



Collaboration, Innovation and Resilience: Championing a Digital Generation

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Surveying the boundaries of Boodjamulla (Lawn Hill) National Park in remote North-Western Queensland

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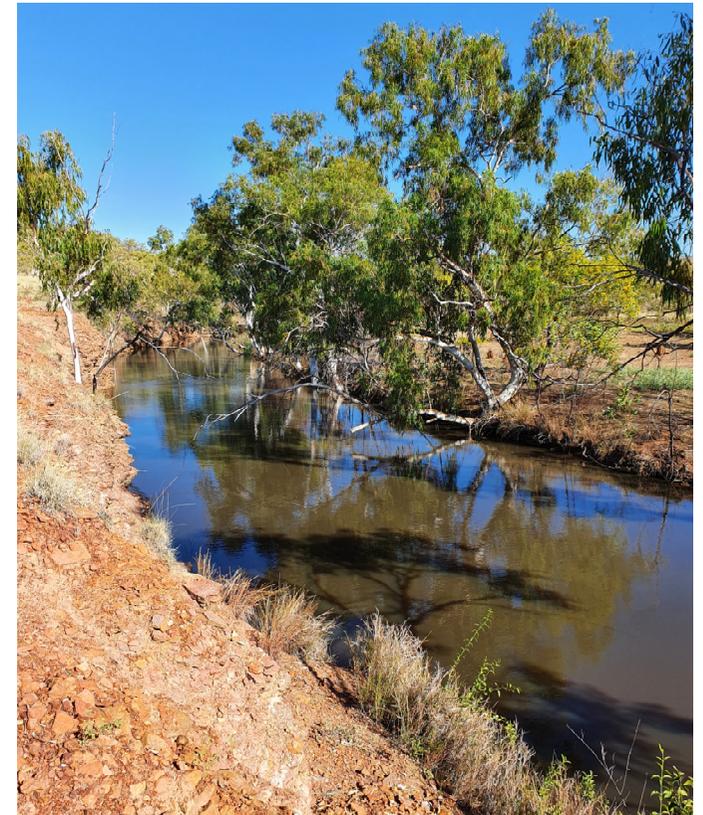


Boodjamulla (Lawn Hill) Survey Overview

- Boodjamulla (Lawn Hill) National Park
- Claimable land
- Land surveying challenges
- Size, location, access and weather of Boodjamulla (Lawn Hill)
- Preparation and resourcing
- Performing the land survey
- Queensland Northern Territory boundary
- Survey plans

Boodjamulla (Lawn Hill) National Park

- An oasis in the outback of remote North-Western Queensland covering over 281,500 ha of land.
- Features spectacular gorge country, sandstone ranges, open woodlands and spinifex communities, and World Heritage fossils.
- Known as rainbow serpent country, it is the spiritual heart of the indigenous Waanyi people's land.
- State land that is claimable land under Schedule 2 of the Queensland *Aboriginal Land Regulation 2011*.



Claimable land

- The *Aboriginal Land Act 1991* (ALA) and the *Torres Strait Island Land Act 1991* recognise the spiritual, social, cultural and economic importance of land to Aboriginal and Torres Strait Islander people of Queensland.
- The grant of freehold title under the ALA over Boodjamulla (Lawn Hill) National Park, under the claimable land provisions of the *Aboriginal Land Act 1991*, is being facilitated by the department.
- Ownership of the land will be transferred to a Prescribed Body Corporate for the Waanyi People.
- The Waanyi people will lease the Aboriginal land, in perpetuity, to the State to manage under the *Nature Conservation Act 1992*.
- This is the first lease back arrangement that has been successfully negotiated on national park land in Queensland.



Aboriginal Land Act 1991

Current as at 26 April 2024



Queensland
Government

Land surveying challenges

- Size and extent of the survey
- Remoteness and accessibility of the land
- Extreme weather conditions
- Logistics and planning
- Resourcing
- Surveying and tenure records searching
- Historical surveys and boundary reinstatement
- Plan drafting
- The jurisdictional boundary of Queensland and the Northern Territory.



Size, location, access & weather

- Survey area of 377,500 ha, including adjoining state reserves.
- Located in remote NW Queensland within two sparsely populated local government areas.
- The area has a semi-arid climate with hot humid summers and dry warm winters constraining field work to winter months.
- In many places access by 4WD was not possible and helicopter charters were required.



Preparation & resourcing

- More than 20 departmental surveying staff involved.
- The survey research and records searching revealed that the:
 - original survey reference trees from 1889 and 1925 from old run surveys of the area
 - water boundaries and natural feature boundaries such as cliffs
 - infrastructure boundary features such as fences
 - the existence of other tenure such as mining interests and telecommunications.



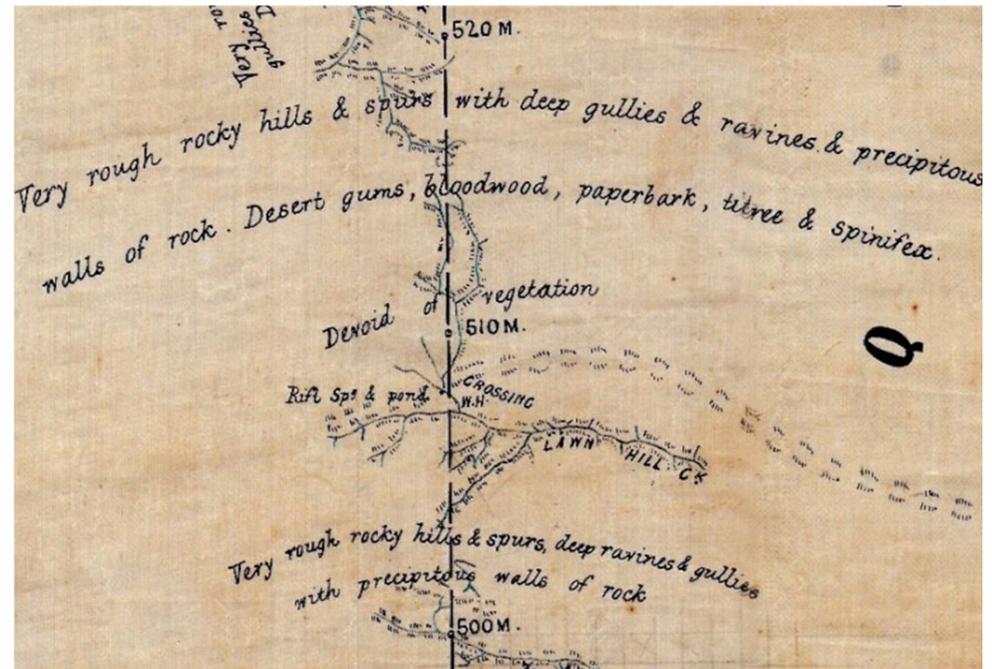
Performing the land survey

- This survey was split into eight campaigns.
- Most field campaigns involved 6-8 surveying staff in five 4WD vehicles due to the amount of equipment and supplies that were required for the remote campaigns.
- The survey was undertaken using traditional total station measuring and Global Navigation Satellite Systems (GNSS).
- Boundary corners were appropriately marked with white surveyors' pegs, stainless steel bolts in rocks or star pickets.



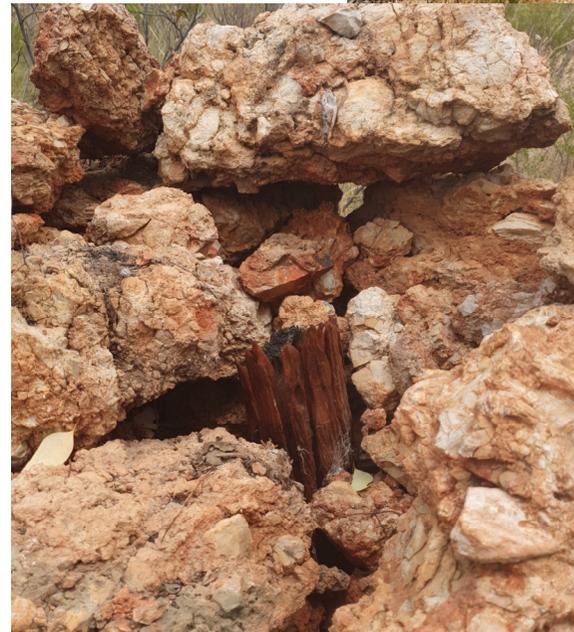
Queensland Northern Territory boundary

- The Queensland – Northern Territory border was originally surveyed from 1884 – 1886 placing a post or marker at every one mile for over 650 miles.
- This project required part of the Queensland – Northern Territory border between chainages of 507 and 538 miles.



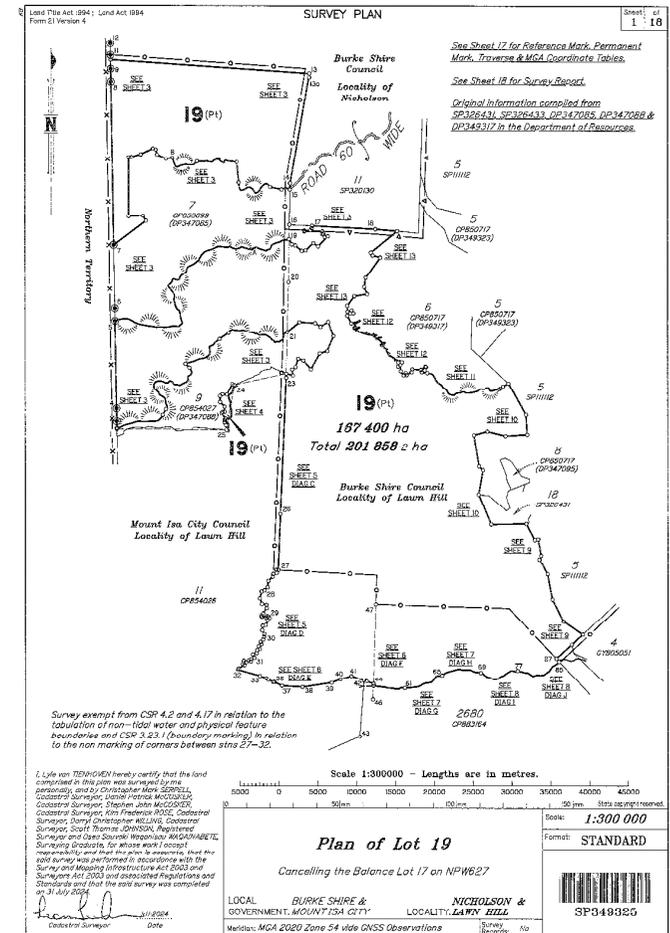
Border survey marks

- Minimal disturbance to the land helped with finding original marks.
- Comparison of physical features on the ground & additional information on original records were used to commence searching for marks.
- Some initial survey posts & rock cairns were found and with improved calculated positions further marks were identified.



Survey plans

- The project team collaborated with Northern Territory government survey office.
- For all survey plans to register along a jurisdictional boundary, the Surveyor General in the adjoining jurisdiction must provide an approval.
- General Consent forms (Form 18s) were signed by the Surveyor General from the Northern Territory and the Director of Surveys in Queensland in their agreement of the registration of these plans.
- The department's surveying services team has delivered a package of eleven survey plans for registration in the title registry of Queensland.



Summary

- The grant of freehold title under the *Aboriginal Land Act 1991* for the Waanyi People, is being facilitated by the department.
- The Waanyi people will lease the Aboriginal land, in perpetuity, to the State to manage under the *Nature Conservation Act 1992*.
- This is the first lease back arrangement that has been successfully negotiated on national park land in Queensland.
- The Boodjamulla (Lawn Hill) National Park is now surveyed providing accuracy and certainty to the boundaries of this land in remote North-Western Queensland.
- Due to these challenges, the Boodjamulla (Lawn Hill) National Park survey was considered a once-in-a-career opportunity with surveyors enthusiastic to be involved, rising to each challenge presented to them on this project.

1 NO POVERTY



1st relevant SDG

15 LIFE ON LAND



2nd relevant SDG

SUSTAINABLE DEVELOPMENT GOALS

International Federation of Surveyors supports the Sustainable Development Goals