

# **Surveying Challenges to Deliver Tenure for the Eastern Kuku Yalanji People's Native Title Determination in the Wet Tropics of Far North Queensland**

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**Key words:** Native Title, Indigenous Land Use Agreement, ILUA, Land tenure

## **SUMMARY**

In Australia the Commonwealth *Native Title Act 1993* provides for Indigenous land use agreements (ILUAs) between native title holders or claimants and other interested parties on how land and waters in the area covered by the agreement will be used and managed in the future. An ILUA is a voluntary agreement between a native title group and others about the use and management of land and waters.

In April 2007 after ten years of negotiation, the Queensland Government concluded a package of ILUAs with the Eastern Kuku Yalanji People and other stakeholders over an area of approximately 230,000 hectares between Mossman and Cooktown in the Wet Tropics of Far North Queensland, predominantly a World Heritage Area. These agreements are the most comprehensive native title outcomes negotiated in Queensland and provide a platform for land tenure and management that will recognise the Eastern Kuku Yalanji People's rights to be custodians and managers of their traditional country. The agreements and tenure outcomes will protect the outstanding environmental and cultural values of the region while still providing sustainable development, continued public access (tourism) and economic opportunities for the traditional owners.

The implementation of the ILUAs have provided many challenges, including the definition of the land boundaries. Many parcels involved in the ILUA have never been surveyed, or were surveyed over 100 years ago providing challenges in surveying and defining the boundaries today. There are hundreds of parcels of different tenure within the ILUA including Freehold land, Aboriginal Land Act Freehold, Reserves, Road actions, Leases, Easements, Conservation areas and National Park. The implementation of the land tenure resolutions has been managed by the Queensland State Government Department of Environment and Resource Management's (DERM) Cairns office.

**This paper discusses the challenges that were faced from a land surveying perspective and how the challenges were overcome using various surveying techniques. Challenges included historical boundary reinstatement, interpretation of the ILUAs, survey and tenure records searches, resourcing, funding, logistics, mountainous terrain, boundary marking and plan drafting.**

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## **1. INTRODUCTION**

In Australia the *Native Title Act 1993* recognises that some Indigenous people have rights and interests in land and waters according to their traditional laws and customs. Native Title describes these rights and interests and they are recognised by the common law.

Indigenous people can make a claim under Section 61 of the Act over a particular area of land or waters. Under Sections 13 and 225 of the Act the Federal Court, High Court of Australia or a recognised body determine if native title exists or not exist in relation to a particular area of land or waters pursuant to the claim,

Under the *Native Title Act 1993* Indigenous Land Use Agreements (ILUAs) between native title holders or claimants and other interested parties can be created. An ILUA is a voluntary agreement between a native title group and others (such as governments, utilities companies, farmers) about the use and management of the land and waters.

## **2. EASTERN KUKU YALANJI PEOPLE'S NATIVE TITLE DETERMINATION**

In late 1994, the Eastern Kuku Yalanji People lodged a native title application over approximately 144,000 hectares (ha) of land within their traditional country in Far North Queensland. Over time there were several amendments to the application including the area of claimed land being claimed from 144,000 ha to 126,900 ha (National Native Title Tribunal, 2007).

In December 2007, the Federal Court made a consent determination recognising the Eastern Kuku Yalanji People's native title rights and interests over 126,900 ha of land and waters in Far North Queensland. The ILUAs cover an area some 103,000 ha larger than the determination area (approximately 230,000 ha).

The determination gives the Eastern Kuku Yalanji people rights to exclusively occupy and use 30,300 ha of currently state-owned land within the determination area and non-exclusive native title rights over 96,600 ha. Non-exclusive rights to the land include the right to camp, hunt, gather resources for personal needs and conduct ceremonies as well as non-exclusive rights to the water, to fish and hunt for personal, domestic and non-commercial purposes (Wet Tropics Management Authority, 2008).

The Kuku Yalanji people are said to be the only tribal rainforest people in Australia who still have their own culture and language. Many areas in the determination area hold very high Aboriginal cultural significance.

### **3. EASTERN KUKU YALANJI INDIGENOUS LAND USE AGREEMENTS (ILUAs)**

#### **3.1 The ILUAs**

In April 2007 after ten years of negotiation, the Queensland Government concluded a package of ILUAs with the Eastern Kuku Yalanji People and other stakeholders over an area of approximately 230,000 ha between approximately Mossman and Cooktown in the Wet Tropics of Far North Queensland, predominantly a World Heritage Area. The area includes the well known Daintree, Cape Tribulation, Black Mountain and Cedar Bay national parks, and popular tourist sites and beaches.

The National Native Title Tribunal registered all fifteen (15) ILUAs in October 2007. The ILUAs are between the Eastern Kuku Yalanji People, the Queensland Government, the former Douglas Shire Council (now part of the Cairns Regional Council), Cook Shire Council, Wujal Wujal Aboriginal Shire Council, Burungu Aboriginal Corporation, Bana Mindilji Aboriginal Corporation, the Wet Tropics Management Authority, Telstra (an Australian communications provider), Ergon (an Australian electricity provider), and grazing and mining lessees in the area (National Native Title Tribunal, 2007).

Under the ILUAs the public's rights of access to national parks and beaches have not been affected and specific areas for the use of the general community are being set aside as reserves. The need for future community infrastructure has been considered and provided for and electricity and telecommunications infrastructure is protected under ILUAs. Existing mining rights, water permits and other licences, tour operator permits and privately owned freehold land have not been affected (Department of Environment and Resource Management, 2010).

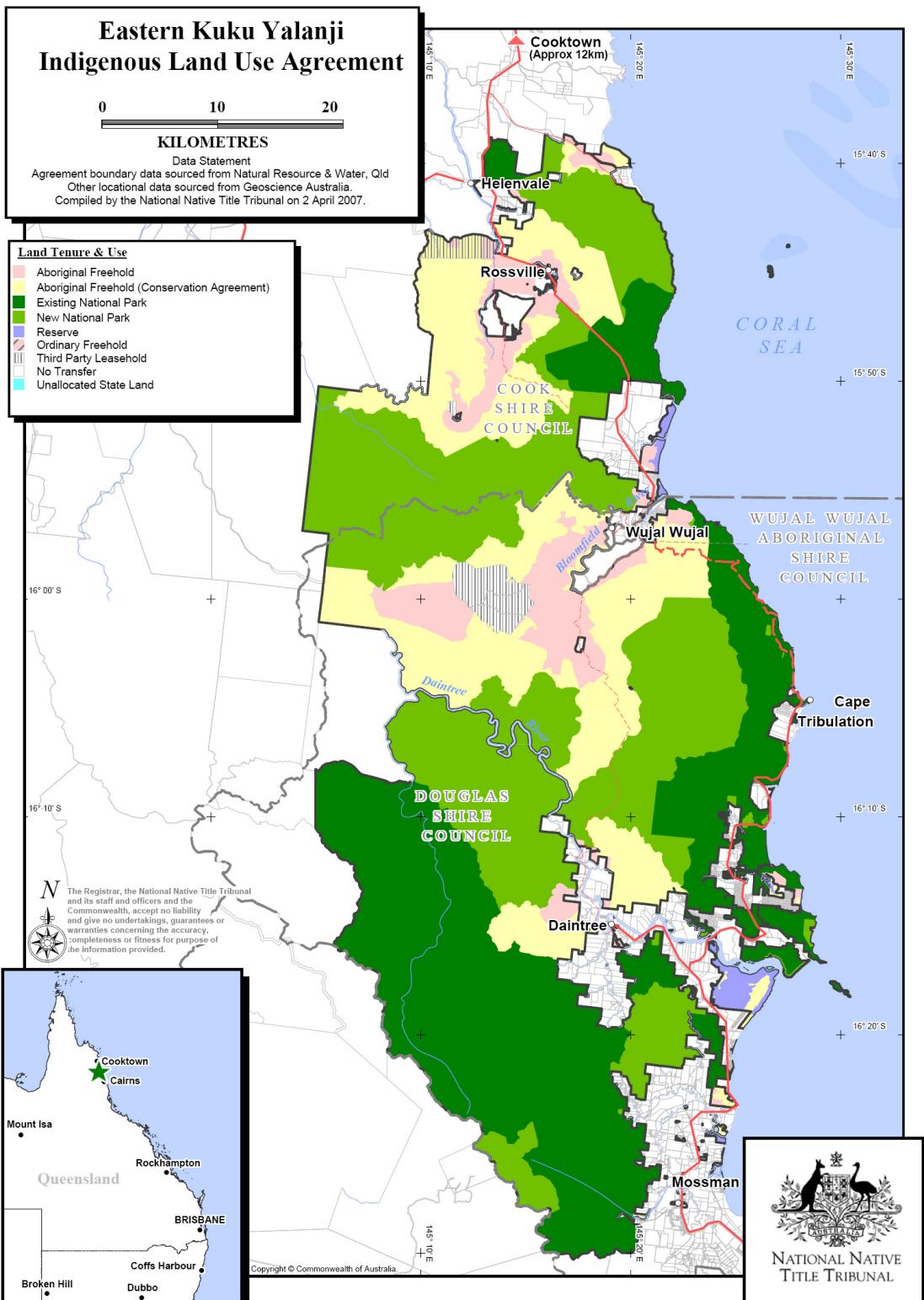
#### **3.2 The land tenures under the ILUAs**

There are a variety of land tenure and land tenure actions associated with the implementation of the Eastern Kuku Yalanji ILUAs. These include national park, public reserves, road actions (including openings and closures), amendments to leases in the area, Aboriginal freehold land, and as the land is in a conservation area there will also be Aboriginal freehold with land conservation agreements to create nature refuge areas. Figure 1 shows the different land tenure within the agreement area.

Under the ILUAs an additional 79,000 ha of national park will be created, nearly doubling the area of national park in the area. The Eastern Kuku Yalanji people will have ownership of

approximately 64,000 ha of Aboriginal freehold land under the *Aboriginal Land Act 1991*, held by an Eastern Kuku Yalanji People land trust with approximately 16,500ha for residential and economic development (subject to regulatory controls of the area including the Wet Tropics Management Plan, the Vegetation Management Act and Shire planning schemes). The remaining Aboriginal freehold land will be a nature refuge under conservation agreements.

Under the ILUAs the Eastern Kuku Yalanji people will also have a greater role in the management of the national parks and it is anticipated that some Eastern Kuku Yalanji people will be employed as park rangers and conservation officers.



**Figure 1 Eastern Kuku Yalanji ILUA location, area and land tenures**

## **4. CHALLENGES FACED PERFORMING LAND SURVEYS FOR THE ILUA IMPLEMENTATION**

### **4.1 Interpretation of the ILUAs**

Unfortunately surveyors had very limited input during the ten years of negotiations and it appears little discussion evolved about the boundaries of the specific parcels of land. In many instances the Digital Cadastral DataBase (DCDB), a seamless digital map of the cadastre of Queensland, was used in the negotiations. The DCDB is not survey accurate and in areas where little few or no boundaries have been previously surveyed in recent years there are vast discrepancies. An example was at Mount Poverty, a parcel was shown in the DCDB as Unallocated State Land, but in fact the parcel did not exist on the ground because two existing leases abutted each other and had done so for decades.

Where new boundaries were being negotiated, the concept of how the boundary would be defined and marked through survey was not discussed in detail. Sometimes natural features such as creeks or watersheds were determined to be the boundary but in many instances arbitrary lines were drawn on maps. Maps used in negotiations were also at small scales, often 1:100,000 so a single line drawn on a map might scale to be many metres wide. Most of the people involved in the negotiations and conversations about the placement of the ‘lines’ have since moved on and do not form part of the implementation process.

In other instances coordinates were provided in the ILUA’s, sometimes with no datum specified. Without any written description there was no alternative but to adopt, after some assumptions, the coordinates as defining boundary. Physical survey of these corners revealed the intent may not fit the coordinates.

Therefore the main challenge in surveying parcels for the ILUA implementation was interpreting what had been negotiated, the intent, what was required to be surveyed and the existing infrastructure on the ground. Ground reconnaissance for many areas uncovered more issues and complicated the surveys.

### **4.2 Logistics, Terrain and Weather**

The topography within the ILUA is varied but covers much of the Far North Queensland’s wilderness including many areas of rugged mountainous terrain, thick rainforest, coastal mangroves and swamps.

Under Queensland legislation, any form of freehold land cannot be granted below high water mark. In some areas there were parcels of proposed freehold land almost entirely surrounded by mangroves such as at the Daintree River South Arm section. The current reserve is being subdivided into an environmental reserve and Aboriginal freehold with a conservation agreement.

The ILUA also covers some ‘ghost’ towns i.e. some towns that were once surveyed but never developed, or towns that were developed during mining booms or gold rushes in the 1800s and have since disappeared with little or no physical evidence of them ever existing. Original marks to reinstate the town of Degarra had been eluding surveyors for a number of years. Surveys of this part of the ILUA implementation discovered all four original iron pins placed in the centre of the surveyed streets in 1888 by surveyor James John Cobon and the town was re-surveyed. Many of the parcels in Degarra will be Aboriginal freehold and will become housing blocks for community residents from nearby Wujal Wujal.

Cairns and coastal Far North Queensland has a tropical climate, with generally hot and humid summer months and warm but milder and dryer winters. The average annual rainfall is 1992mm on an average 154 days (Bureau of Meteorology, 2010). The majority of Cairn's rainfall (some 1200mm) occurs during summer between January and March. From December to March the monsoon trough is close to Cairns bringing the hot, humid conditions and the possibility of thunderstorms and tropical cyclones. Field work is slowed during these months and therefore the majority of the field work was performed from May-November.

Many field trips were difficult to organise logically with people, vehicles, accommodation and subsequent field trips depending on what was accomplished on previous field trips. Field trips were usually 2-3 weeks in length, involving 3-4 vehicles and 6-8 people.

### **4.3 Resources and Funding**

The implementation of the land tenure resolutions has been managed by the Queensland State Government Department of Environment and Resource Management's (DERM) Cairns office. Two officers specialising in land tenure dealings from the Department's State Land Asset Management (SLAM) unit were assigned full time over the project's three year implementation phase.

While the negotiations took ten years, a timeframe of only three years was negotiated to implement the ILUAs. Three years may seem like a long time but if you have not been involved in the negotiations, the ILUAs are lengthy and complex documents to become familiar with. Some land tenure dealings also have periods of advertisement before they can occur. The sheer volume of the number of land tenure dealings is huge and the order in which the dealings must occur is complex. For example all interests such as leases in the Timber Reserve must be terminated before the Timber Reserve can be revoked and new tenures issued, roads opened etc.

As part of the negotiations, no funding was allocated for survey. To survey the boundaries and provide survey advice to the project was estimated to cost in excess of one and a half million dollars. Bids were placed to obtain some funding to perform surveys but underfunding meant taking the cost effective approach of balancing private survey contracts and utilising Departmental survey staff. As the Cairns office only had three full time and one part-time survey staff, the Department took a state-wide approach and engaged staff from around Queensland (including Toowoomba, Brisbane, Gold Coast, Bundaberg and Rockhampton). In

both 2008 and 2009, approximately 75% of the survey staff (or about 30 different people) in the Department have participated in Yalanji surveys. The survey field work was completed on time by December 2009.

#### **4.4 Survey and Tenure Records searching**

In Queensland the DERM has an archive of all of the survey plans dating back to when Queensland was still a colony and part of New South Wales (pre 1859). Survey records are searchable through Departmental computer systems and images of the plans are available digitally.

As the Eastern Kuku Yalanji ILUAs were dealing with State (or Crown) land, and not privately owned freehold land, many of the parcels of land have either not been surveyed or were surveyed a number of years ago. In the Daintree region many of the surveys date back to pre-1900, with little or no survey work performed since the original surveys.

The historical survey records were not always linked correctly in the systems and searching was often onerous. All parcels of State land in Queensland with historical or current land dealings have official Departmental files. In many instances these files for parcels in the ILUAs were archived in State Archives in Brisbane. These files contain important information relating to the parcels of land, including the original descriptions of the land and historical lands agents' sketches of improvements of the land over time as part of the valuation, and rent payment, processes.

#### **4.5 Boundary Marking**

Boundary corners are required to be marked for all freehold land, including Aboriginal freehold land, in Queensland. This provides a clear definition of where the boundary is on the ground and also provides certainty in Queensland's tenure system. Land boundary surveys must be performed by people registered with the Surveyors Board of Queensland.

Pre-1900 surveys in Queensland involved placing survey posts at the corners (1m in length, with 0.6m buried in the ground) and cutting 'shields' into trees that referenced the corner. Prior to 1898 reference trees only had to have shields cut in them at approximately eye height, while after the Surveyors Directions in 1898 trees had to have shields and 'benches' cut down near the ground.

Today in Queensland many reference marks are placed for ease of locating corner marks and for performing surveys in the future. Usually 50x50mm pegs are placed at corners in urban areas and 75x75mm pegs are placed at corners in rural areas. Reference trees are still occasionally cut in rural areas but more commonly permanent survey marks are placed. Iron pins are buried as reference marks near boundary corners and in urban areas nails or screws are often placed in concrete such as in road kerbs.

The Yalanji surveys encountered many difficulties in marking boundary corners, often due to the inaccessibility of corners, steep terrain and thick vegetation. Where possible all boundary corners for the freehold land were marked, including intersections onto creeks and watersheds. For example a permanent survey mark was placed in rock in the Annan River to mark the intersection of the Aboriginal freehold and national park near the Annan Falls.

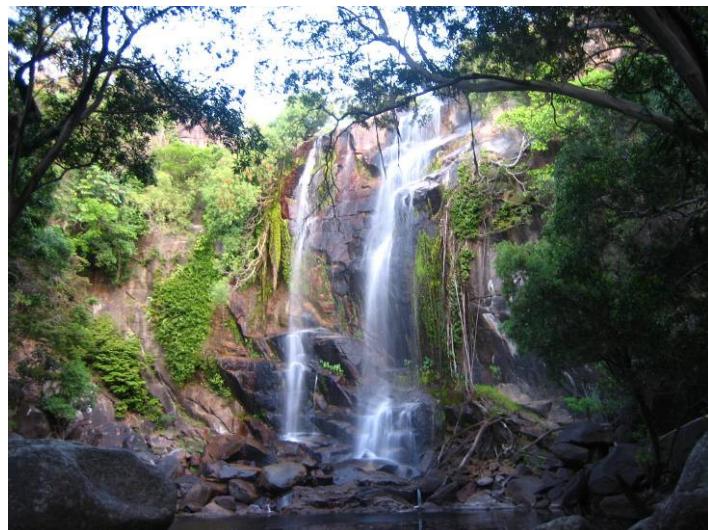
No survey marks were placed along natural features such as creeks and watersheds.

#### **4.6 Historical Boundary Reinstatement**

Each parcel surveyed as part of the ILUA implementation posed its own reinstatement challenges. The main challenges evolved due to the age of the original surveys and existing/remaining survey marks. The following are some specific examples.

##### **4.6.1 Mt Amos Road, Forsberg Point**

The main parcel of land being subdivided in the ILUA was an old Timber Reserve. At the northern end of the timber reserve (Mt Amos Road, Forsberg Point) a large section of land was negotiated as Aboriginal freehold, parts covered by a conservation agreement. There were also new roads to be surveyed and opened (where the road is currently formed) and the old roads to be closed. Two small areas were set aside as gravel reserves (for road building) for the local council (Cook Shire) and an old lease converted to National Park around the magnificent Trevathan Falls.



**Figure 2 Trevathan Falls**

Originally Forsberg Point was an area where ships landed and an old dray track had been located up the extremely steep hillside from the ocean and along the ridgeline inland. The area was subdivided back in 1888 with other surveys performed in the area in 1884. The two main surveyors working in the area back then were Surveyors Norman Eugene Amos and James

John Cobon. Technologies used by the surveyors were theodolite and chain, unlike today's total stations with electronic distance measuring (EDM) systems.

In many instances all evidence of survey posts have long been destroyed through rot, termites, fires or development. Sometimes evidence of survey posts are found as the discolouration of the soil, usually about 0.2m deep, where the post was once located. One original survey post (OSP) discolouration remains was located along Mt Amos Road, see Figure 3.



**Figure 3 Original Survey Post (OSP) remains along Mt Amos Road**

Many reference trees were cut by Amos and Cobon during their surveys, but looking for reference trees approximately 120 years later can be challenging for many reasons including the natural life of the tree, natural events such as fires and cyclones, and development including land clearing for roads, fences, grazing and housing. Several original reference trees, or remains of them, were discovered during the survey, see Figure 4 and Figure 5.



**Figure 4 Original Reference Tree (ORT), Moreton Bay Ash, dead and lying over - shield still obvious from 1887 survey at Forsberg Point (end of Mt Amos Road)**



**Figure 5 ORTs Ash (left with Jemma Picco) and Scrub (right with Graham Jensen). ORTs still standing with shields grown over (and cut open to confirm ORT) from 1884 surveys along Mt Amos Road**

With the discovery of many original survey marks, the surveyors were able to confidently reinstate the cadastre, re-mark the parcels and provide survey control into the area providing a legacy for future surveys in this area.

#### 4.6.2 Portions 34 and 223, North of the Daintree River

Surveys north of the Daintree Township required the survey of Portions 34 and 223 which are both wedged between the local ranges and the Daintree River in very steep and heavily

vegetated tropical rainforest. From the official Departmental files and survey records it was discovered the cadastre in this area is steeped in history and dispute dating back to the first settlers F.L. du Couret and T.J. Pentzcke. Du Couret was later charged with fraud for misleading surveyor Gregory M McLennan in 1883 as to the location of his original selector tree. Staff Surveyor Alfred Starcke investigated and settled this dispute in January 1884. Surveyor McLennan was ordered by the Surveyor General to alter his survey at his own cost in April 1884, and completed that task begrudgingly in May 1884. Staff Surveyor Starcke was again sent by the Surveyor General in August 1884 to investigate McLennan's survey and he wrote in his report to the surveyor General:

*"The instrumental part of the work appears to be well done, as well as the marking. The chainage is very bad indeed. The great difference in the distances induced me to chain all the lines, where a great difference existed in the chainage between pegs, over and over again always with the same result."*

It was not surprising that our investigation into the cadastre revealed excesses and shortages well above those normally expected. In the 2.7 kilometres between Portion 179 in the south, and the SW corner of Portion 144 in the north, 50 metres of shortage exists. In an east west direction shortages up to 11 metres in 300 metres were discovered. These particular boundaries are extremely steep, with the original boundaries step chained up and down slopes in excess of 35 degrees over razor-back ridges only 8 metres wide.

In completing the survey of Portion 34 in the north, boundaries were run until the slopes became impossible (approximately 40 degrees and covered in vine scrub). It took many arduous day traversing razor back ridges searching for 1884 reference trees just to get a start in this area.

In the course of these surveys locals were relied upon to get across the Daintree River by boat as no vehicular access existed to most parcels. A cassowary, a very large flightless bird that can be very aggressive and dangerous, charged our surveyors on one occasion. The necessary standing one's ground with a charging cassowary takes some courage. Other dangers included taipans and black snakes, crocodiles in and around the river, and lots of giant stinging tree and very thick wait-a-while vine. This coupled with very slippery and steep slopes makes progress of surveys in these areas very slow.

The large and prolonged effort and resultant reinstatement and marking of the cadastre in this particularly difficult area will provide a basis for future surveys for generation to come.

#### 4.6.3 Springvale

The Springvale Pastoral Holding abuts a section of the Monkhouse Timber Reserve which will be transferred into Aboriginal Freehold land. Springvale is a very old cattle station and gets its name from the many natural springs that occur through the property. A portion of this boundary was surveyed in 1889, again by James John Cobon, although to a reduced standard

of Compass and Chain. This boundary was reinstated in order to provide the definition of the Aboriginal Freehold lot boundaries adjoining.

The original survey (plan number BK157114) conducted in 1889 was for an isolated portion along the old stock route from Springvale to Bloomfield (the nearest coastal settlement). Due to the remoteness of the survey the Surveyor General of the time allowed the use of the compass instead of the theodolite to read angles and directions in order that the survey be completed expeditiously.

An earlier pastoral run survey (plan number C153335) by Surveyor John Thomas Embley in the area was connected to by Surveyor Cobon during his survey in order to assist with cadastral mapping in the locality by the then Department of Lands. This connection proved vital in locating the boundary during field work since Surveyor Embley had traversed many watercourses and other natural features which could be related to the present by way of small scale topographical maps and imagery.

The position of the boundary was initially surmised by plotting the original traverse and feature crossings from Surveyor Embley and Cobon's field notes overlaid on digital topography and high resolution imagery. The original data was manipulated by translation and rotation until a suitable fit could be obtained with the present location of the natural features. This position was some 500 metres south-easterly from the position stored in the Digital Cadastral DataBase (DCDB) for the parcels, however the evidence of the original surveys, position of the natural features and location of old fences and tracks confirmed the analysis to be reliable.

When confident of the physical location of the boundary all the features that crossed the subject boundary were located by survey and a localised best fit was obtained with the evidence contained in surveyor Cobon's field notes. With this information we were able to discover the original reference tree stumps and holes and also the original post hole in correct relationship to each other. Further searching was then conducted along the old stock route and another original reference tree was found to confirm the work already done and within the expected accuracy of the original compass survey.

Reinstating a boundary surveyed by compass 120 years ago was very satisfying but would not be possible without careful examination of the original surveyors work (method, field notes & plan) and consideration of the facts and natural features existing on the ground.

## 5. CONCLUSION

In April 2007 after ten years of negotiation, the Queensland Government concluded a package of ILUAs with the Eastern Kuku Yalanji People and other stakeholders over an area of approximately 230,000 hectares between Mossman and Cooktown in the Wet Tropics of Far North Queensland, predominantly a World Heritage Area.

The implementation of the land tenure resolutions has been managed by the Queensland State Government Department of Environment and Resource Management's (DERM) Cairns office. The implementation brought many challenges in defining the land boundaries and surveying the parcels including the interpretation of the ILUAs; the logistics, terrain and weather of the area; resources and funding; records searching; boundary marking and boundary reinstatement. Each section had its own reinstatement challenges, mainly due to the age of the original surveys and locating original survey marks and natural features. The project has seen dozens of survey plans prepared. The plan drafting for all the field surveys should be finalised in February 2010.

Overall the surveyors involved in the implementation of the ILUAs have enjoyed the challenge of defining the land boundaries for the delivery tenure in the Eastern Kuku Yalanji people's traditional country.

## **ACKNOWLEDGEMENTS**

The authors wish to acknowledge the support of all survey staff in the Department who have assisted in performing surveys for the implementation of the Eastern Kuku Yalanji ILUAs. In particular they wish to acknowledge Senior Surveyors Mr Ian Honor, Mr Lyle van Tienhoven and Mr Graham Jensen whose expertise, enthusiasm, support and input to the project have been invaluable.

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## **REFERENCES**

Bureau of Meteorology. (2010). *Climate of Cairns*. Last visited 16<sup>th</sup> January 2010.  
<http://www.bom.gov.au/weather/qld/cairns/climate.shtml>

Department of Environment and Resource Management. (2009). *Eastern Yalanji land use agreements*. Last visited 20<sup>th</sup> January 2010.  
<http://www.derm.qld.gov.au/nativetitle/dealings/yalanji.html>

National Native Title Tribunal. (2007). *Eastern Kuku Yalanji People's native title determination- Far north Queensland, 9 December 2007*. Last visited 20<sup>th</sup> January 2010.  
[http://www.nntt.gov.au/publications-and-research/publications/pages/native\\_title\\_determinations.aspx](http://www.nntt.gov.au/publications-and-research/publications/pages/native_title_determinations.aspx)

Wet Tropics Management Authority. (2008). *Rainforest Aboriginal Heritage*. Last visited 20<sup>th</sup> January 2010. [http://www.wettropics.gov.au/rah/rah\\_title.html](http://www.wettropics.gov.au/rah/rah_title.html)

## **BIOGRAPHICAL NOTES**

Leslie (Les) is a Principal Surveyor in the Queensland Government Department of Environment and Resource Management (DERM), based in Cairns. Les is Registered as a Land Surveyor with the Surveyors Board of Queensland and is a Fellow of the Surveying and Spatial Sciences Institute (SSSI).

Les has been actively involved in providing survey advice and land tenure solutions for land under the *Aboriginal Land Act 1991*, the *Torres Strait Islander Land Act 1991* and Deeds of Grant in Trust (DOGITs) under the *Land Act 1994* and Indigenous Land Use Agreements (ILUAs) under the Native Title Act 1993 for over ten years including writing a policy on methods for these cadastral surveys (PBO/900/119).

Les is also member of the Queensland Survey Requirements Committee, responsible for reviewing and setting the standards and guidelines for cadastral surveys in Queensland cover aspects such as accuracy, survey monuments, integration of surveys, methods of lodging the survey records and access to that information.

Jemma is also a Principal Surveyor in the Queensland Government Department of Environment and Resource Management (DERM), based in Cairns. Jemma is Registered as a Land Surveyor with the Surveyors Board of Queensland and was awarded Queensland Young Surveyor of the Year in 2001.

Jemma is an active member of the Surveying and Spatial Sciences Institute (SSSI) and is a Young Ambassador for the FIG2010 Congress in Sydney.

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