



Department of Conservation  
and Land Management



*Conserving the  
nature of WA*

**BACKGROUND DOCUMENTATION**

# **PROPOSED MULGALANDS**

## **RESERVE VISIT**

**CONSERVATION COMMISSION**

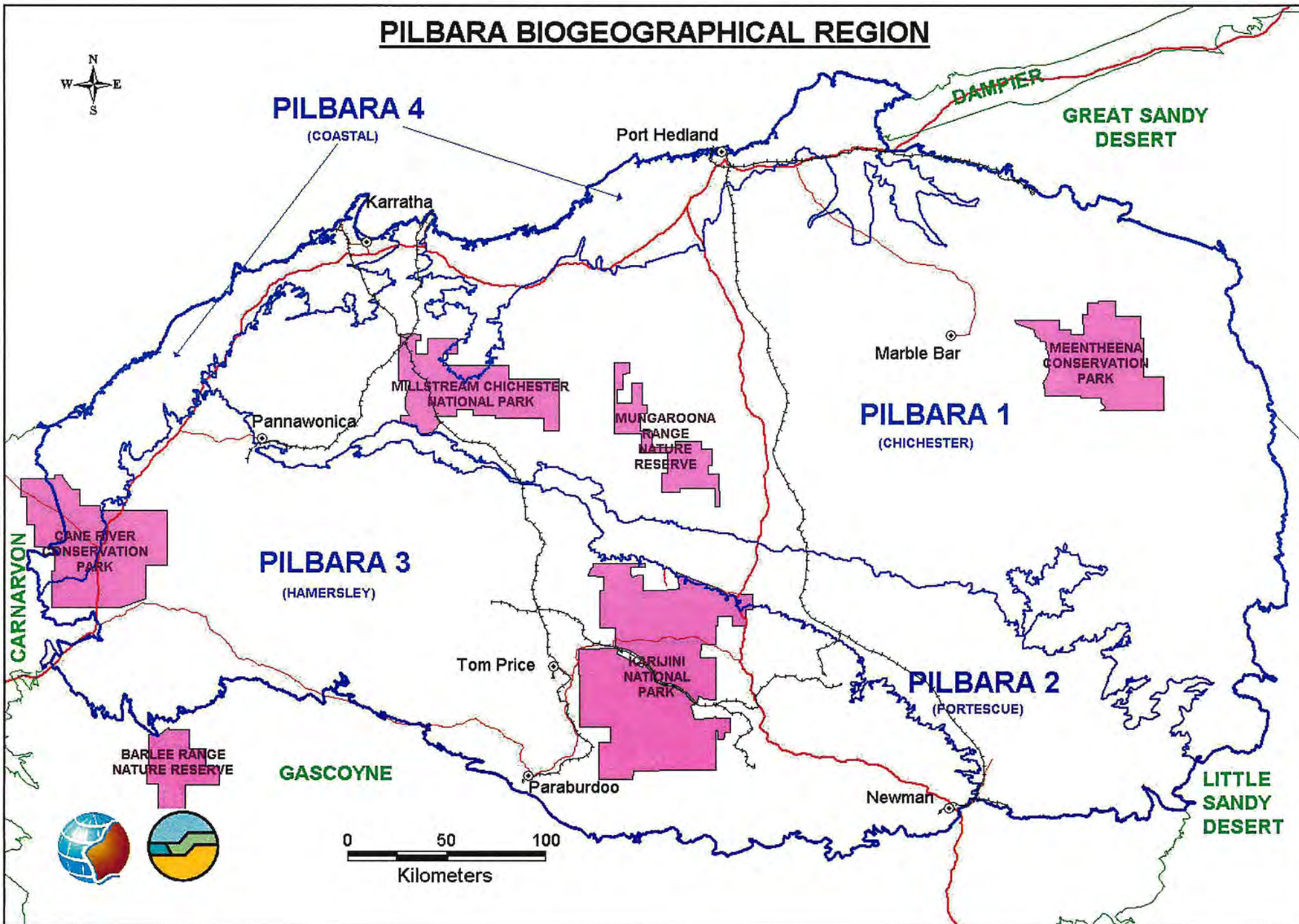
**WESTERN AUSTRALIA**

Friday 1 July 2005

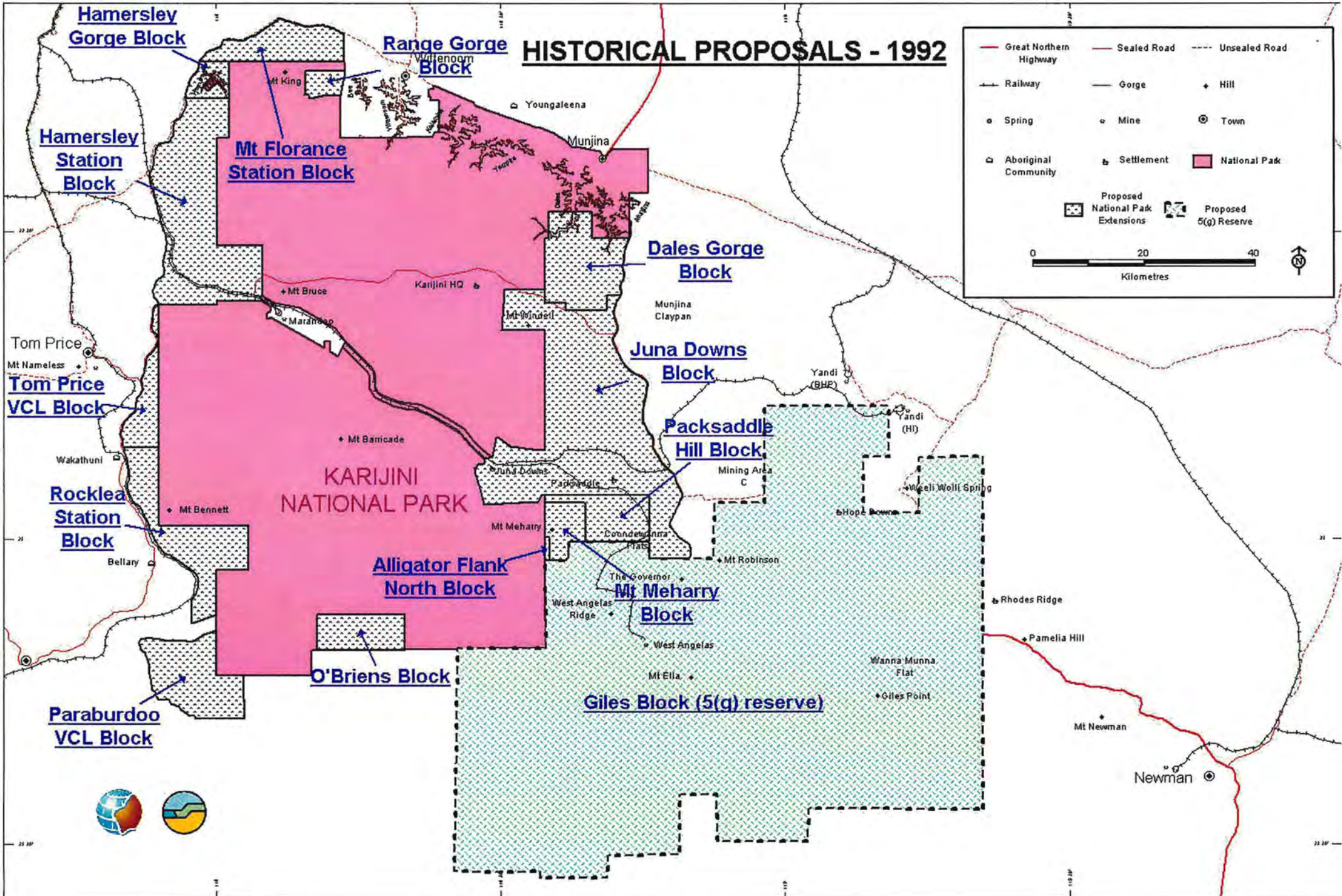
**CALM**

**PILBARA REGION & SCIENCE DIVISION**

# PILBARA BIOGEOGRAPHICAL REGION



# HISTORICAL PROPOSALS - 1992



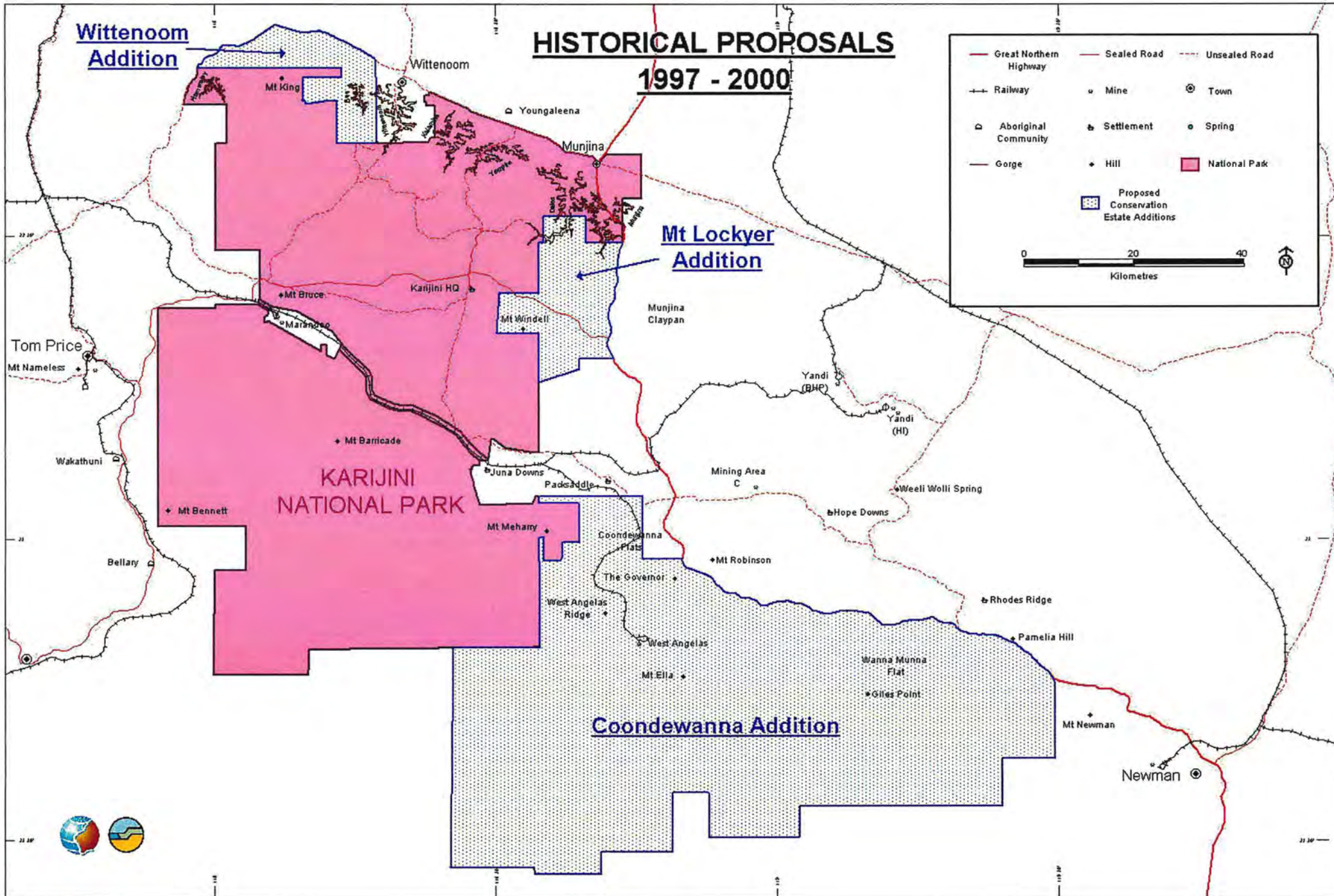
Great Northern Highway	Sealed Road	Unsealed Road
Railway	Gorge	Hill
Spring	Mine	Town
Aboriginal Community	Settlement	National Park
Proposed National Park Extensions	Proposed 5(g) Reserve	

0 20 40  
Kilometres

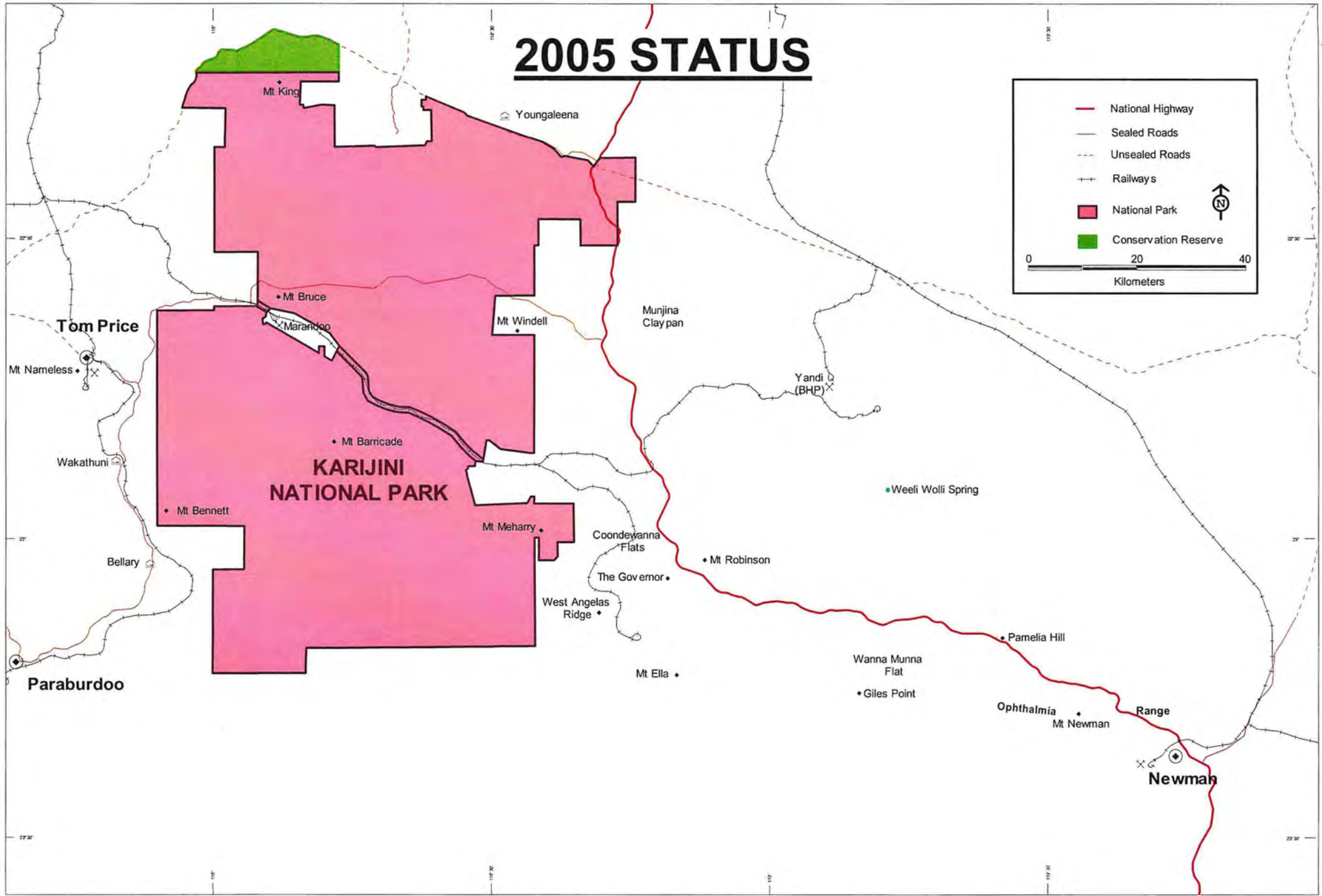
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N



# HISTORICAL PROPOSALS 1997 - 2000



# 2005 STATUS



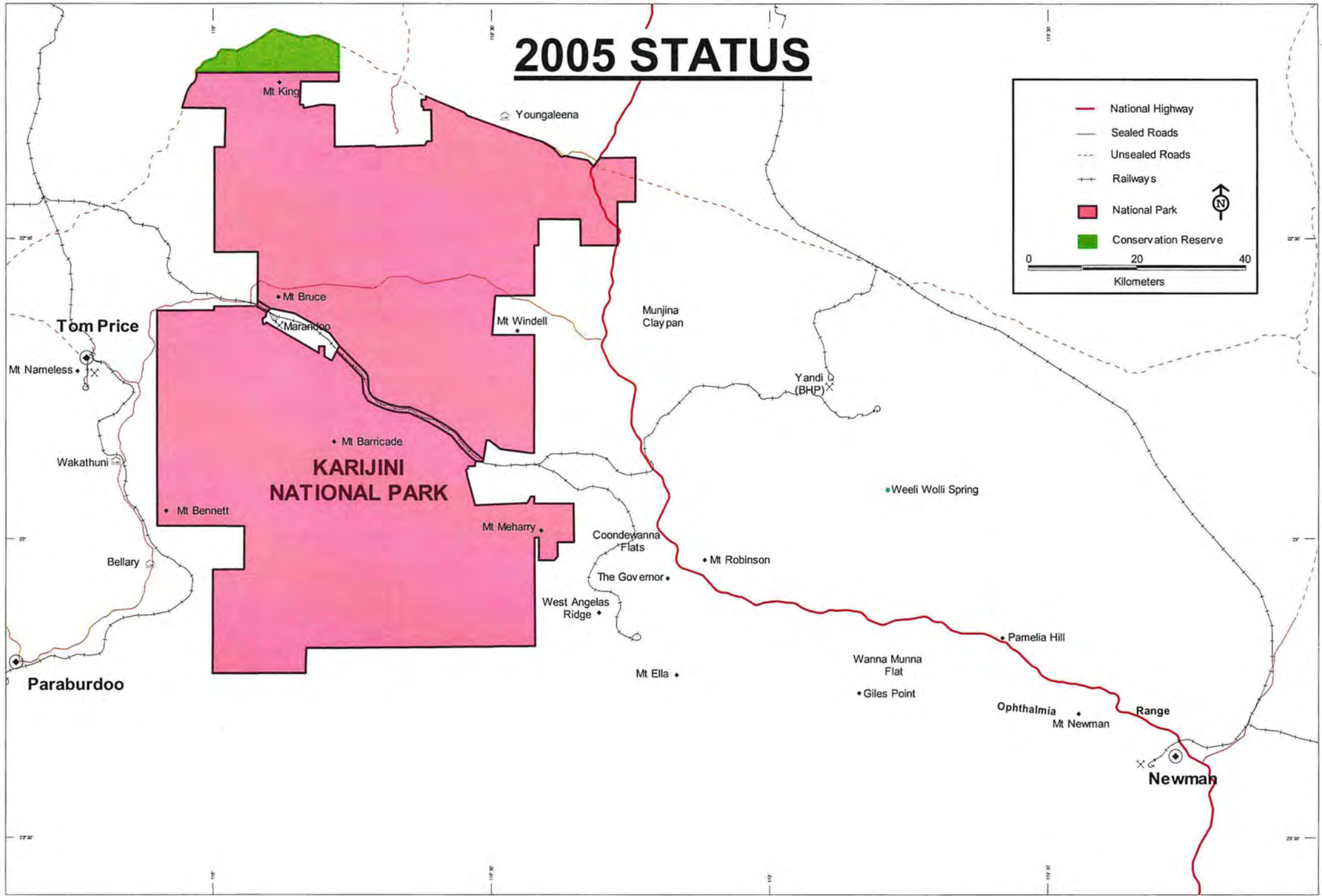
**Legend**

- National Highway
- Sealed Roads
- Unsealed Roads
- Railways
- National Park
- Conservation Reserve

0 20 40  
Kilometers

**KARIJINI NATIONAL PARK**

# 2005 STATUS



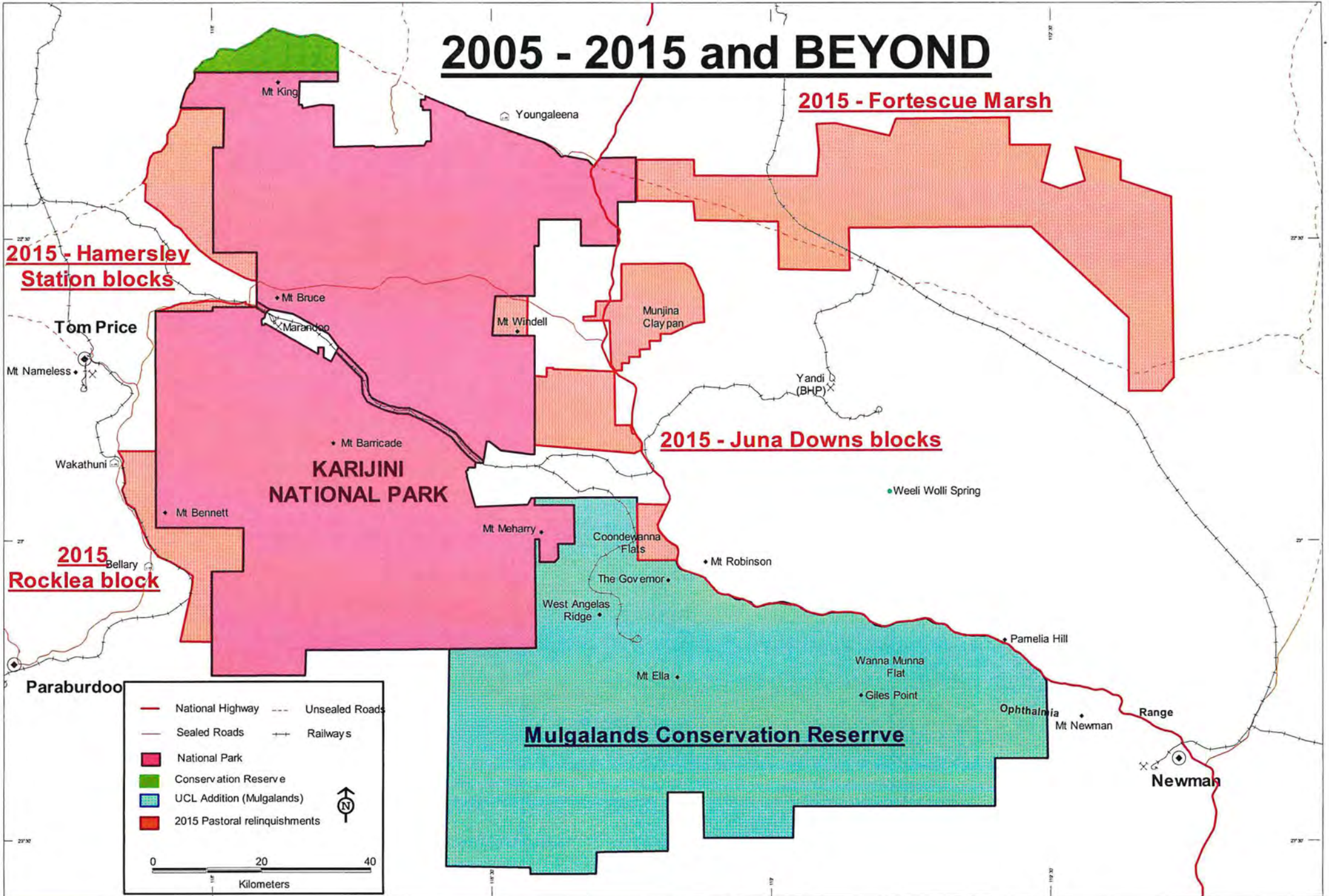
**Legend**

- National Highway
- Sealed Roads
- Unsealed Roads
- Railways
- National Park
- Conservation Reserve

0 20 40  
Kilometers

**KARIJINI NATIONAL PARK**

# 2005 - 2015 and BEYOND



# **CHRONICLE OF CONSERVATION ESTATE ADDITIONS IN THE HAMERSLEY RANGE (DRAFT)**

**(Current at September 1997)**

## **Background**

The first conservation estate within the study area was the Dales Gorge Nature Reserve established in 1956. This reserve was subsequently augmented and transformed into a National Park (Dales Gorge National Park) in 1969 following the recommendations of a Government appointed Reserves Advisory Committee. The Reserves Advisory Committee's recommendations were primarily based on a 1962 proposal for a national park in the Hamersley Range as formulated by the Western Australian Sub-committee of the Australian Academy of Science Committee on National Parks. The name was subsequently changed to the Hamersley Range National Park in 1970.

The Park remained largely unchanged until 1977 when a small addition was made to accommodate Hamersley Gorge. Over the next 13 years minor changes were made to the boundary of the Park to accommodate the Great Northern Highway road reserve, Munjina tourist village and rationalise management boundaries along the eastern side of the Park abutting the two incursions of the Juna Downs pastoral lease and along the northern boundary with the Mulga Downs pastoral lease to align the Park boundary with the Nanutarra-Munjina (formerly Wittenoom-Roy Hill) Road. Major changes to the Park occurred in 1991 when the Marandoo Mining Lease and Central Pilbara Railway corridor were excised from the conservation estate. In 1994 the Mt Meharry block, vacant Crown land adjacent to Hamersley Gorge, and the O'Briens block of Juna Downs were added to the Park. The name of the reserve was changed to the Karijini National Park in 1991.

The process of augmenting the conservation estate in the Hamersley Range has been ongoing since first initiated through the recommendations of the Western Australian Sub-committee of the Australian Academy of Science Committee on National Parks in 1962. The recommendations of the State Government's Reserves Advisory Committee in 1969 also supported this augmentation. In 1974 the Conservation Through Reserves Committee (CTRC) made a number of recommendations for additions to the conservation estate in the vicinity of the Park (recommendations for Area 8.14, pp. 8-25, CTCRC 1974). Most of these recommendations were subsequently endorsed by the Environmental Protection Authority (EPA 1975) and most of the endorsed recommendations have now been successfully implemented (EPA 1993), including the incorporation of Hamersley Gorge *sens. lat.* and O'Briens Block into the Park. The only outstanding recommendation currently not implemented (recommendation 8.14.2) is the inclusion of the whole of Dales Gorge into the Park.

In 1984 the National Park Authority (NPA) and the Department of Conservation and Environment (DCE) commissioned the Mulga Research Centre (Curtin University of Technology) to review the status and conservation of mulga communities in the south-eastern Pilbara (Dunlop and Porter 1985). One impetus for this review was the 1983 extension to Juna Downs which amalgamated the three disjunct eastern blocks into a new entity through the addition of a further 162 000 ha. Another impetus for the review was the realisation that this part of the Pilbara contained communities of extremely high conservation value, particularly extensive mulga woodlands in near pristine condition which were not well represented on the existing conservation estate (Fox 1983, Fox & Dunlop 1983a, Fox and Dunlop 1983b). Accordingly, many plants and animals were recorded from this part of the Pilbara but were absent from the adjacent National Park (Integrated Environmental Services 1979, Muir 1993, Dames and Moore 1984).

Dunlop and Porter (1983) confirmed the high conservation value of the south-eastern Pilbara and recommended the implementation of a series of management actions to conserve and protect the natural environment values of the region. These management actions included:

- An extension to the Park which encompassed a series of east-west trending valleys west of the Coondewanna Flat and north of the proposed West Angelas mine area. This extension contained excellent examples of mulga woodland, was contiguous with small areas of mulga in the existing Park, protected the habitats of wildlife not recorded from the Park (eg. *Lerista neander*, *Sminthopsis ooldea*) and captured the entire watershed of these mulga dominated valleys. The proposed extension also had outstanding landscape value containing Mt Meharry and impressive ridges like the West Angelas (Twin Peak) Ridge. At the time of inception, the boundary of the proposed extension did not contain any major defined ore bodies.

The addition of Mt Meharry to the Park in 1994, satisfies only part of Dunlop and Porter's (1983) recommendation.

- The establishment of a Scientific Reference Area (SRA). This SRA encompassed the south east corner of the Park and all of the proposed extension and was primarily envisaged as a location to monitor long term temporal change in ecological patterns and processes, especially with respect to mulga communities. Dunlop and Porter (1983) also proposed that the SRA be used as a control area for monitoring the effect of changes in fire regime, grazing pressure and mining on mulga communities.

This recommendation has in part been met with the establishment of several benchmark biological monitoring sites in the SRA under the auspices of the Fire/Mulga Study and Botanical Survey of Tussock Grasslands in the Central Pilbara (by CALM's Science Division).

- The establishment of Management Priority Areas (MPA). MPA were identified as the major drainage basins and outwash plains in the south-eastern Pilbara. These areas, which were principally dominated by mulga woodland and tussock or bunch-grass communities, required special management to maintain their nature conservation value. Impacts which Dunlop and Porter (1983) identified as requiring special attention were:
  - \* Pastoral activity on the Coondewanna Flat area, in particular stocking rates, stock control and burning practices;
  - \* Intense exploration activity in the Wanna Munna Flats-Giles Point area; and
  - \* The creation of impediments to natural surface drainage from the inappropriate construction and orientation of infrastructure corridors servicing new mining developments.

The MoU between CALM and Hamersley Iron over management of Juna Downs together with an increased environmental awareness in exploration by resource development companies has addressed some of the concerns raised by Dunlop and Porter (1983).

- The establishment of a Fire Exclusion Zone (FEZ) which was to be managed to exclude wildfires. The FEZ was located on the south-eastern corner of the Park and in the southern portion of the proposed extension to the Park. The zone was primarily designed for the protection of mulga communities and as a reference area for monitoring the impacts of changes in fire regime on mulga woodlands.

Research conducted by the Science Division of CALM under the auspices of the Fire/Mulga Study indicate that the heterogeneous mosaic of landscape types in the area (east-west trending ridges and valleys producing archipelagoes of mulga in a sea of spinifex or *visa-versa*) provides an intrinsic FEZ.



In addition to these management actions, Dunlop and Porter (1983) also foreshadowed the establishment of a regional system of nature reserves in the south-eastern Pilbara. Particular localities identified for addition to this reserve system included the Wanna Munna Flats-Giles Point area and Weeli Wolli Spring.

In response to the Dunlop and Porter (1983) report, a synchronous increase in awareness of the unrepresentativeness of the existing conservation estate and the wealth of biological resources in this part of the Pilbara, CALM identified the rationalisation of existing boundaries as a specific objective in the draft management plan for the Hamersley Range National Park (CALM 1989). The justification for this objective was based on the practicality for future management and the biological integrity (comprehensiveness/adequacy/representativeness) of the existing conservation estate. Strategies to achieve this rationalisation included all the 1974 CTRC recommendations endorsed by the EPA in 1975. With the exception of the Dales Gorge proposal, these recommendations have now been implemented. Other strategies proposed in the draft management plan and implemented include the addition of Mt Meharry to the Park and the exchange of land with Mulga Downs to align the Park boundary with the Nanutarra-Munjina Road. An outstanding strategy for boundary rationalisation is the enlargement of the Park to include adjoining areas with land systems (alluvial valley floors) and habitats (mulga woodlands) poorly represented within the existing Park's boundary. Reservation of areas between the Park's eastern boundary and the Great Northern Highway was identified as a priority.

In 1992 CALM formulated, in consultation with the then Department of State Development (DSD), a new strategy for the rationalisation of boundaries around the Park in line with the Government's 'Resolution of Conflicts' policy and its requirement to identify areas of high conservation value to be added to the Park as compensation for the excision of the Marandoo Mining Lease and Central Pilbara Railway (EPA 1992). These additions were proposed to identify a realistic identifiable boundary for the Park which achieved conservation and management objectives. Paramount among the conservation objectives was the addition of mulga woodlands, grasslands on cracking clay soils and vegetation associations characteristic of the Gascoyne Biogeographical Region (formerly Ashburton Botanical District) and Fortescue Valley physiogeographic unit of the Pilbara Biogeographical Region (formerly Fortescue Botanical District) to the conservation estate.

The proposed CALM/DSD additions to the Park are illustrated were:

1. The Range Gorge Block: Proposed because of its scenic landscape values and the possibility of including populations of the Declared Rare species *Lepidium catapycnon* within the augmented boundary.
2. Mt Florance Station Block: Proposed to provide a more practical, clearly defined and accessible management boundary south of the Nanutarra-Munjina Road.
3. Hamersley Gorge Block: Proposed for addition to conform with EPA endorsed CTRC recommendations (8.14.1) and to provide a more practical, clearly defined and accessible management boundary.
4. Hamersley Station Block: Proposed to assist with management of fire and feral animals, including livestock, and to include a representation of cracking clay grasslands and grove-intergrove mulga which are not or poorly represented in the Park (Mattiske 1992, Trudgen 1992).
5. Tom Price VCL Block: Proposed to assist with management of fire and feral animals, including livestock, and to provide a more practical, clearly defined and accessible management boundary.
6. Rocklea Station Block: Proposed to provide a more practical, clearly defined and accessible management boundary east of the Hamersley railway line. New boundary would assist with feral animal and stock control.
7. Paraburdoo VCL Block: Proposed to capture elements of the Gascoyne Bioregion which are not well represented in the Park. Would also provide management benefits for the control of livestock and feral animals.
8. O'Briens Block: Proposed for addition to conform with EPA endorsed CTRC recommendations (8.14.3) and to capture elements of the Gascoyne Bioregion which are not well represented in the Park. To be achieved at the time via a change in vesting from Conservation Park.

9. Mt Meharry Block: Proposed for addition to the Park to conform with the 1989 draft management plan strategy for boundary rationalisation. This objective would be achieved via a change in vesting from Conservation Park. This proposal was depicted in the *Pilbara 21 Study* (Pilbara Development Commission 1992).
10. Alligator Flank North Block: Proposed for addition to provide a more practical and clearly defined management boundary. The area in question is only 340 ha.
11. Packsaddle Hill Block: Proposed to capture areas of mulga woodland and a small portion of the Coondewanna Flat tussock grassland not within the Juna Downs lease. Would have also provided a more practicable boundary along the top of the Mt Meharry Block. This proposal was depicted in the *Pilbara 21 Study* (Pilbara Development Commission 1992).
12. Juna Downs Block: Proposed for addition primarily to provide a more practical, clearly defined and accessible management boundary on the eastern margin of the Park. The addition would fulfil EPA endorsed CTCRC recommendations (8.14.3) for extension of the Park and would also assist with the control of feral animals and livestock. Addition would have also provided a greater opportunity to control and regulate access to the Park. The addition would also capture some extensive area of mulga woodland, albeit grazed, and provide protection for a number of rare and restricted flora and fauna species.
13. Dales Gorge Block: Proposed for addition to conform with EPA endorsed CTCRC recommendations (8.14.2) and to provide a more practical, clearly defined and accessible management boundary. Would capture areas of high scenic quality containing significant aboriginal heritage sites. This proposal was depicted in the *Pilbara 21 Study* (Pilbara Development Commission 1992).

Currently, three of these proposed Park additions have been satisfied (numbers 3, 8 and 9). The MoU with Hamersley Iron over Hamersley and Juna Downs Stations goes some way to fulfilling proposals 4 and 12 while negotiations with Hamersley Iron and the Gumala Aboriginal Corporation may address proposal 6. The remaining seven proposals are outstanding.

In addition to the aforementioned 1992 Park extensions, synchronously CALM and DSD proposed the creation of a 5(g) Conservation Reserve over the block of vacant Crown land to the south east of the Park - Giles Block. This proposal was primarily based on the Government's 'Resolution of Conflicts' policy, its requirement to identify areas of high conservation value and the desire to capture landforms and biological communities not well represented on the conservation estate, such as mulga woodlands, grasslands on cracking clay soils and vegetation associations and species characteristic of the Gascoyne Bioregion. Government was aware of the extremely high mineral prospectivity in the Giles Block and in order to accommodate both mining and conservation interests proposed that the area be vested with CALM as a reserve for the purpose of conservation and mining. This proposal is outstanding.

During the 1992 review process CALM also suggested that the portion of Juna Downs east of the Great Northern Highway be added to the conservation estate. The intent was to protect the regionally significant grasslands on Munjina Claypan, together with the abutting mulga woodlands and to capture the entire watershed of Coondewanna Flat. A tenure of Nature Reserve or 5(g) Conservation Reserve was recommended. However, this proposal was not pursued as the Great Northern Highway provided a desirable management boundary; mulga woodlands (especially ungrazed and unburnt communities) were well represented in the Giles Block; and Hamersley Iron, as the new owners of Juna Downs, were sympathetic and aware of the conservation values associated with Munjina Claypan and Coondewanna Flat.

In the 1995 draft management plan for Karijini National Park (CALM 1995), CALM acknowledged that the final boundary to the Park should be viewed in a dynamic context and would alter with an increased understanding of the biological, cultural and mineral resources of the area. The primary objectives outlined in the draft management plan for the Park's boundary and associated tenure matters related to:

- The protection of environmental and cultural values through the creation of practicable management boundaries; and
- The identification of areas with outstanding cultural or natural environment values, which can be added in compensation for land excised for iron ore developments.

Strategies to achieve these objectives included:

- The alignment of new boundaries with major roads, or topographical features which permit the construction of fences and prevent stock trespass;
- The incorporation of Dales and Munjina Gorge catchments into the Park as far east as the Great Northern Highway (conforms with CTCRC recommendation 8.14.2);
- Seeking the incorporation of areas with high conservation value in the vicinity of Mt Meharry.
- Seeking additions to the Park for iron ore mining and infrastructure excisions. These additions should have similar or higher conservation value and take into consideration the integrity and representativeness of existing land systems, biological communities and cultural values.

In concordance with the dynamic principle ascribed to Park boundaries in the 1995 draft management plan, CALM also adopted a similar approach for the proposed 5(g) Giles Block. In 1996 this resulted in a revised proposal termed the Coondewanna Block, which included only the vacant Crown land to the south west of the Great Northern Highway. This proposal provided a more practical, clearly defined and accessible management boundary capturing significant areas of unburnt and ungrazed mulga woodland, alluvial flats with bunch-grass communities, coolibah flats and cracking clay grassland communities.

## **Current (1997) proposed conservation estate additions**

Three additions to the conservation estate are currently under consideration. The trigger for pursuing these additions has been a change in Government policy with respect to mining and the conservation estate, the release of the 1995 draft management plan for Karijini National Park, including the desire to progress stated objectives, and the imminent development of the next generation of iron ore mines in the vicinity of the Park.

A total of 528 140 ha is under consideration for addition to the Hamersley Range conservation estate under the current proposals. Thirteen percent of this proposed addition (69 100 ha) is recommended for inclusion in the Karijini National Park while the remaining 87% of the area has been recommended as a multiple purpose conservation reserve specifically recognising both the conservation and iron ore values. The proposed additions to the Park will increase its size by 11% while the successful ascension of all three proposals will increase the conservation estate in the Hamersley Range by 87%.

The three proposals are:

### **Wittenoom Addition**

This Addition is proposed as an extension to the Park. The extension includes all of the Range Gorge and Mt Florance Station Block as submitted in the 1992 proposals, together with an extension further east to include Bee Gorge. This Addition covers approximately 28 700 ha or 5.5% of the area currently under consideration for addition to the Hamersley Range conservation estate.

### **Mt Lockyer Addition**

This Addition is proposed as an extension to the Park. The extension includes all of the Dales Gorge Block and the northern part of the Juna Downs Block as submitted in the 1992 proposals. The extension conforms with the EPA endorsed CTCRC recommendation for Dales Gorge (8.14.2) and also partly fulfils the Juna Downs recommendation (18.4.3) (CTCRC 1984). Simultaneously, the extension also fulfils the 1995 Karijini National Park draft management plan strategy of capturing the catchments of Dales and Munjina Gorges as far east as the Great Northern Highway. This Addition covers approximately 40 400 ha or 7.6% of the area

currently under consideration for addition to the Hamersley Range conservation estate.

### **Coondewanna Addition (Mulgalands Conservation Reserve)**

This Addition is proposed as a 5(g) reserve for conservation and mining. An appropriate designation for this reserve has not been confirmed, however, a title reflecting its mineral, biological and landscape values together with the intrinsic multiple use character of a 5(g) conservation reserve would be appropriate. A Natural Resources Management Area (NRMA) has been proposed as an appropriate title for this area.

This Addition includes all the vacant Crown land to the south of the Great Northern Highway and Juna Downs station, west of Mt Newman, north of the northern boundaries of Prairie Downs and Turee Creek stations and west of the latter station and the Park's eastern boundary. The Addition covers 459 000 ha and will encompass the Alligator Flank North, Packsaddle Hill and Giles Block recommendations of the aforementioned 1992 boundary review. The Addition will achieve stated strategies for boundary rationalisation as mentioned in the 1985 and 1995 draft management plans for the Park and will comply with the intent of recommendations for the addition of land systems and communities poorly represented within the existing Hamersley Range conservation estate, as advocated by Dunlop and Porter (1983) and the EPA (1992).

## **Developments since 1997**

The developments detailed below are principally in relation to the Mulgalands Reserve proposal. Simultaneously CALM has continued to pursue land acquisitions in the vicinity of Mt Windell (Juna Downs Block-Mt Lockyer Addition), the Rocklea Station Block and the Hamersley Gorge Block. Some success has been achieved with most of the Hamersley Gorge Block now vested as a conservation reserve.

The 2015 pastoral lease renewal process also identified significant areas for addition to the Hamersley Range conservation estate. These areas include parts of Juna Downs, Rocklea and Hamersley Stations.

- |           |   |
|-----------|---|
| ~1998     | DRD, DEP, DOME & CALM (Chamber also involved) came to in-principal agreement for the creation of Mulgalands (Coondewanna) reserve. Proposal supported by BHP Iron & Hamersley Iron. Hope Downs did not comment and Robe River Mining were 'in agreement' subject to the West Angelas approval process.  |
| ~1998     | EPA agreed to provide guidance to proponents for the approval process and requirement for developments in the proposed Mulgalands reserve.  |
| 1998      | EPA actively supported Mulgalands reserve proposal through the West Angelas EIA process and bulletin.   |
| 1998-2000 | CALM (Frank Batini (FB) & Chris Muller (CM)) promoted a multiple use reserve (akin to Marine Multiple Use reserve) although actual details needed to be clarified with DOLA.  |
| 2001      | Support for proposed mulgalands reserve was forthcoming from Hamersley Range Hilltop Botanical Survey. Survey indicated that floristic communities and species recorded from hilltops in the area encompassed by the proposed Mulgalands reserve were not represented in similar habitats in the Karijini National Park. Botanical survey supported creation of the Mulgalands reserve and prompted Department to pursue reservation. The botanical |

survey also recommended the creation on another multiple use conservation reserve at the extreme western end of the Hamersley Range principally based on botanical knowledge (hilltop floristic taxa and communities).

- 2001 CM attempted to restart process following FB retirement but to no avail
- 2004-05 Areas of Juna Downs identified for relinquishment as part of the 2015 pastoral lease renewal process.
- 2005 DOIR expressed some concern about Mulgalands proposal and the justification (loss of corporate memory!) and impacts of proposal on proponents with respect to the State Government's Sustainability policy. DOIR and CALM await policy direction from Government in order to progress proposal.