due to breakdowns	▪ Include backup systems in design ▪ Maintain quality standards in installation standards & level of equipment installed ▪ Comprehensive preventative maintenance program established & maintained ▪ Thorough research & engagement with chosen repair services

Opportunities	Strategic Implications	Possible Responses
Potential to offer diverse, multiple experience	▪ Increases ability to increase average length of stay ▪ Broadens appeal to more target markets ▪ Provides more depth to marketing messages	▪ Packaging & marketing
Attainment of eco-certification	▪ Increases the authenticity of the experience ▪ Increases appeal to 'ethical ' consumer segments	▪ Seek certification
Engagement with Rangers	▪ Likely to enable delivery of a combined cultural, conservation and eco experience ▪ Differentiates product offering ▪ Provides a key experience sought by target markets – personal interaction with Indigenous people	▪ Early & ongoing engagement ▪ Clearly identify individual needs, aspirations, level of interest & capacities ▪ Build understanding of the tourism industry & its requirements ▪ Provide selected Rangers with direct experience of tourism
Achievement of reputation as a 'must do' Cape York experience	▪ Likely to increase occupancy levels ▪ Likely to increase ability to charge premium rates ▪ Increases yields on investment & likely profitability levels ▪ Increases staff morale, pride & commitment ▪ Reduces the weaknesses flowing from the short tourist season ▪ May provide opportunities for future expansion ▪ Increases the need for superior performance in product / experience delivery	▪ Recruitment of staff with good interpersonal skills ▪ Careful attention to design & delivery of experiences perceived as authentic, meaningful and rewarding for target markets ▪ Ongoing monitoring of product delivery and comparative experiences offered by competitors ▪ Allocation of resources & development of systems & feedback mechanisms to stimulate & motivate staff ▪ Ongoing monitoring of markets for changing trends
Engagement with Apudthama land owners and NPA community generally	▪ Provides a key experience sought by target markets – personal interaction with Indigenous people ▪ Increases authenticity of experiences offered	▪ Early & ongoing engagement with Traditional Owners ▪ Clearly identify TO's needs and aspirations ▪ Build understanding of the tourism industry & its requirements ▪ Provide selected TO's with direct experience of tourism
Involvement of Apudthama land owners in ownership structure	▪ Likely to increase level of engagement ▪ Likely to attract investment funds	▪ Early & ongoing engagement with Traditional Owners ▪ Clearly identify TO's needs and aspirations

Opportunities	Strategic Implications	Possible Responses
Utilisation of the Lodge as a training & meeting venue	▪ Increases spread of open season & utilisation of asset ▪ Indicates a need to access group transport capable of access during the wet season	▪ Research target markets, discuss needs & market engagement
Attraction of funding for training programs	▪ Increases appeal and likely level of engagement with Apudthama land owners and NPA community ▪ Increase ability to sustain staffing levels ▪ Likely to increase ability to sustain professional service standards	▪ Identify specific needs & nature of programs required ▪ Research programs available ▪ Seek funding support
Attraction of support from programs & investment initiatives targeted at support for Aboriginal & Torres Strait Islander people	▪ Contributes to project viability ▪ Increases ability to engage with Apudthama land owners	▪ Engagement with Apudthama land owners ▪ Research programs available ▪ Seek funding support
Ferry service to TI direct from the Lodge	▪ Provides a service sought by most visitors to the NPA area ▪ Increases appeal & ability to increase average length of stay	▪ Discussion & negotiation with ferry service provider ▪ Inclusion in marketing collateral

Threats	Strategic Implications	Possible Responses
Lack of sustained interest from Apudthama people and / or Rangers	▪ Limits ability to deliver key experiences to attract target markets ▪ May significantly reduce viability	▪ Early & ongoing engagement with Traditional Owners ▪ Clearly identify TO's needs and aspirations ▪ Build understanding of the tourism industry & its requirements ▪ Provide selected TO's with direct experience of tourism
Poor management and / or governance	▪ Increases risk of project failure	▪ Recruit high quality professional management ▪ Develop a quality, informed Board of Management ▪ Professional governance structures & systems
High turnover in experienced staff	▪ Likely to reduce service standards and detract from reputation ▪ Increases staffing costs	▪ Periodically review individual needs with staff members ▪ Put in place HR policies to support staff retention ▪ Establish packages to meet individual needs to the extent practicable ▪ Develop a pool of local casual labour with experience
Significant & sustained fuel price increases	▪ Likely to reduce number of FIT travellers on long haul journeys ▪ May possibly increase appeal of tour group travel ▪ Alternatively may increase airfares, making fuel efficient vehicle journeys attractive	▪ Monitor trends ▪ Adjust marketing focus
Continuing high Australian dollar	▪ Likely to adversely impact number of international visitors ▪ Likely to reduce numbers of Australians choosing domestic holidays for long breaks	▪ Target short break fly in fly out domestic market segments
Economic recession in one or more international target markets	▪ Likely to adversely impact number of international visitors	▪ Target short break fly in fly out domestic market segments ▪ Monitor trends ▪ Adjust marketing focus
Inability to secure appropriate tenure and	▪ Project failure	▪ Development of high quality quadruple bottom line business case

Threats	Strategic Implications	Possible Responses
approvals to operate on the site		▪ Engagement with Apudthama land owners
Lodge is in a cyclone zone	▪ Likely to increase insurance costs ▪ May disrupt shoulder & 'closed season' operations	▪ Close attention to standards of design & construction ▪ Cyclone rated structure for staff & guests ▪ Evacuation procedures in place & practiced

Risk Management

While a full business risk management assessment is premature at this pre-feasibility stage, CYSF has endeavoured to pinpoint areas that will need addressing in management strategies for a future eco-lodge development. From the case studies assessed, lessons can be learnt from previous mistakes made and from the successful enterprises operating in remote northern Australia today.

The following considerations are divided into 2 sections, the first dealing with obtaining the lease and land tenure approvals, without which the project cannot proceed anyway. The second deals with matters that may arise once the development is in place.

Pre Land Tenure And Lease Approval

Risk – what can happen	Management strategies
Inability to secure investment due to uncertainty as to ability to secure appropriate approvals & tenure to develop the site (***Note:*** *This and the following are in effect pre-conditions to enable the project to proceed)*	Investigate likely sources of funding support Appeal to benevolent funding source for donation of the necessary funds based on 'Closing the Gap' principals. Apply for government funding support based on 'Closing the Gap' principals. Engage with the Apudthama Land Trust to seek funding in collaboration. Consider mixed funding sources as above. Consider the terms of the funding as being in the nature of a loan, to be repaid by the entity providing the capital for project development.
Failure to secure appropriate approvals & tenure to develop the site (*see Note above*)	Brief political representatives on the objectives and wider benefits of the project. Hold preliminary meetings with stakeholders concerned to discuss their needs and requirements against the project proposal. Appoint appropriately qualified professionals to pursue the processes concerned. Work collaboratively with the Traditional Owners

Post Land Tenure and Lease Approval.

Risk – what can happen	Likelihood	Management strategies
Loss of reputation due to poor service delivery	medium	Recruit & retain high quality professional management Recruitment of staff with good interpersonal skills Set service standards, monitor & follow-up Implementation of strategies to address staff burnout Ongoing staff training, feedback & review sessions Follow up surveys of guest experiences Policy & strategy for dealing with complaints Ongoing engagement with Rangers & facilitation of their understanding of tourism Development of a pool of experienced local casual staff to draw from
Failure to secure appropriate approvals to access areas for tour experiences	low	Hold preliminary meetings with stakeholders concerned to discuss their needs and requirements against the project proposal Appoint appropriately qualified professionals to pursue the processes concerned Work collaboratively with the Traditional Owners
Inability to sustain delivery of a quality Indigenous experience	medium	Early & ongoing engagement with Traditional Owners & Rangers Clearly identify TO's & Rangers needs and aspirations Build understanding of the tourism industry & its requirements Provide selected TO's & Rangers with direct experience of tourism Maintain a pool of people able to deliver quality Indigenous experiences Provide incentives & reward for superior performance linked to personal aspirations & needs

Breakdown in relationship with the Apudthama Land Trust	low	Early & ongoing engagement with Traditional Owners Clearly identify TO's needs and aspirations Build understanding of the tourism industry & its requirements Clearly define all parties roles, responsibilities & demarcations in a document clearly understood by all parties
Significant periods of loss of power or other key infrastructure services due to breakdown	Low – med	Ensure all support infrastructure elements installed are of high quality, with specifications matched to the demands of the environment Build backup systems into the design Research the best available support services Design & implement procedures to follow in the case of breakdown Document and adhere to a quality preventative maintenance schedule
Reduced market due to significant escalations in travel costs (fuel / airfares / exchange rates)	Low-med	Spread the risk across diverse market segments
Loss of market share due to competitor upgrade / expansion and / or new competitor entering the market	Low-med	Continuing quality marketing Linking with partners in the tourism marketing & distribution systems Maintenance of quality service standards & delivery of superior guest experiences
Serious cyclone damage	low	Appropriate design& construction standards A disaster recovery plan in place Appropriate protective strategies in place & implemented during cyclone season

Significant reduction or loss of air services into Bamaga	low	Collaborative marketing & packaging with air services

Financial Model

Model Description

This feasibility level financial model has been prepared for Cape York Sustainable Futures. It has been developed to determine whether a 20 cabins ecotourism resort located a Mutee Head is a viable investment. The model provides a profit and loss and cash flow statement for a six year period from the commencement of operations.

In addition to the financial statements the following graphs have been developed to summarise the results of the model:

- Net Profit After Tax
- Net Cash flows from Operating Activities
- Net Cash Position

Key Assumptions

The financial model is based on a number of assumptions which can significantly change the results of the model. Information about these assumptions was obtained from the following sources:

EcoSustainAbility provided information about construction of hard and soft infrastructure and operation of hard infrastructure.

Both by Kleinhardt Business Consultants together with the Cape York Sustainable Futures provided information about the other operational assumptions.

A summary of key assumptions impacting the model include:

Revenue Assumptions

The resort will contain 20 cabins (12 standard cabins and 8 luxury cabins)

Average room occupancy has been estimated in each year:

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Av Room Occupancy	20%	35%	50%	50%	50%	50%

It has been assumed that on average two people will be staying in each room.

The types of visitors frequenting the resort has been estimated in each year:

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
% FIT Pax	90%	55%	35%	35%	35%	35%
% Tour Group Pax	10%	30%	35%	35%	35%	35%
% Fly In Pax	0%	10%	20%	20%	20%	20%
% Wet Season / Training Pax	0%	5%	10%	10%	10%	10%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

The majority of visitation will occur during the dry season between April and October.

Both prices and costs will increase by 3% each year.

Average prices have been set as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Accommodation	$280	$288	$297	$306	$315	$325
Food	$75	$77	$80	$82	$84	$87
Beverage	$15	$15	$16	$16	$17	$17
Tours	$100	$103	$106	$109	$113	$116

The propensity to spend of each type of visitor has been estimated:

	FIT Pax	Tour Group Pax	Fly In Pax	Wet Season / Training Pax
Av. No. of Nights	1	2	3	3
% of Accommodation	100.00%	85.00%	100.00%	90.00%
% of Food & Beverage Spend	85.00%	95.00%	100.00%	100.00%
Av. No of Tours	0.5	1	2	0
% of Tour Spend	100.00%	85.00%	100.00%	0.00%

A $300,000 grant will be received to obtain the initial approvals.

Expense Assumptions

The following number of Full Time Equivalents will be employed in the resort each year:

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Total FTE's	5.2	7.05	8.2	8.2	8.2	8.2
Lodge Manager						
No. FTE's	1.2	1.2	1.2	1.2	1.2	1.2
Hourly Rate	$33	$34	$35	$36	$37	$38
Receiption / Administration / Bookkeeper						
No. FTE's	0.75	1	1	1	1	1
Hourly Rate	$20	$21	$21	$22	$23	$23
Chef						
No. FTE's	0.5	0.9	1	1	1	1
Hourly Rate	$33	$34	$35	$36	$37	$38
Kitchen Hand / Wait Staff						
No. FTE's	1	1.2	1.5	1.5	1.5	1.5
Hourly Rate	$18	$19	$19	$20	$20	$21
Tour Guides / Maintenance						
No. FTE's	0.75	1.5	2	2	2	2
Hourly Rate	$23	$24	$24	$25	$26	$27
Cleaner						
No. FTE's	1	1.25	1.5	1.5	1.5	1.5
Hourly Rate	$18	$19	$19	$20	$20	$21

Due to the remoteness of the resort board of $40 per day has been factored into the model for each staff member.

Margins on tours and food and beverage are assumed to be 70% and 65% respectively.

Maintenance expenses have been calculated as 2% of capital.

The resort will require five vehicles costing a total of $23,400 per year including lease repayments.

It is assumed the resort will have a $150,000 overdraft for the six year period and interest will be paid at 10.79% on the facility.

Depreciation expense is 4% on hard infrastructure and 8% on soft infrastructure.

There will be a $10,000 annual lease payment.

Electricity costs have been estimated at $110,000 per year. There has been no estimate for gas costs included in the model.

Insurance costs are assumed to be $50,000 per year.

Marketing costs are estimated to be $70,000 in the first year and $50,000 each subsequent year.

Income Tax has been calculated on net profit at 30%.

Goods and Services Tax of 10% has been factored into the model.

Assets

It is estimated that hard infrastructure will cost $2,222,450, soft infrastructure will cost $512,500 and establishment costs to get the initial approvals will cost $300,000 totalling $3,034,950.

Liabilities

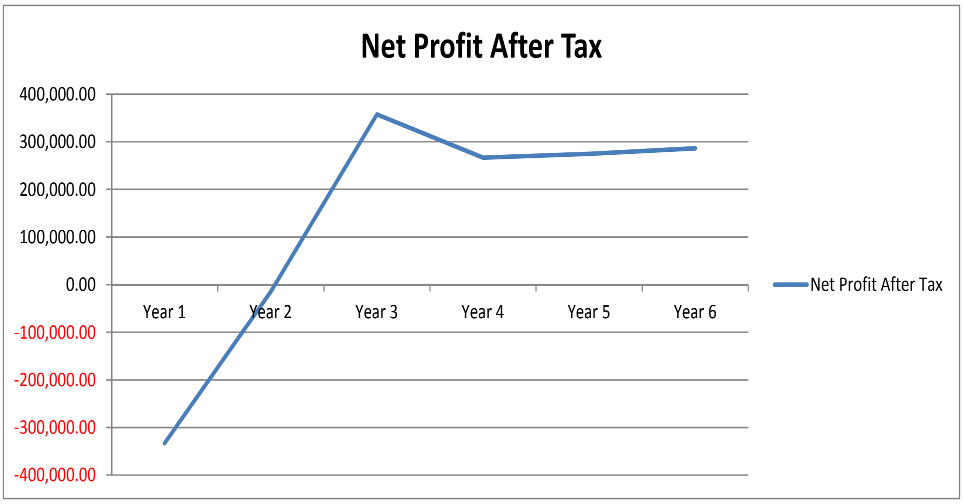
It is assumed that the infrastructure costs are funded through an equity injection, therefore the only debt financing is the $150,000 overdraft.

Equity

An equity injection of $2,734,950 has been provided to fund the infrastructure costs.

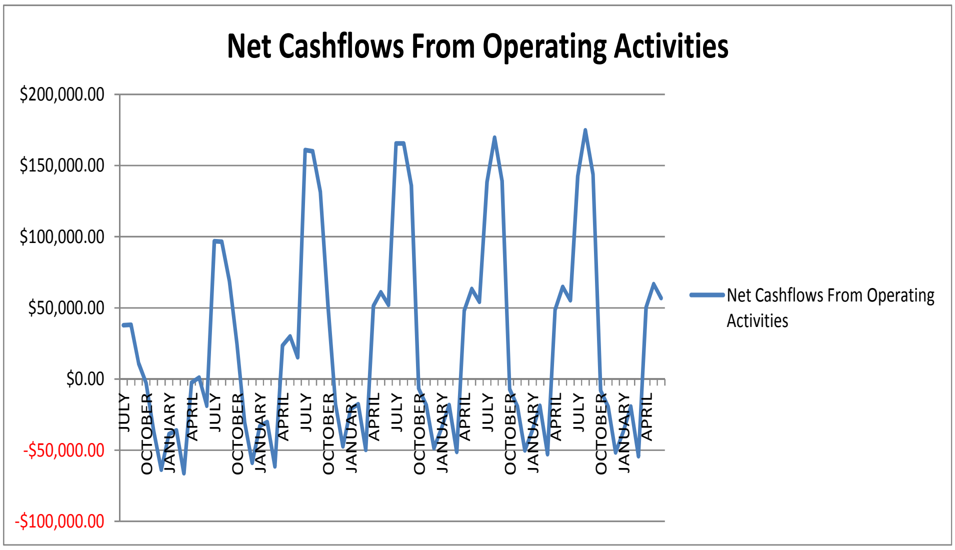
Summary of Results

The results of the financial model based on the stated assumptions indicate the following (see Table 14 for detailed financial statements):



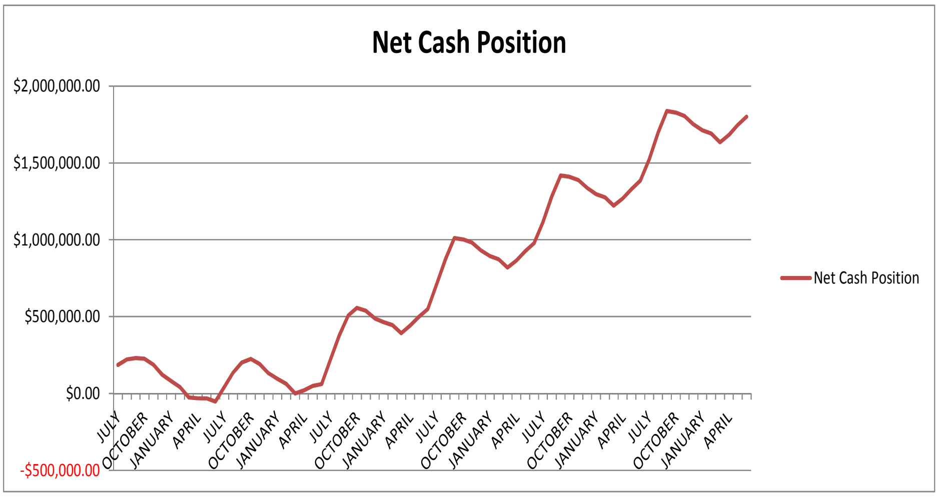
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Net Profit After Tax	-332,789.95	-14,787.32	357,095.77	266,578.39	274,621.37	286,065.60

Net profit after tax will be negative for the first two years, become positive in year three and levels out in years four to six. This reflects that in the first three years guest numbers will increase and then stabilise in years four to six. The reason why the net profit in year three is higher than in year four is because of the impact of the accumulated tax losses in years one and two inflating the profit in year three.



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Net Cashflows from Operating Activities	-$176,706.95	$141,595.68	$514,943.54	$454,801.27	$432,936.67	$445,130.94

Net Cash flows from Operating Activities graph reflects the seasonality of demand for the resort. Operating cash flows are negative in the first year, become increasingly positive in years two and three and then level out in years four, five and six. The reason why net cash flows from operating activities in year three are higher than in year four is because of the impact of the accumulated tax losses in years one and two reducing income tax expense in year three.



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Net Cash Position	-$52,891.95	$62,218.72	$550,368.27	$978,057.27	$1,383,553.85	$1,800,907.05

Based on the operating, investing and financing assumptions the resort will need an additional $53,000 working capital in the first year of operation. However, from year two the resort should be able to sustain itself and maintain an increasingly positive net cash position.

The average net profit before tax return on investment based on the current assumptions is 6.56%. The return on investment for each of the periods modelled has been shown in the table.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Return on Investment	-10.97%	-0.49%	11.90%	12.55%	12.93%	13.47%

Modelling was also completed in order to determine the breakeven rack rate and the rack rate at which a 15% before tax return on investment is achieved. These rates have been calculated as at year four, because year four is when the growth in guest numbers is expected to level out.

	Rack Rate
Breakeven	$169.00
Before Tax Return on Investment of 15%	$302.00

Conclusion

Considering the stated assumptions and the high-level analysis completed it can be concluded that the proposed ecotourism resort at Mutee Head has potential to be a financially sustainable investment.

However, it is important to understand that that the financial analysis in this study has been completed at a feasibility level. Therefore, there is a significant risk that the assumptions will change as the project develops. If the project is pursued it is recommended that the financial model is updated and more detail financial modelling is undertaken once more information is known about each assumption.

Table 14: Financial Statements

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
CAPE YORK SUSTAINABLE FUTURES						
FORECAST FINANCIAL MODEL						
PROFIT & LOSS STATEMENT						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Operating Revenue						
Accommodation	$367,495	$638,754	$927,339	$957,776	$983,814	$1,013,328
Food	$171,889	$325,070	$492,792	$508,966	$522,803	$538,487
Beverage	$34,378	$65,014	$98,558	$101,793	$104,561	$107,697
Tours	$131,359	$225,116	$323,131	$333,952	$342,810	$353,094
Total Operating Revenue	**$705,120**	**$1,253,954**	**$1,841,820**	**$1,902,488**	**$1,953,987**	**$2,012,606**
Operating Expenses						
Employee Expenses	$358,493	$498,975	$591,329	$609,427	$627,341	$646,161
Tour Expenses	$39,408	$67,535	$96,939	$100,186	$102,843	$105,928
Food & Beverage Expenses	$72,193	$136,529	$206,973	$213,766	$219,577	$226,165
Accommodation Expenses (Laundry)	$8,796	$15,858	$23,323	$24,082	$24,743	$25,485
Maintenance Expense	$54,699	$56,340	$57,981	$59,622	$61,263	$62,904
Motor Vehicle Expense	$117,000	$120,510	$124,125	$127,849	$131,685	$135,635
Total Operating Expenses	**$650,589**	**$895,748**	**$1,100,670**	**$1,134,931**	**$1,167,452**	**$1,202,278**
Gross Profit	**$54,532**	**$358,207**	**$741,150**	**$767,556**	**$786,535**	**$810,328**
Gross Profit Margin	8%	29%	40%	40%	40%	40%
Other Revenue						
Grant Revenue	**$300,000**	**$0**	**$0**	**$0**	**$0**	**$0**
Other Expenses						
Establishment Expenses	$300,000	$0	$0	$0	$0	$0
Interest Expense	$16,185	$16,185	$16,185	$16,185	$16,185	$16,185
Lease Expense	$10,000	$10,300	$10,609	$10,927	$11,255	$11,593
Depreciation	$129,898	$129,898	$129,898	$129,898	$129,898	$129,898
Utilities	$110,000	$113,300	$116,699	$120,200	$123,806	$127,520
Rates	$0	$0	$0	$0	$0	$0
Insurance	$50,000	$51,500	$53,045	$54,636	$56,275	$57,964
Marketing	$70,000	$50,000	$51,500	$53,045	$54,636	$56,275
Total Other Expenses	**$686,083**	**$371,183**	**$377,936**	**$384,892**	**$392,056**	**$399,435**
Net Profit	**($332,790)**	**($14,787)**	**$361,175**	**$380,826**	**$392,316**	**$408,665**
Net Profit Margin	-47%	-1%	20%	20%	20%	20%
Less Income Tax Expense	$0	$0	$4,079	$114,248	$117,695	$122,600
Net Profit After Income Tax	**($332,790)**	**($14,787)**	**$357,096**	**$266,578**	**$274,621**	**$286,066**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
CAPE YORK SUSTAINABLE FUTURES						
FORECAST FINANCIAL MODEL						
CASHFLOW STATEMENT						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Cash Inflows from Operating Activities						
Accommodation	$367,495	$638,754	$927,339	$957,776	$983,814	$1,013,328
Food & Beverage	$171,889	$325,070	$492,792	$508,966	$522,803	$538,487
Beverage	$34,378	$65,014	$98,558	$101,793	$104,561	$107,697
Tours	$131,359	$225,116	$323,131	$333,952	$342,810	$353,094
GST Collected	$70,512	$125,395	$184,182	$190,249	$195,399	$201,261
Total Cash Inflows from Operating Activities	**$775,632**	**$1,379,350**	**$2,026,002**	**$2,092,736**	**$2,149,385**	**$2,213,867**
Cash Outflows from Operating Activities						
Employee Expenses	$359,731	$500,780	$593,349	$611,292	$629,484	$648,368
Tour Expenses	$39,408	$67,535	$96,939	$100,186	$102,843	$105,928
Food & Beverage Expenses	$72,193	$136,529	$206,973	$213,766	$219,577	$226,165
Accommodation Expenses (Laundry)	$8,796	$15,864	$23,342	$24,055	$24,763	$25,506
Maintenance Expense	$54,699	$56,340	$57,981	$59,622	$61,263	$62,904
Motor Vehicle Expense	$117,000	$120,510	$124,125	$127,849	$131,685	$135,635
Utilities	$110,000	$113,300	$116,699	$120,200	$123,806	$127,520
Rates	$0	$0	$0	$0	$0	$0
Insurance	$50,000	$51,500	$53,045	$54,636	$56,275	$57,964
Marketing	$70,000	$50,000	$51,500	$53,045	$54,636	$56,275
GST Paid	$59,921	$71,932	$85,969	$88,646	$91,180	$93,895
GST Remitted to the ATO	$10,591	$53,464	$98,213	$101,603	$104,219	$107,365
Income Tax	$0	$0	$2,924	$83,035	$116,718	$121,210
Total Cash Outflows from Operating Activities	**$952,339**	**$1,237,754**	**$1,511,058**	**$1,637,935**	**$1,716,449**	**$1,768,736**
Net Cashflows from Operating Activities	**($176,707)**	**$141,596**	**$514,944**	**$454,801**	**$432,937**	**$445,131**
Cash Outflows from Investing Activities						
Purchase of Hard Infrastructure	($2,222,450)	$0	$0	$0	$0	$0
Purchase of Soft Infrastructure	($512,500)	$0	$0	$0	$0	$0
Establishment Expenses	($300,000)	$0	$0	$0	$0	$0
Total Cashflows from Investing Activities	**($3,034,950)**	**$0**	**$0**	**$0**	**$0**	**$0**
Cash Inflows from Financing Activities						
Loan Proceeds	$0	$0	$0	$0	$0	$0
Grants	$300,000	$0	$0	$0	$0	$0
Overdraft	$150,000	$0	$0	$0	$0	$0
Equity Injections	$2,734,950	$0	$0	$0	$0	$0
Total Cash Inflows from Financing Activities	**$3,184,950**	**$0**	**$0**	**$0**	**$0**	**$0**
Cash Outflows from Financing Activities						
Lease Payments	$10,000	$10,300	$10,609	$10,927	$11,255	$11,593
Overdraft Interest	$16,185	$16,185	$16,185	$16,185	$16,185	$16,185
Loan Repayments	$0	$0	$0	$0	$0	$0
Total Cash Outflows from Financing Activities	$26,185	$26,485	$26,794	$27,112	$27,440	$27,778
Total Cashflows from Financing Activities	**$3,158,765**	**($26,485)**	**($26,794)**	**($27,112)**	**($27,440)**	**($27,778)**
Net Increase / Decrease in Cash	($52,892)	$115,111	$488,150	$427,689	$405,497	$417,353
Cash at the Beginning of the year	$0	**($52,892)**	**$62,219**	**$550,368**	**$978,057**	**$1,383,554**
Cash at the End of the year	**($52,892)**	**$62,219**	**$550,368**	**$978,057**	**$1,383,554**	**$1,800,907**

Mutee Head – Next Steps

Achieving the Vision

There are numerous key steps to facilitating the project. These involve:

- Planning and project scoping
- Corporate model and finance options
- Tenure
- Approvals
- Design and Project management
- Ecolodge Management Establishment

The following is not a detailed discussion but rather dot points of aspects and tasks for future steps.

Planning and Project Scoping

- Confirm feasibility of site layout with planning constraints (pre-lodgement discussions with agencies)
- Confirm key engineering/infrastructure aspects power supply (Ergon powerline or onsite generation) and water (ground water bore/desalinator etc.)
- Discuss concept with key tour operators and input their comments to scope.
- Discuss concept with key adventure travel/ecotourism wholesalers and input their comments to scope.

Corporate model and finance options

- Further evaluate corporate model and likelihood of independent developer option.
- Review corporate finance options.
- Identify likelihood of grant funding for training or land trust initiatives to be embedded within project.
- Discuss project concept with ILC and IBA
- Discuss project concept with commercial banks
- Discuss project concept with ecolodge management/development companies.
- Discuss project concept with potential investors
- Land trust creates Company/Corporation (if model chosen)
- Consider seeking expression of interest for commercial partners/private equity finance.

Tenure

- Start lease creation process.
- Work with land trust in expression of interest, CATL process.
- Survey
- Develop lease consideration options, lease rental, equity growth and terms ownership models.
- Undertake relevant Sustainable Planning Act approvals as part of lease settlement process.

Approvals

- Ensure appropriate licences and access can be gained for tours (e.g. river cruises on Jardine, Crab island, Tip tour etc. etc).
- Identify and develop process and critical path for environmental and planning applications.
- Finalise infrastructure approaches (e.g. pipeline/bore for water powerlines, desalinator requirements) and determine approvals needed.
- Indentify terms of reference for required environmental or engineering studies.
- Undertake studies, lodge approval applications, provide any further information and negotiate conditions.

Design and Project Management

- Taking into account needs of potential partners, feedback from tour operators, wholesalers, and community/land owner consultation and conditions of lease and approvals undertake detailed design.
- Develop documentation and if kit/prefabricated buildings work with manufacturers for design/documentation and site works etc.
- Appoint project manager/construction contractor etc.
- Undertake procurement of infrastructure items and develop critical path for construction program and progress expenditure.

Ecolodge Management Establishment

- Identify key staff and/or management company arrangements. Ideally have potential manager or management company have input to final design aspects.

Understanding Risks and Security

One important aspect with the Mutee Head Ecolodge proposal is that there is very little security or certainty for an investor until the lease is established and key environmental approvals are confirmed. As such there is much work to be undertaken and/or money required to progress the project without any security being able to be offered (other than a memorandum of first option type offer by the Land Trust) until a lease is established.

It is likely that some form of seed funding/grant will be require to progress this project to the point where it is “bankable”.