



CAPE YORK SUSTAINABLE FUTURES

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A JOURNEY OF DISCOVERY

The Overland Telegraph Line through Cape York Peninsula

CYSF

June 2011



Final Report to DEEDI on the QRDI project: Overland Telegraph Line Tourism Drive. OTL Infrastructure Requirements: Bush Camp Sites and Interpretive Signage



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Acronyms

CYSF	Cape York Sustainable Futures
DEEDI	Dept of Employment, Economic Development and Innovation
MOU	Memorandum of Understanding
NPA	Northern Peninsula Area
OTL	Overland Telegraph line
PDR	Peninsula Development Road
SUV	Sports Utility Vehicle



OTL INFRASTRUCTURE REQUIREMENTS: BUSH CAMP SITES AND INTERPRETIVE SIGNAGE

INTRODUCTION

In developing the OTL as a 'themed 4WD drive' destination, CYSF gave careful consideration to visitor management requirements, as well as the nature of the tourism experience. Market research reported on in the Project Phase 2 report clearly demonstrated the type of tourist using the Peninsula Development Road and the 4WD sections. Clearly it was, and remains, the expressed desire of travellers to experience a 'wilderness environment' and whatever action taken by CYSF and other parties in the future needs to take this into account.

CYSF also expects to see a changing trend as the PDR gradually improves and is of the view that the number of tourists seeking more sophisticated accommodation will increase as will the number of travellers in robust off-track caravans and larger group tours in buses carrying 30-40 people. It is expected that Weipa and the NPA will become accessible to drivers of smaller SUVs and even sedans with a high clearance. The number of travellers who are not campers or caravanners will also increase, creating a demand for a different style of accommodation. They will be discerning travellers looking for good quality motel style rooms, units or self contained cabins. This style of accommodation is already in very short supply, with no evident plans for additional ventures or expansion of existing centres. Along with the creation of bush camps and a safari resort, the potential need for this style of accommodation presents opportunities for entrepreneurs and investors.

THE NEED FOR MANAGED BUSH CAMP SITES

CYSF examined the rationale for establishing bush camps and more sophisticated adventure and safari style accommodation. Four key objectives were identified.

1. *Meeting the needs of the tourists:* Visitor comments have identified that many travellers want to stay in a bush camp environment rather than formal camp grounds, whether beside a creek with no infrastructure or at locations with minimal infrastructure, where they have a choice of locations, few fellow travellers and freedom to enjoy the 'wilderness'.
2. *Environmental and visitor management:* currently there are problems associated with uncontrolled use of the roadside as a waste dump and visitor impacts are degrading the environment at certain locations. Management and promotion of the OTL must not exacerbate this problem and indeed, must overcome as best as possible, the deterioration of the environment without detracting from the 'wilderness experience'. Providing incentives for travellers to use certain locations for which there is a capacity to manage rubbish and waste disposal would provide part of the solution.

Future management must also ensure that environmental impacts are reduced at creek crossings, to prevent further degradation at vehicle entry and exit points. It is expected that in the OTL sections north of Bramwell Junction, this will be a priority and the responsibility of the NPA Regional Council. It is expected that Council will seek additional funding from government to undertake this work. This aligns with the state government's premise that training and engagement of rangers for environmental work is a part of the economic development plan for Cape York Peninsula.



3. *Business and private enterprise potential:* The Investment Prospectus “New Horizons and Opportunities” produced by CYSF in late 2010 identified ecotourism as a strong investment area for Cape York Peninsula. Enterprise development to expand existing tourism businesses or create new initiatives for new business development, by for example Traditional Owners at sites they select for tourism development, will be areas for future development investment with ecotourism based, safari style camp areas created, to attract travellers and provide a source of ongoing income for individuals and groups.
4. *To enable Cape York Peninsula to become more competitive in remote area adventure tourism:* The main competitors in this field are the Northern Territory and the Kimberley, both of which have considerably expanded capacity in this field over the past 20 years. In contrast, the tourism environment in Cape York Peninsula has remained relatively static. The WA and NT governments, in concert with tourism operators, actively supported this expansion and used the assets of their national parks to create a growth environment. Increased visitor numbers are required to encourage private investment in tourism infrastructure.

LAND TENURE AND MANAGEMENT RESPONSIBILITY

Underlying such initiatives is the unquestioned requirement to first identify land tenure issues where any infrastructure is to be developed and finalise signed agreements or MOUs, between the parties to be responsible financially and administratively for any development **and** CYSF and/or government.

In order to enable long term delivery of control and maintenance measures, on-ground, local government support will be essential – the NPA Regional Council north of Bramwell Junction and either Main Roads Department or Cook Shire Council in other sections of the OTL. It will require commitment of funds and manpower per annum to attend to creek crossings and remove litter and clear waste disposal units. This will create several jobs and Council(s) will need to source funding, such as natural heritage/environment funding, to meet the additional expenses. Where infrastructure is placed on private land, the business owner will be expected to maintain the asset. The potential for joint ventures and partnerships in development and ongoing management is considerable and has the potential to see growth in the tourism industry on Cape York Peninsula.

This would help to implement some of the strategies of the Cape York Peninsula Tourism Development Action Plan, in particular Strategy 3 (“develop tourism products, experiences and supporting services”) and Strategy 7 (“attract the financial resources required to develop, maintain and upgrade tourism infrastructure and products”).

Case Studies Other Remote Areas

The experience of establishing the Savannah Way clearly demonstrated that there needs to be land management and ownership issues in place before installation of any infrastructure, however minor.

Savannah Way experience – the need for MOUs

To cite an example: the Savannah Way signage at the 40 Mile Scrub rest area was damaged and responsibility for repair fell back on Gulf Savannah Development(GSD), the regional agency primarily concerned with the Savannah Way. Therefore, despite the fact that the 40 Mile Scrub was not within



the boundaries of the GSD member shires and therefore not within the area covered by Council agreements, costs had to be carried by GSD.

CYSF cannot afford to be faced with such a burden in the future. Infrastructure development on the OTL will need to be covered by agreements with Memoranda of Understanding (at least) signed by the key parties before any infrastructure installation proceeds. A draft example of an MOU is included (*Appendix A*).

CYSF expect that the key parties responsible for infrastructure along the OTL will be the NPA Regional Council, or Cook Shire Council (depending on ownership of the land) or private enterprise operators such as Bramwell Junction Roadhouse or Traditional Owners and Council at e.g. Cockatoo Creek. Therefore MOUs between these parties AND the state government and/or CYSF will be required. Three-way agreements may be necessary.

Northern Territory and Kimberley – value of partnership approach

Safari style camps, some operated on a permanent basis, have been established since the 1990s, and characterised by cooperative ventures between operators, government and traditional owners and attracted investment from indigenous funding agencies.

SITE SELECTION AND CONTENT

At this stage, the number of bush camp sites to be created and managed arising from this project have been kept to the minimum necessary to test the management regimes that will need to be set in place. Examples already exist in the NPA area at Somerset Beach and Cockatoo Creek, of infrastructure having been installed without adequate provision made for maintenance.

The sites suggested in this report are at locations where there is either, already private enterprise activity and the locations are being used by travellers, or at localities where such a development would enhance the traveller experience. In all cases designs are generic, requiring on ground proofing and surveying, activities beyond the capacity of this project. During a land trip to Seisia in May, CYSF was able to ground test several sites for suitability and to gauge the level of difficulty in ensuring on ground maintenance and other land tenure issues.

These sites will need to be monitored to test the effectiveness of the management procedures, visitor response and the benefits to local businesses, with this responsibility expected to fall on the Regional Council or private enterprise operator. Based on this information, the model will be available to be duplicated by Councils and private enterprise throughout the region.

BUSH CAMP GROUND PLAN DESIGNS and MANAGEMENT REQUIREMENTS

Level 1: Basic amenities

Basic amenities will include:

- Enviro-toilets and rubbish collection
- Some OTL and advisory signage.



Travellers will be free to camp anywhere. No fee will be charged for usage, however cleaning and maintenance costs will need to be carried by the local Council or private operator benefitting from the camp

This model is suggested for the creek crossings on the OTL 4WD section – Dulhunty River and Gunshot Creek are recommended.

In the future, it is expected that smaller designated bush camps will be considered near creek crossings such as those on the 4WD section of the OTL between Bramwell Junction and the Jardine River. The objective will essentially be environmental and people management to reduce impact, erosion and accumulation of waste and rubbish along the route. These locations will have very basic facilities to attract travellers in order to reduce the *ad hoc* use of roadside areas and facilitate management of rubbish and waste disposal. Combined with a strong environmental message about dealing with waste in the wilderness, the bush camping sites are a proactive way to improve bush camping behaviour patterns. Infrastructure for these sites will essentially consist of a simple waste disposal system, rubbish collection area and an information board.

It is difficult to see these sites operating on a commercial basis as to charge usage will require the area to be clearly marked and fenced. Travellers would simply avoid the location and camp for free further along the creek/track. The incentive to use them will essentially be one of ‘traveller conscience’ – that is, to keep the area clean and pristine for the next visitor. This encouragement will be in promotional material available on the strip maps and will be a critical aspect of future eco-tourism development.

Level 2: Small bush camps

This model will be open plan with camping sites more or less chosen by the visitor within the confines of the area marked out. An example has already been created at Bramwell Junction.

This is intended for overnight stays and the size and number of camp site areas can vary depending on visitor impacts and size of travel parties.

This model is suggested as an adjunct to an existing small operation, as there is a greater possibility to provide a management regime and ongoing maintenance. The opportunity exists for the operator to make money out of the bush camp to cover ongoing management and maintenance expenses

This site will be used as a model for more bush camps which can be established by local entrepreneurs and/or Councils. A fee will be charged for usage. The design can reflect the history and style of CYP and the OTL. This design only needs to be developed once and duplicated at bush camping locations.

These will be designated areas where campers can select their camp site. Basic amenities provided include an eco-toilet, water tanks, picnic area and BBQ areas, in addition to an information bay detailing for those travelling south along the OTL, what can be expected and for those travelling north into the NPA, details of attractions. This would be proposed for the Jardine Ferry site as it is not a location where people will camp for extended periods.

Level 3: Larger bush camps

Other sites can offer greater amenity and a more sophisticated model is proposed which will have 5 or 6 designated camp site areas. Amenities include:

- An ablution block with environmentally sound toilets (ideally a self mulching facility that has low water and maintenance requirements); and showers,
- water tanks and stand to supply water pressure and a solar pump or windmill to keep a tank full. This may necessitate the sinking of a bore for supply during the dry season
- solar power generation,
- Rubbish bins,
- Signage bay and
- Employment of an on-ground supervisor with temporary accommodation and facilities. A fee will be charged for usage.
- This model is suggested for the Quintell Beach location and the design could reflect the local indigenous culture and history.

These facilities will need to be serviced. Where feasible, such as in the already existing Bramwell Junction example seen right, these areas would be expected to value-add to an existing operation and be run as a commercial activity. This is the type of model suggested for Quintell Beach.

All smaller bush camping sites would only be open for approximately 5 months per year, closing for the Wet Season. During the closure repairs could be undertaken or facilities expanded by the responsible agency.



Level 4: Safari style Eco lodge

The fourth level is a safari style eco – lodge, developed as a stand-alone venture and to be operated on a commercial basis. A Safari lodge could also take on a training role for indigenous hospitality trainees, environmental personnel and rangers. This was identified in the Investment Prospectus as a valid undertaking for a private entrepreneur. Funds will be sought for a feasibility study into the potential of such a development.

Infrastructure would be expected to include:

- a range of accommodation which will include a mixture of slabs for vans and motor-homes, established safari tents - designated camp sites with BBQ areas
 - slabs for vans and motor-homes
 - established safari tents
 - grassed and shady camp ground
- Camp ground area for erection of tents
- Safari style conference/meeting area and communication centre
- water tanks with pumps operated by solar power
- ablution block, toilets and hot showers, laundry facilities
- solar power for refrigeration and heating
- cafe/restaurant and bar



- shop with souvenirs, maps and other supplies for the traveller
- picnic area and fire/BBQ sites
- information bay and signage
- swimming pool
- helipad

Staff accommodation and amenities will be required.

The eco-safari lodge management will need to look at a longer period of occupancy per annum than the smaller bush camps, preferably operate on a permanent basis in order to cover establishment and operational costs. This level of accommodation would operate on a similar basis to comparable ventures in the Northern Territory and Kimberley.

A “green season tourism” approach will be required with capacity to be accessed during the Wet Season. A helipad, charter operator and access to a Cape York Peninsula airstrip or airport will be essential. A hovercraft to access wetlands in the Wet Season will also be a requirement.

The safari lodge, while open to passing traffic in the Dry Season, will also target the fly in/fly out market. A comparable enterprise in Cape York Peninsula, Lotus Bird Lodge, is booked out years in advance and does not accept passing traffic due to accommodation constraints. In the case of the proposed safari lodge model, safari tents and camping sites for the passing traveller providing their own gear will be available.

The safari lodge model will require a high level of staffing, potentially permanent all year round. Management personnel, groundsmen, mechanics, hospitality staff, professional guides and environmental interpreters are all employment possibilities. Training and skills development programs will be an essential component.

The most likely location for such a venture would be in the NPA.

GENERAL BUSH CAMP DEVELOPMENT REQUIREMENTS

The following issues need to be resolved prior to any infrastructure development and installation. They are self evident however errors have been made in the past. To resolve some issues may required government intervention or the engagement of professional services such as surveyors, accountants or investment advisors and/or eco-tourism experts.

- Land tenure security
- Management regime developed and agreed to
- Quality control
 - standards agreed to and
 - measures in place
- Financial and organisational/business responsibilities determined for:
 - planning
 - construction and installation
 - management day to day including income
 - maintenance
 - repairs and replacement



- MOUs will need to be in place

BUSH CAMPING MANAGEMENT MODEL

To protect the environment and effectively manage bush camping along the OTL an effective bush camping model for management of such sites is required. As bush camping is acknowledged as an integral part of the experience of travelling through Cape York Peninsula and along the OTL, any move to introduce more organised 'bush camps' must have a positive impact on the traveller and be accepted. Therefore proper management regimes at each site will be essential.

Ideally Site managers are required on site at each larger bush camping site throughout the main tourist season. Their major roles are:

- Site management and environmental protection
- Management of campers and their activities
- Routine maintenance of infrastructure
- waste management
- Supply of water and firewood as required by the particular site
- Coordination of any major infrastructure repairs and/ or maintenance
- Collection of any camping fees as appropriate

The on-site managers need to be under the direct control of a regional authority or private enterprise and the activities and outcomes agreed to with the key parties to any agreement.

Management of the small bush camps near creek crossings will need to be undertaken by way of regular visitation by Council based rangers.

In order to assist on-site managers at the larger bush camps, there will be a requirement for basic infrastructure to be provided for them. The provision of this infrastructure would be the responsibility of the key agency and would include:

- Signage and access road to direct travellers
- Toilet facilities
- Rubbish disposal system
- Accommodation (caravan)
- Means of communication (satellite phone and radio)
- Vehicle and supplies, spare parts etc.

Northern Territory Bush Camp Management Example

In the Northern territory, bush camps under the management of the Parks and Wildlife Commission (now the NT Parks and Wildlife Service) are often managed by volunteer labour sourced from caravan and campervan tourists and 'grey nomads'. In the future it may be possible to create a volunteer program which could be loosely based on the volunteer program adopted by Parks and Wildlife Commission, NT. An abstract of the Guidelines adopted by Parks and Wildlife Commission is included in *Appendix B* for information. The major differences between the PWC model and that proposed for the OTL is that management payments may be appropriate, depending on final roles and responsibilities and the extent to which agreements with host businesses can be made to ensure that income from the infrastructure covers their cost of maintenance.

Advertising through the National Seniors Australia website and e-newsletter, and through caravan and camping organisations would attract interest.

Communication options for bush camps

Optional resources extras include a radio, VHF and HF, to connect to the larger bases. The use of radios also allows travellers, often carrying radios, to talk to the bases long before they arrive. In addition the bases give travellers a central location to call in case of accident or mechanical problems. In the future these radio bases could be a part of the CYP tourism network, passing on and seeking information, making bookings, leaving messages and acting as a form of security. The design can reflect the history and style of CYP and the OTL. This design only needs to be developed once and duplicated at bush camping locations.

In the case of on-site managers for the higher category camp sites, radios and satellite phones will be required.

EXISTING OTL RELATED INFRASTRUCTURE INSTALLED

Morehead River: Old shelters are in a state of disrepair and need removal.

Somerset Beach: toilets were established recently but are obviously not well maintained. An honesty box exists for payment of camp fees. Run down cars and an old caravan litter the site. No signage in place.

Cockatoo Creek: a toilet and covered picnic area and tables on a concrete base were installed late 2010. The facilities are in good condition but constructed of timber which will be susceptible to damage. No rubbish bins are in place and rubbish already exists at the site. No signage is evident either relating to the OTL or seeking cooperation on rubbish removal etc.



As can be seen from the photo left, the design is simple but does not reflect the character of the region or the OTL history. With more thought the design could have been far more appealing.

Fairview Turn-off to Almaden from PDR: a small cleared area with toilet established; inadequate access and no signage. A picnic area and information bay are required. Management arrangements have been made with Cook Shire Council.

Vrilya Point: It is understood that a toilet facility has been placed at Vrilya Point. The bridge over Crystal creek is often inaccessible.

INFORMATION BAY AND BUSH CAMP SITE SELECTION

In determining the optimum locations for new infrastructure, CYSF took into account infrastructure that already exists on the OTL and along the PDR, whether established by private enterprise, or in some cases, installed by government. The locations of additional infrastructure was selected to value add to existing enterprises and not create unnecessary competition as a result of close proximity. With regard to infrastructure and signage along the 4WD section of the OTL, 2 key sites are recommended. Major information bays would be located at Bramwell Junction and the Jardine Ferry Crossing to provide travellers with all the information they require. Most travellers attempt

the OTL 4WD section either heading north or south and so the 2 major information bay locations are considered essential.

The recommended sites for new infrastructure are in sequence from south to north, commencing at Almaden and ending in the Northern Peninsula Area. The locations for bush camps, information bays and advisory signage under consideration are listed below.

Almaden: Information Bay

- **New Infrastructure: Information Bay**
- An information bay at Almaden will enable promotion and advisory material delivery in the southern section of the OTL;
- The existing hotel and caravan park will benefit from added visitation and people staying longer to view the information panel;
- Strip maps can be obtained free from the hotel and caravan park (currently for sale) and people may stop to buy drinks etc.
- The owner of the hotel is happy to hold supplies of the free strip maps. However management of the information bay will need to be negotiated as installation, management and replacement and maintenance costs and responsibility will need to be clarified. The site falls within the ambit of the Tablelands Regional Council, which may have little interest in promotion of the OTL track, although the signage would promote space to the assets in the immediate area, such as Chillagoe.

Fairview turn-off on the PDR: Information bay, picnic area

- **New Infrastructure: Picnic Area and Information Bay to supplement existing infrastructure.**
- A toilet has already been established at the site as can be seen in the photo to the right. However, access must be improved and adequate signage installed as the site is virtually invisible and with only one entrance, cannot be accessed by vans or vehicles with trailers. The entrance is on the corner of the turnoff to Palmerville and the PDR, as seen lower right.
- The site would be suitable for picnic tables and an information bay. It is understood the site is maintained by person from Coen, employed by Cook Shire Council
- Camping should not be permitted.



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Hann River: Information Bay

- **New Infrastructure: Information Bay**
- This is an existing business enterprise location with space near the roadhouse for information signage.
- Strip maps available free of charge at the Hann River Roadhouse, encouraging people to stop and linger.
- Again maintenance of an information bay will need to be clarified as it is unlikely the owner would be willing to carry this responsibility.

Musgrave roadhouse: Information bay

- **New Infrastructure: Information Bay**
- This is an existing establishment, with roadhouse, camp ground, donga style accommodation and facilities, with heavy visitation during the tourist season
- Some information on the OTL already exists within the roadhouse confines and minimal additional data is expected to be required
- The OTL strip maps will be available free of charge from the roadhouse
- Again maintenance of an information bay will need to be clarified as it is unlikely the owner would be willing to carry this responsibility.

Archer River: Information bay

- **New Infrastructure: Information Bay**
- An existing business, roadhouse, camp ground and 4 units, with heavy visitation during the tourist season
- Location for the bay has already been indicated by the owners (see right) and on-site supervision is in place
- OTL strip maps would be available free of charge from the roadhouse.
- Again maintenance of an information bay will need to be clarified as it is unlikely the owner would be willing to carry this responsibility.



Lockhart River Turn-off on PDR: information bay, picnic area, toilets

- **New Infrastructure: Information Bay, Picnic Area, toilet**
- large area available and an ideal location to advise travellers of the attractions around Lockhart River, Iron Range, Portland Roads
- Suitable location for advising travellers of the alcohol restrictions on Lockhart River
- Advice on accommodation at the airport and contact details could be included
- Camping should not be permitted
- As a picnic area is being added, a toilet is considered necessary despite the proximity of Archer River Roadhouse
- Again maintenance and ownership responsibility will need to be clarified.



Creek Crossings between Bramwell Junction and Jardine River: small bush camps

- **New Infrastructure: basic bush camps, Dulhunty and Gunshot Creeks, toilets, signage and rubbish bins**
- There are at least 16 crossings and not all would be considered for attention. 3 are suggested here
- Cockatoo Creek already has a toilet and picnic area installed, but no rubbish bins
- Gunshot Creek crossing (seen right), particularly the north side is a possibility due to the fact that this crossing can delay travellers for periods of time and a cleared area already exists
- Dulhunty River crossing; travellers on the OTL track often stop at Dalhunty overnight as midway along the 4WD section
- Basic infrastructure would be required at these sites

- Management will be a matter of regular visitation by a mobile ranger service during the tourist season. These Rangers will become public relations and information sources. There is a need for creek crossing maintenance, especially Gunshot.

Moreton Telegraph Station- Information bay

- **New Infrastructure: Information Bay**
- This is an existing business and one of the remaining telegraph stations of the OTL and is therefore an ideal location for an interpretive site, particularly in view of the extensive expansions being undertaken by owner/operator OzTours
- Strip maps can be available free of charge from the Moreton kiosk.

Bramwell Junction Roadhouse: Information bay

- **New Infrastructure: Information Bay**
- This is an existing business enterprise location with opportunity to establish interpretive signage.
- This is also an important location on the junction before the 4WD OTL section.
- Strip maps available FOC from the roadhouse
- Again maintenance and ownership responsibility will need to be clarified as it is unlikely the owner would be willing to carry this responsibility.

Jardine River Ferry site, southern side: bush camp, information bay, picnic area

- **New Infrastructure: Information Bay; picnic area, camp sites**
- A suitable site for those arriving after 5.00pm and too late for the ferry
- An attractive cleared area with decorative palms already exists between the service station and the ferry over the river as seen in the photos below
- Picnic tables, toilets and rubbish bins and up to 4 designated camp sites with BBQ facilities
- Again maintenance and ownership responsibility will need to be clarified as it is unlikely the owner would be willing to carry this responsibility.



Safari Eco-lodge: new site or expansion of existing business

- Site yet to be selected, however the NPA is the most suitable area given the existence of Lotus Bird Lodge near Lakefield National Park
- this will need to be a private enterprise commercial development, perhaps Traditional Owners in conjunction with a developer/investor such as Indigenous Business Australia
- A generic site plan has been created as an indicator of expected infrastructure content



Other bush camp options: National Parks

Experience in other states and the Northern Territory, and overseas, has demonstrated the potential for usage of National Parks with benefits for the public purse and operators, in addition to growth of employment opportunities for local residents. For example, Parks Victoria has developed Wilderness Retreats in National Parks for which a rate of between \$150 –\$250 per head per night is charged, depending on the level of amenities provided.

Locations of existing National Parks, Reserves and Conservation Parks in Cape York Peninsula are shown in *Appendix C*. Numerous opportunities are apparent in northern Cape York in the Jardine National Park and in Lakefield and Mungkan Kandju National Parks. Although the National Parks authorities have traditionally been reluctant to undertake such development, it would provide employment and business opportunities for indigenous residents as well as personnel training and capacity community building.

LOCATIONAL DETAILS NEW INFRASTRUCTURE

Following are the satellite images indicating the locations of the proposed infrastructure.

ALMADEN



The location is close to the Savannah Way Alternate Route and the OTL. Local businesses will benefit from travellers staying longer in the town.

Proposal: Construction of an information bay, free standing near or opposite the hotel, preferably on State Government or Tablelands Regional Council land. If the latter, negotiations with the Tablelands Regional Council or State Government will be required.

MITCHELL RIVER CROSSING

There is potential for a bush camp site in this locality although not investigated during the writing of the report as the road was closed. It would supplement camp sites in the Chillagoe-Mungana National Park. The location is close to Mount Mulgrave Station and no discussion has taken place at this stage. Consideration would also need to be given to the level of flooding per annum in terms of a suitable site for any bush camp.



FAIRVIEW



An information bay to be installed near the entrance to the facility with drive access created and 2 access/exit points. As can be seen from the photo (left), access is only possible by way of a small gate at the corner of the block. The cleared area is insufficient for vehicle and trailer turn around (right).



A covered picnic table and seats with rubbish bins can be added.



HANN RIVER ROADHOUSE



The location is on the PDR and the OTL and is an existing private enterprise location, already visited by tourists.

Proposal: an information bay adjacent to the existing property; strip maps available FOC from the roadhouse.

MUSGRAVE ROADHOUSE



This is one of the original OTL transmission stations.

Proposal: a free standing information bay in the front of the accommodation area.

ARCHER RIVER ROADHOUSE



This is an existing business.

Proposal: a free standing information bay in front of the existing roadhouse where some signage and information boards already exist. This material would be improved/replaced.



LOCKHART RIVER TURNOFF

Some signage already exists at the junction of the PDR and the road to Lockhart River.



Proposal: a free standing information bay, picnic tables and enviro-toilet. No camping should be allowed due to the proximity of the Archer River Roadhouse..

QUINTELL BEACH, LOCKHART RIVER



This is a Lockhart River community proposal and would be a large Level 3 well appointed camp ground with facilities.

NORTH LOCKHART OPPOSITE RESTORATION ISLAND

This is a potential proposal from the traditional owners for a Level 2 bush camp initially with potential to expand. Known as “Dotty’s Place”, this is an indigenous business opportunity.



MORETON TELEGRAPH STATION



Again this is an existing site.

Proposal: The proposal includes establishing an information bay near the entrance to the property. The owner is happy to have the information bay installed and to provide free strip maps of the OTL to travellers.

The satellite photo does not indicate the most recent expansion of accommodation on the cleared area. Depicted below is the communal dining hall and cafeteria which has been established for larger tour groups, along with safari style tent accommodation and self contained and air-conditioned cabins which will be fully open for business later in the 2011 tourist season.



BRAMWELL JUNCTION ROADHOUSE



This is an already well established bush camp adjacent to the roadhouse. The existing signage, as seen right, indicating the start of the OTL track will be improved, and will also include directions to the Bramwell Junction camp ground.

An information bay will be installed in a cleared area near the kiosk and close to the start of the OTL track, which can be seen in the top LH of the photo to the left. The owner is happy to have the infrastructure installed. This is an important location providing travellers with all necessary information before embarking on the drive up the OTL. Similarly the information bay at the Jardine River will provide information



for those attempting to drive the OTL north to south.



DULHUNTY RIVER



This is a camp area regularly used by those travelling the OTL and is an optimum location for a bush camp.

Proposal: basic bush camp, toilets, rubbish collection, advisory signage

GUNSHOT CREEK



A cleared area already exists on the northern bank of the creek and would accommodate a basic bush camp, toilet and some advisory signage.

COCKATOO CREEK



Picnic area and eco-toilets already exist. No further additions recommended, apart from a small information bay with advisory signage, but this is not a priority as travellers will already have seen the information bays at Bramwell Junction and the Jardine River crossing.

JARDINE RIVER CROSSING



An area already exists between the service station and the river and would be improved with additional infrastructure and facilities.



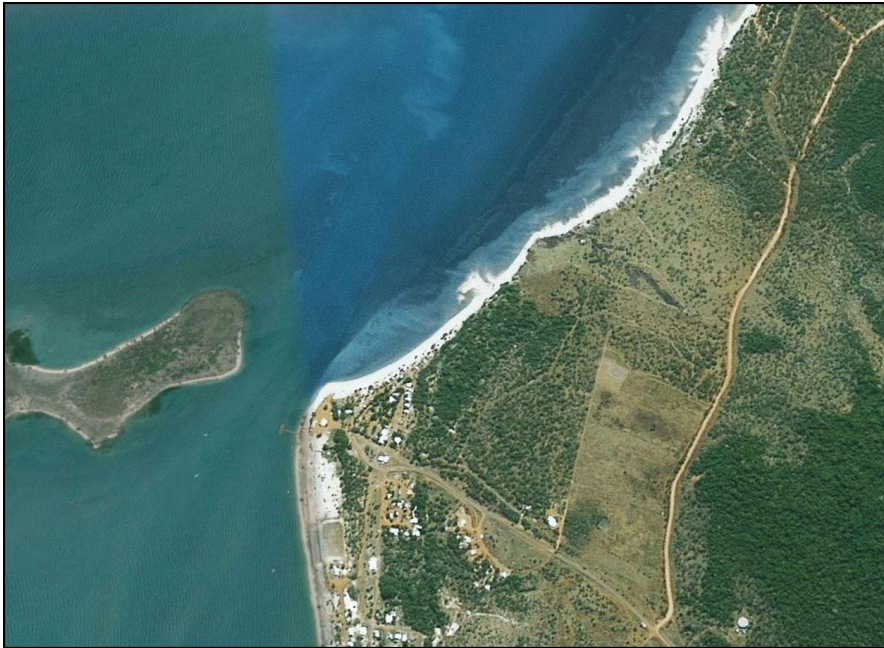
Proposed: information bay, designated camp sites, toilets, BBQ areas

The information bay will provide the traveller



with all necessary data before heading south along the OTL.

SEISIA AND LOYALTY BEACH



Improvements to, or expansion of, existing infrastructure could provide the locality for the eco tourism safari lodge. Pajinka is in a state of ruin and an eyesore. Until land tenure issues are sorted out, the Seisia location would appear to be the only reasonable shorter term option in the NPA.

SOMERSET BEACH

This is an existing area near the Tip and the Pajinka ruins and although the facility is new, the camp site itself is run down. No improvements or additional infrastructure are recommended until a management regime is in place.



INTERPRETIVE SIGNAGE BAY DESIGNS and COSTS

The shelter design will be the essentially same for each bush camp and interpretive signage site – it is expected to be prefab panelling in hard wearing, weather resistant ‘timber look-alike’ material with the OTL logo. Stand alone structures will require a concrete base



with freedom of movement all round the structure (similar to the Savannah Way signage on the Cook Highway at the commencement of the Savannah Way. See left). The basic design is termite proof, cyclone rated and hard wearing.



Where signage is installed on existing under cover areas, a half frame roof can be manufactured to be bolted on to an existing wall.

INDICATIVE ESTABLISHMENT COSTS: Information bays and basic amenities

Based on costs for the Savannah Way information bays (similar to that on the Cook Highway near the Cairns Airport)

Information Bay

- | | |
|--|--------|
| • Design and specifications of information bays | 5,000 |
| • Bay, concrete/cement base, roof | 13,000 |
| • Information panels preparation , art work and design | 12,000 |
| • information panels manufacture | 5,000 |
| • Installation (local labour, Regional Council) | 5,000 |

Enviro loo and installation

12-20,000

Examples exist at Coen, Cockatoo Creek (see right) and Somerset Beach, the latter being in a run-down state already and only operating for 12 months. The facility at Cockatoo Creek was established in 2010 and looks essentially unused and is not a design reflecting the OTL character. The design adopted by the DPI at Coen seems more fitting for a bush environment (see below).



Design of the facility at Coen is a Country Style manufactured by Fabranamics Pty Ltd (NSW) and for the Cockatoo Creek facility a Hybrid design from Gough Ltd in Townsville.



The metal construction of the Coen model which cost in the order of \$12,000 installed is more likely to survive the ravages of bush fire and termites.

Water tank and pipes, installation etc

estimate \$5,000

Examples of eco-waste disposal systems are included in Appendix D. An estimate has been made of the costs of supply and installation to a remote area.

Establishment costs for the more sophisticated levels of camping accommodation have not been obtained at this stage as it is envisaged that professional design, surveying and architectural services will be required.

INFORMATION BAY SIGNAGE STYLE

As demonstrated by these examples, the panels will be professionally designed and created and the content prepared to reflect each location. The information bays will be designed with an OTL and Cape York theme and will need to go out to tender to attract a range of design concepts. The panels

will be hung under the protective awning provided by the information bay shelter.

Samuel Morse in 1846, had shown what could be done with his telegraphic code of dots and dashes. Colonial governments were quick to capitalise on this new innovation constructing telegraph lines across long distances of Australia. One such line was from Cardwell on the east coast to Normanton and Norman Mouth (Karumba) on the Gulf of Carpentaria, completed in the 1870s. It was into this system at the repeater station Junction Creek, near Mt Surprise, that the Overland Telegraph Line commenced its journey up a route surveyed by John Bradford in 1883 to the very top of Cape York Peninsula. Then the cable ran down the beach and disappeared underwater, travelling to Thursday Island via a submarine cable.

The arrival of steam technology and its application in the 1800s to steam driven vessels changed the marine routes previously subject to the vagrancy of global wind patterns.

For the Bradford expedition in 1883, camp life was Musgrave. Their camp was on the banks of Saltwater Creek, near the sea with a roan mare purchased in Cooktown dying here in camp. The hunter-gatherers confirmed their mastery of the environment by using fire as a management tool and weapon; being an ever present threat without revealing themselves to the expedition's rifles fire power. Aboriginal fires continually bounded the expedition forcing Bradford to alter course to the west, then adding to the horses discomfort by depriving them of feed. They pushed on, with a diminishing horse plant, marking out sites for the proposed telegraph line. For a few days they pulled up and rested at Lalla Rookh, a Masey brothers' cattle station south of Coen.

In all there were five repeater stations between Fairview and Paterson, the northern most Cape York telegraph office. They were Musgrave, Coen, Mein, Moreton and McDonnell.

The total distance of this line was 600kms and the poles were an Oppenheimer type used elsewhere in Australia and sea freighted from England. They were used in conjunction with galvanised wire that weighed 120kgs for each kilometre.

The presence of the telegraph office at Musgrave presented a communication node from which telegrams could be sent and collected in the lower Peninsula. From across the wilds of the savannah grasslands pioneering graziers from remote cattle stations, outposts in a harsh environment, came to this telegraph station to make contact with the outside world.

This was a period of attempted settlement and not all was successful. To the east of Musgrave T.O. at the top end of Lakefield National Park lies the vast Nifold Plain. This marine plain pockmarked with rich waterholes and notable for the number of magnetic termite mounds that cover the landscape was considered as a sugarcane plantation. In fact, moves were made to acquire the land, but the scheme failed.

The historic Musgrave Telegraph Office (Musgrave T. O.) was one such repeater or relay station. When built it was constructed from corrugated iron as a fort with wide verandahs and turrets plus gun ports on two corners to enable rifle fire to protect the building in case of Aboriginal attack. Water tanks, butcher shop, firewood and internal steps were all secured beneath the building. A number of rooms opened off the internal verandah and housed both the telegraph office and staff. Windows were all fitted with iron shutters that could be dropped in event of attack.

In 1880 a steamship service commenced between England and the colonies of Australia via the Torres Strait. Thursday Island soon became a coaling port and the question of security prompted the construction of Fort Victoria to protect the new port from any marauding foreign navy. At the same time Germany was showing interest in New Guinea and the French had established New Caledonia. Additionally, communications was an important issue as Thursday Island was thousands of kilometres away from the colonial capital.

The southern portion of this line had only recently been built to supply a telegraphic service to Cooktown, port for the fabulous wealth of the Palmer Goldfield and beachhead for Cape York settlement. From Fairview, however, the line was all new construction that was simultaneously commenced from both ends in 1886. This line was the main thoroughfare along which messages were sent from repeater station to repeater station, established at regular distances apart. Linesmen and strings of packhorses would service the line and those who lived in Cape York Peninsula well into the 1960s. There were no roads.

Initially marine resources were harvested. The first economy established on Cape York with the old world technologies of the 1800s was gold, a key reason for the Peninsula settlement.

A wealth of gold was wrestled from the harsh environments of the Palmer River, Coen and Batavia goldfields by hardy fortune hunters from the age of steam. At one time Cooktown had more embassies than Brisbane, the capital of the new colony.

Vast, slow moving cattle drives from remote cattle stations of the Peninsula moved in a chorus of bellowing beasts and guiding whistles of the ringers navigating across the savannah grasslands.

Strings of packhorses carried most cargo, from gold mining machinery to a delicate ribbon for a child at one of the fortress telegraph stations that were strategically placed along the overland telegraph line.

Nowhere else in Australia did the leap from horse transport to aircraft happen instantaneously without other transport systems acting as stepping stones.

The military technologies of the 1940s were quickly installed when World War II drew rapidly closer to northern Australia. Across the Cape many significant sites remain that reflect the part played by the Peninsula.

Cape York Peninsula is still seen as a frontier in some locations.

It was only 50 odd years ago that saw the construction of a road system and the end of a dependence on horses for transport.

Now part of the rich tapestry of our nation's history, the thick tropical jungle of Iron Range hides remains of a vast World War II Air Force base from which medium and heavy bomber groups with names like "the Jolly Rogers" did battle with the Japanese Imperial Army in those threatening days of 1943.

The Iron Range airport is a war artefact still in use by the Lockhart River community.

Surveying the Telegraph Line

1883 saw John Bradfield, Queensland Post & Telegraph Department's supervisor of lines and mail route services, dispatched to lead a four man party to Cooktown to the colonial outpost of Cape York in order to survey a route for a telegraph line.

After conferring with R Logan Jack, the ex-government geologist and obtaining a copy of his available map Bradfield left Cooktown on the 6th of June 1883. With him were four Europeans, Sam Goss, a Chinese cook and Jacky, an Aboriginal.

They were individually armed with a Martini carbine and a heavy revolver as the Police in Cooktown anticipated trouble with the Aboriginal people whose country was being traversed. The Police also insisted that Bradfield because his expedition numbers from 4 to 6.

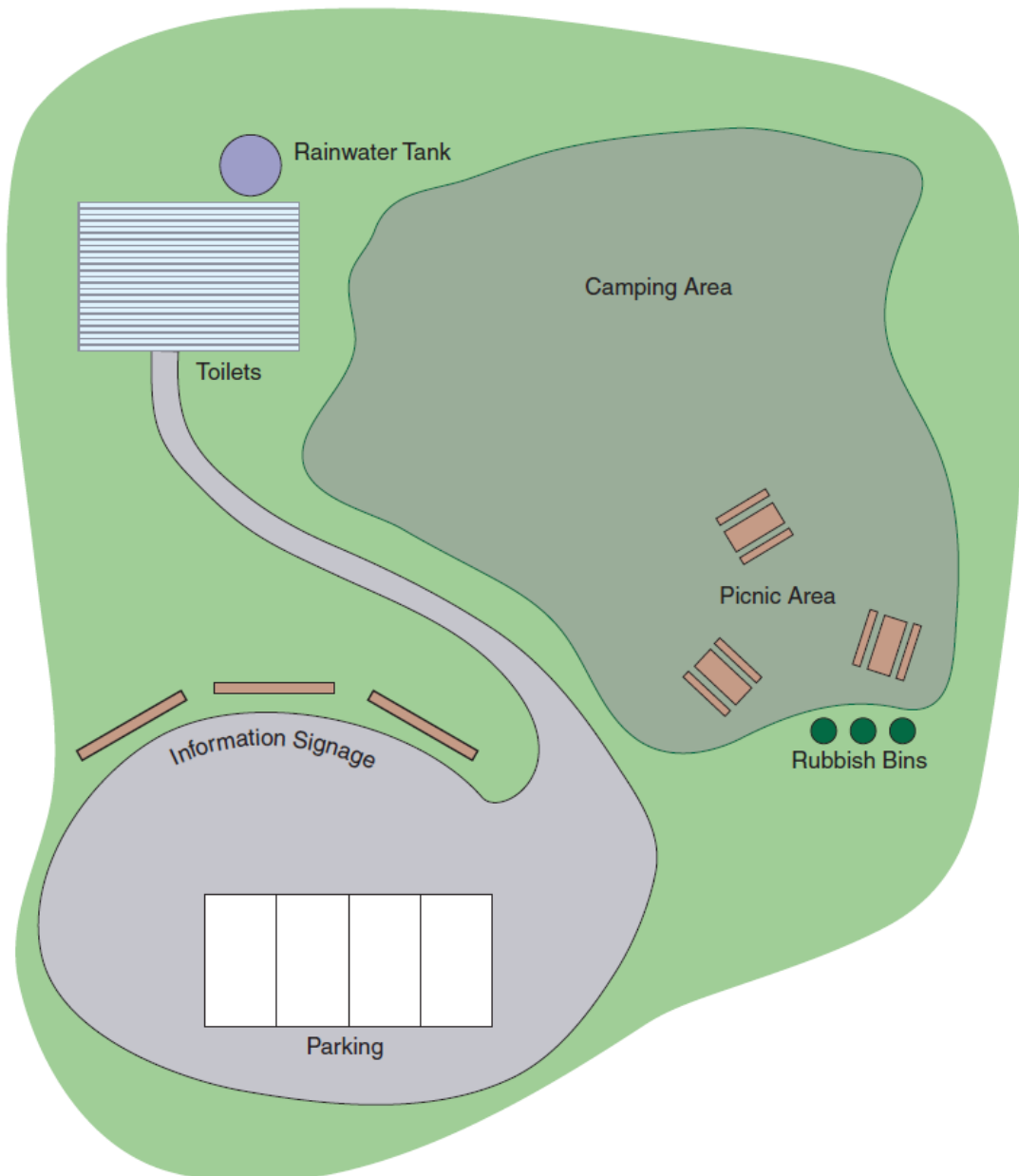
Bradfield was commissioned to explore difficult country along the east coast where it was expected that settlements would eventually require telegraphic services to be in demand.

With these were 36 hours of which 23 would die.

GENERIC CAMP DESIGNS

BASIC BUSH CAMP DESIGN

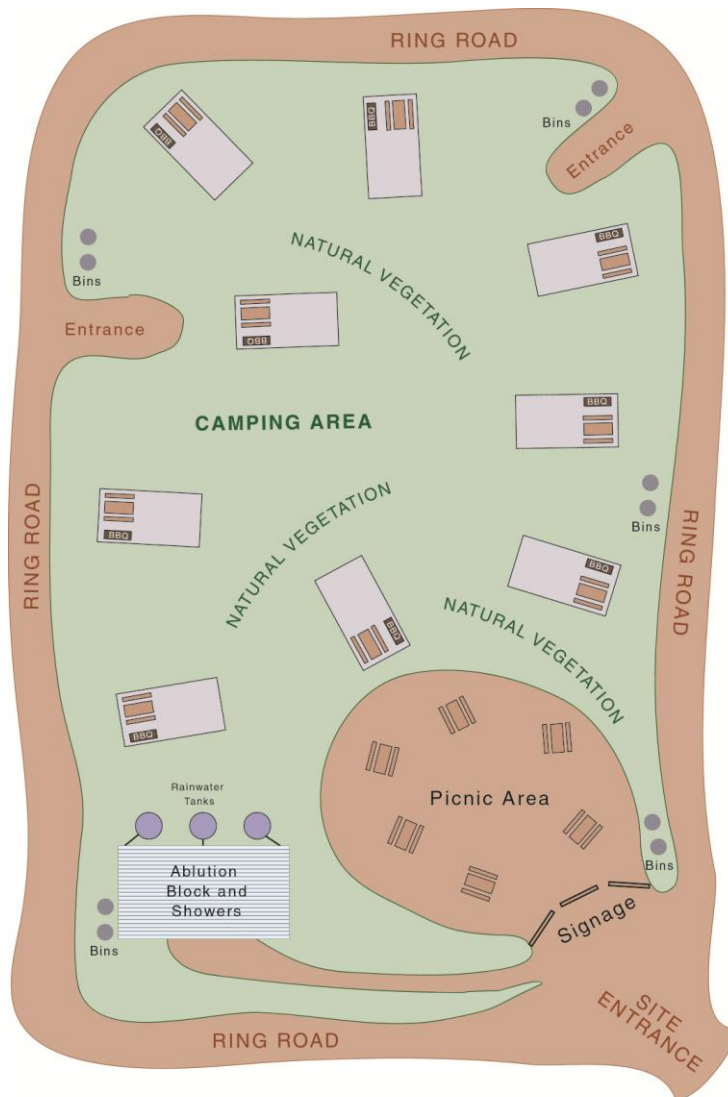
The design below demonstrates the essential components of the bush camp proposed for Bramwell Junction – the exact placement of infrastructure will depend upon the local topography and vegetation.



Characteristics: open plan and visitors can camp anywhere; vehicular access to the camping area will be necessary; the car bays indicated are for those travellers only access the information bay and picnic area, toilets (composting or similar environmentally sound system).

The relevant council will be required to roster staff to clear the rubbish and maintain the toilets.

MORE SOPHISTICATED BUSH CAMP DESIGN



Characteristics: designated camp sites with BBQ facilities; wood supplied by the on site manager; ablution block with showers, water tanks and solar power, picnic area and signage, regular rubbish disposal.

In addition to the above design, accommodation will be required for the on site manager. This would need to be temporary accommodation such as a caravan with amenities. Payment will be required for usage of the camp sites. A usage scheme could also be introduced for passing travellers to use the showers and amenities.

SAFARI ECO-LODGE GROUND PLAN



In addition to the amenities above, the safari lodge will require staff accommodation and amenities, a helipad and maintenance and storage areas. Infrastructure and layout will need to be architecturally designed. Relocatable units (dongas) are not considered adequate for this style of accommodation, although mobile homes would be suitable.

SAFARI TENT DESIGNS

There is a plethora of safari tent designs available in Australia and internationally. Some examples are shown here. Costs vary widely according to the level of sophistication, whether with en-suite or not, air conditioned and so on.

Safari tenting styles and designs can range from the very luxurious to the budget level.



Tents can be designed with patios and en suites and have water and power supplied.

The examples shown are an Australian design. A style suited to Cape York and the OTL could be developed.



A more up market design could be along the lines of the Poruma Island Resort, Torres Strait. Some examples of room layout and facilities are shown below.



Some international examples of safari tents and resort design from Africa and Brazil suitable for a savannah or tropical environment.



CAMPING FEE STRUCTURE

A sliding scale of fees is proposed. Below are indicative costs based on some existing camping grounds in Cape York Peninsula. Fees need to be enough for some cost recovery without deterring campers.

LEVEL	DESCRIPTION OF AMENITIES	FEEES	COLLECTION
1	Enviro-loo, rubbish bins, signage, no designated camp sites	FREE	
2	Enviro-loo, water tank, rubbish bins, picnic area, signage, no designated camp sites	\$5 per person per night	Honesty box
3	Enviro-loos, showers, water tanks, solar power, picnic area, designated BBQ and campsites, signage, rubbish bins, on site manager in Dry Season	\$10 per person per night \$10 boats and trailers	On site manager
4	Safari Lodge Camp site no power Safari tents no en-suite Safari tents with en-suite Caravan and motor home no power Caravan and motor home with power	\$10 per person per night \$140 per night \$200 per night \$25 per night \$100 per night	On site manager



APPENDIX A: Draft MOU Covering New OTL Infrastructure

DRAFT

Overland Telegraph Line

MEMORANDUM OF UNDERSTANDING

between

funder (probably government)

and

**Council (NPA, Cook,
T/lands)**

and/or/maybe

**private enterprise
and/or CYSF**

Date

PARTIES TO THE MEMORANDUM OF UNDERSTANDING

The principal parties to this Memorandum of Understanding are the **QUEENSLAND Government, Council/CYSF**

BACKGROUND

The OTL 4WD Adventure destination was initiated by Queensland Government and CYSF

The signatories' support for the OTL is:

1. To provide a major stimulus to Cape York Peninsula's small business and tourism industries;



2. To establish a marketing framework and identity for road-based tourism across the through the Peninsula;
3. To enhance the experience and safety of the motoring tourist along the OTL experience.

The signatories are committed to the preservation of the OTL as a 4WD experience and the enhancement of business and employment opportunities in towns and destinations along the in CYP.

PURPOSE OF THE AGREEMENT

The primary purpose of the Memorandum of Understanding (MOU) is to the ongoing maintenance, replacement and management of interpretive signage and infrastructure which supports the OTL experience.

Elements of the MOU

This agreement has been developed to clearly state the responsibility of each organisation.

This MOU has two (2) key elements that outline the agreement:

- 1) Ongoing maintenance, replacement and management
- 2) Consultation and sign off protocols.

SIGNAGE AND INFRASTRUCTURE MANAGEMENT

Infrastructure covered by the MOU separately listed for each site. To include such as:

- information signage and information bays
- toilets
- picnic tables and roofing
- water tanks
- BBQs
- rubbish bins
- other as itemised

Key Parties to the MOU are:

Each location:

Almaden

Responsible agency –

At the time of replacement consultation should occur between XXX to ensure the content and design are appropriate.

Fairview

Responsible agency: each respective local government is responsible for maintenance, replacement and management.



At the time of replacement consultation should occur between XXX to ensure the content and design are appropriate.

Hann River

Initial installation was by XX

Ditto: Musgrave, Archer, Lockhart River Turnoff, Moreton telegraph Station, Bramwell Junction, Dulhunty River; Gunshot Creek; Cockatoo Creek (already in place); Jardine River ferry;

Responsible agency: Each respective XXX is responsible for maintenance, replacement and management

GENERAL

Ongoing Management, Replacement and Maintenance

The ongoing management, replacement and maintenance of infrastructure at each location, is the responsibility of XXXX. The maintenance of the signs and infrastructure commences from the time of erection and continues throughout the life of the sign and infrastructure. At the time of replacement consultation would need to occur between XXX, XXX and XXX.

Use of OTL Logo

CYSF will retain the ownership and protect the future use of the OTL logo.

Separate Guidelines are available to manage the future use of the logo.

DURATION OF THE AGREEMENT

This MOU commences on the date of signing and continues until:

It is superseded by another agreement between the XXX organisations;

The parties to this agreement understand that a Memorandum of Understanding is a document of intent and good faith. Any variations to this agreement should be agreed by all parties in writing and signed, after appropriate consultation with the major stakeholders.

EXECUTED by the parties as a Memorandum of Understanding

DATE of the Memorandum of Understanding

THIS Memorandum of Understanding is made on the _____ day of _____ 20XX

SIGNED on behalf of XXX by

Print name: _____

Signature: _____



This day of 20XX

Witness: _____

(print name and sign)

SIGNED on behalf of the XXX by

Print name: _____

Signature: _____

This day of 20XX

Witness: _____

(print name and sign)

SIGNED on behalf of XXX by

Print name: _____

Signature: _____

This day of 20XX

In the presence of:

Witness: _____

(print name and sign)



APPENDIX B: NT Parks & Wildlife Guidelines for Caravan and Motorhome Volunteers

Introduction

Volunteer participation in Commission activities is encouraged through its Corporate Plan. A major task of the Commission outlined within the Plan is working with the community to protect the Territory's natural values and provide opportunities for the public to encounter, enjoy and be inspired by nature.

The Northern Territory seasonally receives a large numbers of caravan and motorhome travellers. These people bring with them a wide range of skills and represent a valuable volunteer resource if managed correctly. The objective of these Guidelines is to assist in the management of an effective system aimed specifically at providing volunteer opportunities on parks for active older people who are fully self contained travellers.

The Caravan and Motorhome Volunteer Program has been established to assist with more general park management tasks rather than with specific projects as in the general Volunteer Management Program. Participants may undertake similar tasks at various parks on an ongoing basis throughout their Territory visit.

Definitions

Caravan and Motorhome Volunteer (CMV): An individual who has registered and been approved as such.

Volunteer: An individual who has completed a 'Volunteer in Parks' registration form and who has been approved by a divisional or regional manager as a volunteer.

Volunteer Project Coordinator (VPC): A Commission employee who is assigned the task of coordinating and monitoring the involvement of volunteers in Commission activities. The VPC reports to the Assistant Director Parks on all matters relating to volunteers.

Volunteer Project Officer (VPO): A Commission employee who is assigned to liaise with, supervise and/or coordinate a project involving volunteers. VPO's report to the VPC on all matters relating to volunteers.

CARAVAN AND MOTORHOME VOLUNTEER PARTICIPATION - GENERAL

- Initial and periodic articles in the 'letters' section of national caravan/motorhome magazines will alert prospective volunteers to the opportunities available.
- Applications to volunteer services will be channelled through the VPC, who will in turn forward a 'Volunteers in Parks' registration form to the applicant.
- All successful volunteer applicants will register with the Commission and be approved in accordance with these Guidelines and the general Volunteer Management Guidelines.
- The VPC will establish a 'read only' Volunteer Caravan and Motorhome Data Base on 'N' drive for use by VPO's. VPO's will liaise with the VPC to arrange placing or movement of volunteers.
- The VPC, with the assistance of VPO's, will keep records of all volunteer registrations, attendance at activities and other information that may be relevant to a particular volunteer effort. A CMV may terminate his/her relationship with the Commission by giving notice to the VPO (preferably in writing).
- The VPO may also terminate the services of a volunteer, ensuring that the VPC and Assistant Director Parks is advised of the termination and the reason for it.
- A CMV will require at least a minimum level of support from participating parks and reserves.



- It will be the responsibility of the Senior Park Ranger to provide a secure living area for a caravan with appropriate access, access to water and power unless fully self contained, appropriate training, orientation and supervision.
- The VPC should provide clearly defined parameters within which the CMV's will work.
- CMV's should be properly briefed by the VPO before the program commences. Upon entering a park the CMV should be made aware of the purpose and methodology of the task and the context/environment in which the activity is to take place. The VPO must comprehensively discuss the standard of conduct expected of the CMV while volunteering within the park, with particular emphasis placed on the importance to the Territory Government of Aboriginal relations. These expectations must be fully discussed in order to ensure a positive and satisfying experience for both the CMV and the Commission.

VOLUNTEER PARTICIPATION – OH&S

Appropriate work injury insurance will be provided to registered and approved volunteers under the existing volunteer registration procedures. VPO's are to ensure that all retiree volunteer activities take place in a manner and environment, which complies with safety legislation and the Commission's OH&S policy. The Duty of Care is the same for CMV's as it is for volunteers. CMV's must be briefed on these safety requirements before work commences.

CMV's are responsible for providing themselves with protective clothing e.g. a hat, sunscreen, protective shoes, and individual volunteers may be eligible for personal accident cover through the Commission upon approval of their registration form.

Pre-existing health conditions need to be noted within the Caravan and Motorhome Volunteers Application and placed into the Data Base as part of the initial screening of interested parties.

VOLUNTEER PARTICIPATION – PAYMENTS

CMV's are not eligible for payment by way of a salary or reimbursements. Dispensation is restricted to the offer of power, water and free camping within a designated area.

VOLUNTEER PARTICIPATION - SUPPORT

The Commission should assume the same degree of responsibility to CMV's as it does to its own staff. Volunteers should be treated with respect and all effort made to assist them in their tasks wherever possible. Such assistance may include the provision of transport (subject to conditions as specified below) for particular tasks, the provision of tools, materials and basic training or a comprehensive briefing as required in order to carry out the task.

CMV's should undergo on park orientation training to become familiar with the structure and functions of the Commission. Unless specific approval is given by the Director or his delegate in the field, a CMV is not permitted to drive a Commission vehicle. Prior to receiving approval the CMV must provide proof of a current Driver's License and must read and agree to abide by the conditions of the NT Fleet Driver's Handbook (available through NT Fleet's homepage or at each park headquarters).

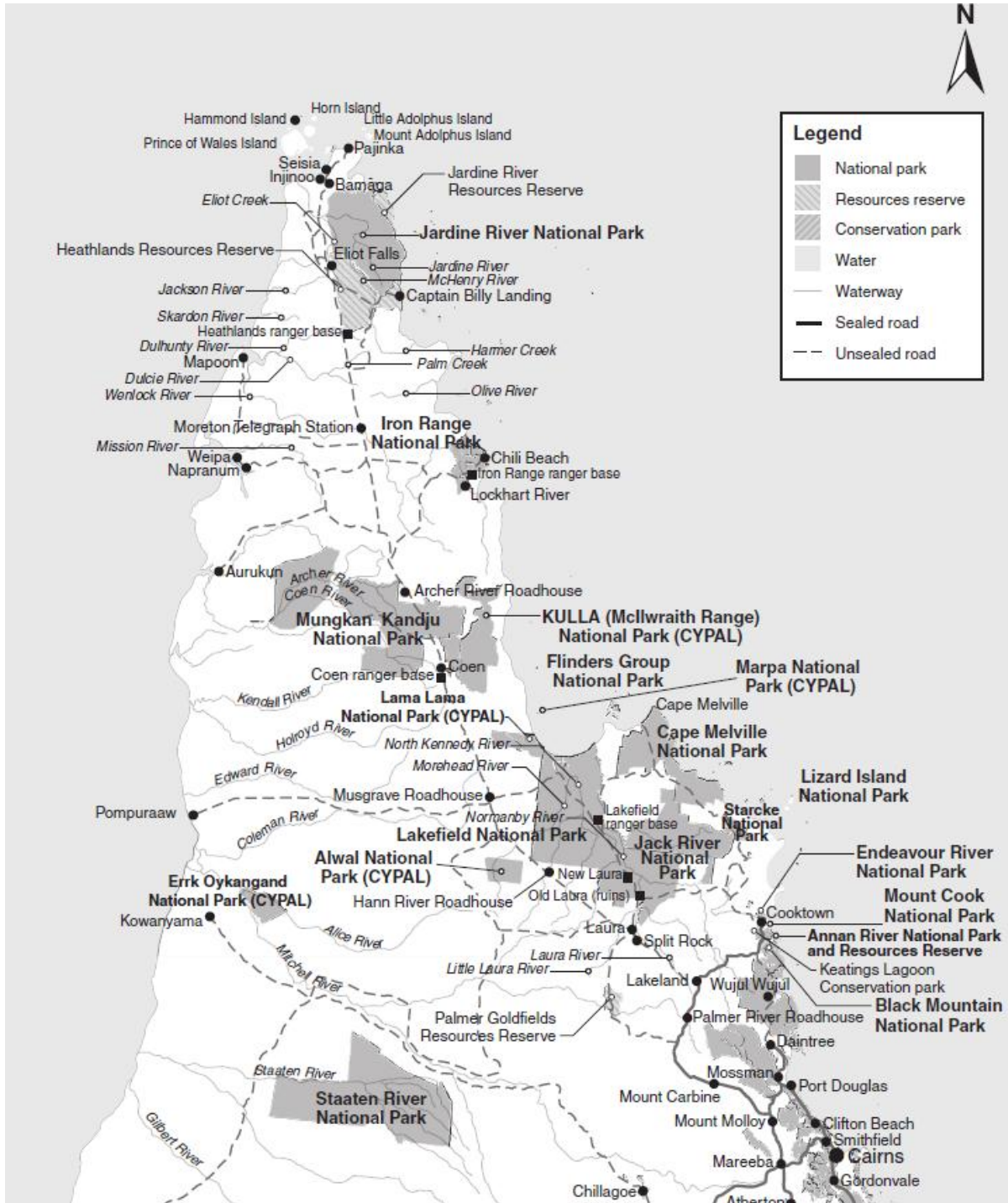
PARKS AND PROJECT REQUIREMENTS

- Participating parks will have a uniform standard of CMV facilities in all but remote parks, i.e. access to power, water, toilet and shower facilities and a suitable parking and camp site. In remote parks with no facilities only fully self contained CMV's will be considered. In some cases the CDR may wish to use his/her discretion to provide limited fuel support in remote areas if warranted.



- Parks not be able to meet the minimum standard of facilities and support for CMV's should not participate in this program.
- Participating parks must ensure that the use of facilities and resources required to conduct CMV work programs is fully sustainable.
- CMV's will be supervised by the VPO or his/her delegate and works will be conducted in a safe and acceptable manner. The VPO will plan, coordinate and report to the CDR on works conducted by CMV's.
- CMV's may use their own vehicle, tools, equipment or materials if they wish to do so on the understanding, clearly identified at the commencement of the program, that no damages will be accepted by the Commission other than for personal injury in accordance with the Volunteer Insurance.
- A minimum time of one (1) month at any one park may be negotiated between the VPO and the CMV with a maximum of three (3) months and an option to negotiate a further three (3) months providing both parties are satisfied with the arrangement. The VPO will advise the VPC of these arrangements so that the CMV Data Base is continually updated.
- Where the possibility of conflict with the activities of existing concessionaires may arise CMV's will only be used at the CDR's discretion.

APPENDIX C Existing National Parks and Reserves





APPENDIX D Examples of eco toilet systems

www.clivusmultrum.com.au

PRICE GUIDE ALL AREAS (Effective December 2008)

This pricing guide applies to sales within Australia and includes government taxes. For overseas sales, please contact us for special pricing.

The price of a complete toilet unit for a particular situation will depend on the style and model that is most appropriate, the number of fixtures required and whether any options and accessories are desired for the installation.

For full information and pricing details on your requirements please contact your nearest Clivus Multrum™ distributor, or send us an email at info@clivusmultrum.com.au.

WATERLESS TOILETS

Models suited for regular use start around \$1900 for small residential Ecolet units, and range from around \$3700 to over \$8000 for our larger Clivus Multrum™ household and commercial units. (Delivery and installation not included)

Because they simply sit on the floor, Ecolet models have lower installation costs than the Clivus Multrum™ models. Simple instructions are provided for owner-builders or local tradesmen to install the units without specialised knowledge.

PREFABRICATED AMENITIES BUILDINGS

Our prefabricated kit buildings are designed as a cost-effective solution for stand-alone amenities buildings in public areas such as parks, roadside stops and community facilities. Our standard range of modular designs includes wheelchair accessible units, and modules can be rearranged to suit a customer's special floor plan requirements.

Ex-factory prices on our standard kits range from around \$8500 for a single cubicle unit to \$55,000 for a four cubicle unit, and vary according to the options, access means and wind load requirements to suit a particular installation. (Delivery, site erection and toilet systems not included)

ECOFLO <http://www.ecoflo.net.au/questions/questions/costguide.html>

Cost Guide

The following table compares the cost of an Ecoflo waterless composting toilet and separate Greywater system against systems involving the flushing of 35,000 litres per year of water



**Equipment
and
Installation**

Ongoing Cost*

Waterless composting toilet with primary Greywater treatment	\$6,000 – \$7,000	Minimal
Septic Tank	\$7,000 – \$12,000	Low
Septic Tank with large sand filter or reed bed	\$12,000 - \$15,000	Low
Aerated water treatment system	\$12,000 - \$18,000	\$500 per year
Worm farm system	\$12,000 - \$18,000	\$500 per year

*Includes council mandated service contracts, electricity, replacement pumps and council fees.
Home > Questions > Cost comparison >

Composting Toilet Systems: Classic 750

<http://www.nature-loo.com.au/toilets/SYSTEMS/classic750.html>

The Classic 750 is the standard batch system toilet for domestic installations. Since its development in 1992 thousands have been sold all over Australia. Its strengths are its small underfloor space requirements, simplicity, minimum maintenance and unlimited capacity with the purchase of additional chambers. Most importantly, it is the lowest priced family composting toilet in Australia.

The Classic 750 (previously sold as the Ensuite) is approved in QLD, NSW, WA, NT and SA and is Australian Standards 1546.2 certified.

The Classic range is complete with everything required for installation, **including pedestal and seat**, except, for reasons of freight cost, the external vent pipe and absorption trench materials, which can be bought from your local hardware store for about \$80. **The minimum height required to install the chamber beneath the bathroom floor is 750 mm.**

Included in the standard Classic 750 - 3 Package are:-

- Fibreglass clean white hard wearing pedestal and matching seat.
- 3 composting chambers (65 cm high x 60 cm diameter).
- Waste connecting chute (70 cm in length - can be cut by you to suit your installation).
- Ventilation system including a 12 volt fan and transformer.
- Easy to follow installation and maintenance manual.

Price: \$2,800 ex-Brisbane factory Capacity: 4 people on a permanent basis

The Classic 750 - 2Package:



Includes all components of the Classic 750 - 3 but has only 2 chambers. The 2 chamber toilet is only suitable for 2 people plus visitors. It is possible to start with 2 chambers and add an additional chamber later.

Price : \$2,450 ex-Brisbane factory Capacity: 2-3 on a permanent basis