CHAPTER FOUR

JABIRU

INTRODUCTION

- 1. In its second report (1977) the Ranger Uranium Environmental Inquiry recognised that, if the proposed mining in the region were to take place, it would be necessary to accommodate a relatively large resident population within a reasonable distance of the mine. The inquiry concluded it would be preferable for mine employees to be accommodated in a town of high amenity in which firm environmental controls would be imposed. The town should be in the national park and planned and managed in accordance with the Park plan of management. The inquiry recommended that the Northern Land Council be consulted in connection with the general control, planning and management of the town and that no accommodation be provided for tourists for the time being. 1
- 2. Shortly after the publication of this report the Commonwealth Government announced its decision to allow uranium mining to proceed and accepted the conditions of the inquiry relating to the construction of a town in the region. Construction of Jabiru did not commence, however, until mid-1979.2In the meantime, Aboriginal land claims negotiated with the Commonwealth Government³ and ANPWS appointed consultants to update their original design study for the town.4 The design study included extensive assessment of the likely environmental impact of the town and recommended appropriate measures to ensure least disturbance to the environment. 5

- In December 1978 a town plan was presented to the major parties involved with Jabiru. After some changes, including an additional area for future development, a change in the residential street pattern and relocation of the golf course, withdrew from direct involvement in the Responsibility passed to the Northern Territory Government which assumed self-government earlier that year. The Jabiru Town Development Authority, comprising representatives of the Government and the mining companies, was created under NT legislation in January 1979 to finance, develop and operate the new town. 6 Construction of the town began in July 19797 and the first residents arrived in 1980, when production began at the mine.⁸ The town was officially opened in July 1982⁹ and in the same year an Advisory Council was created to enable citizen participation in town government. The Jabiru Town Council was established in 1984 giving Jabiru a form of self-government. 10
- 4. Jabiru is 230km east of Darwin and 10km west of the Ranger mine. The current population is about 1200, the majority being employed at Ranger with others in service industries associated with mining, such as the Alligator Rivers Region Research Institute. The town site occupies 13 square kilometres of Park land, within a town area of about 69 square kilometres. 11 It is not Aboriginal land, and is held under a 40-year lease by the Jabiru Town Development Authority (JTDA) from the Director of the Park. 12 The JTDA, in turn, sub-leases to occupants and controls leasing and licensing of commercial and business activities in Jabiru. The lessee is required to comply with the plan of management, Park regulations and the Town Plan.
- 5. Facilities at Jabiru include an Olympic-size swimming pool, recreation lake, a shopping centre with six speciality shops, public schooling to year 10, a library, health care centre, social club, golf course, shooting ranges, regional police station and other government-related offices and services. 13

6. Residents of Jabiru are subject to the same restrictions as any visitors to the Park, except where special provision has been made in the plan of management, Park regulations or other laws and regulations.

THE IMPACT OF JABIRU ON THE PARK

Sociological effect

- 7. Jabiru is a town with a difference, a mining population centre for the Alligator Rivers Region, in a World Heritage area, a 'white enclave in a region with a permanent Aboriginal population.' 14 It is regulated by Commonwealth and Northern Territory legislation, and town by-laws. The town was planned for 3,500 people, a much larger population than the current 1200. The planning was based on the possibility that Pancontinental Mining Limited and Denison Australia Ltd might gain permission to mine leases at Jabiluka and Koongarra respectively. This did not happen and the population of the town consists mainly of Ranger employees. 15 Despite this, Jabiru is the sixth largest town in the Northern Territory.
- 8. Jabiru residents live in a mining town in which they do not pay the normal social cost of living in an urban environment. One question raised by a member of the Committee was the extent to which this had led to 'a "cradle-to-grave" mentality of everything being provided for them' and whether, as a result of this, they lacked any incentive to become involved in community affairs. Dr R. B. Zehner, Senior Lecturer from the School of Town Planning, University of NSW said that this was generally a problem in mining communities having a limited life-span and that Jabiru was not unique in this respect. There was a lack of interest in becoming involved in the town community, with only 25 per cent of eligible residents voting in the elections for the town council. He thought the development of tourism in Jabiru

would remedy this to some extent.¹⁶ Over the next ten years a sizeable part of the population would enter 'their 50s' and he foresaw the population would be looking to what they would do in the future. Tourism would provide an alternative proposition.¹⁷

- 9. A Jabiru community survey¹⁸ found that a majority of residents saw living in the Park as an advantage, despite controlling regulations. Residents indicated that the Park was attractive and provided recreation opportunities while the presence of Park management policies helped preserve what the Park had to offer. Over 90 per cent of the residents made use of the Park¹⁹ but almost half the residents expressed concern about regulations which limited their use of the Park.²⁰
- 10. Ranger provides orientation courses for residents in Jabiru to explain what people are able to do and not do in the area. Attendance by Ranger employees is compulsory. The Australian National Parks and Wildlife Service also holds induction courses for Ranger staff and their families. 22
- 11. The restrictions imposed residents on include regulations on the types of pets which can be kept. Cats, horses and exotic birds are prohibited. There are also restrictions on the types of plants which can be introduced. Sale of liquor requires permission of the Director and sand and gravel cannot be imported. Then there are the general restrictions which apply to all Park users, including Jabiru residents. For example fires may be lit only in particular areas, hunting is prohibited and camping is restricted. It has been reported that 'a significant number of billabongs and camping areas, popular with Jabiru residents, been declared of bounds have out for non-Aboriginals',23 According to Dr Zehner, feelings of resentment against these restrictions were held by 'some very people within the town - a minority but a vocal vocal minority'.24
- 12. Regulation 20E of the National Parks and Wildlife

Regulations requires the Director's approval for the sale of liquor in the Park. In addition the vendor must hold a licence under the Liquor Act of the Northern Territory. The Northern Territory Government expressed dissatisfaction with these legislative arrangements and argued that provisions for the control of liquor should be uniform throughout the Territory. It said that the approval of the Director was unnecessary. There had already been some confusion over applications for special licensing and the legality of licenses in the town. 25 The sale of alcohol to Aborigines is further controlled. An unofficial rule has been established with the Sports Club that Aboriginal members may purchase only one carton of beer per day. 26 It was contended that some Aborigines see this as discrimination and would rather have normal access to alcohol. 27

Impact on Aborigines

- 13. Aborigines tended to regard Jabiru largely as a visitors town, which is how Jabiru residents in fact see themselves. 28 A number of Aborigines do live within Jabiru. Around 46 live at the Manaburduma camp site within the town. Only a small number of these are members of the Gagudju Association, the traditional owners within the area. 29 In addition, an estimated three per cent of the men and women in Jabiru are Aborigines living in Ranger or Government supplied housing. Depending on the season and the accessibility of the rest of the Park a variable number of Aborigines also live in part of Jabiru East, some 5km from Jabiru at the Koonjimba camp site. 30
- 14. Jabiru offers a convenient living base for those Aborigines employed by Ranger or ANPWS. It also offers a base for other Aborigines who wish to live in the Park and is a location for essential services.

- 15. The Gagudju Association has serviced and improved Aboriginal living areas throughout the Park and the Department of Aboriginal Affairs has also contributed funds for Manaburduma. This settlement is managed by the Jabiru Town Council as an agent of the Jabiru Town Development Authority and has a water supply, houses and ablution facilities. 31 Aboriginal children who live in Jabiru attend the Jabiru school. 32
- 16. The NT Government, in its review of the plan of management for Stage 1, asserted that the town had generally a beneficial impact on Aborigines. Consultation with the Northern Land Council had ensured suitable facilities, liquor licensing and privacy for those Aborigines living in camping areas. The supermarket, health services and schools were readily available, and the availability of alcohol had not increased 'alcohol abuse.' In this respect the provision of camping areas in the town had reduced the risk of road accidents. 33
- 17. The Australian Institute of Aboriginal Studies has predicted that there will be adverse impacts on Aborigines should tourism be developed at Jabiru. There could be an increase in the requests by tourists for permits to visit Arnhem Land which, if granted, would exert a certain amount of pressure on neighbouring Aboriginal populations. A Northern Land Council (NLC) office is located in the centre of Jabiru³⁴ and inquiries for permission to visit Arnhem Land have already increased. ³⁵ Often there is little understanding of why a permit to a particular area might be difficult to obtain and, as a consequence, arguments sometimes develop about land rights. ³⁶ NLC staff have sensed on occasions that Aborigines wish to refuse permission for permits but feel unable to do so, ³⁷ while the NLC office in Jabiru has come to serve almost as a travel agency and a broker between tourists and Aborigines. ³⁸

- 18. Some signs of strain are already evident in the Aboriginal population in the Park. Aborigines residing near popular non-Aboriginal fishing places have asked for more signs to be erected to keep tourists away from their living areas. Some signs declaring Aboriginal land have been removed and some Aboriginal residents on off-shore islands and coastal communities have applied to the Northern Land Council to have entry to seas restricted within 2km of the shore. There have also been complaints about rubbish left behind by tourists. 39
- 19. In general, however, there appears to be a relationship between the Aboriginal and non-Aboriginal communities in Jabiru. 40 It appears that Jabiru has had a mixed impact on the Aboriginal population, but by no means entirely There is no doubt that the effect of diversification of town's function will be hard to predict. On one hand the of tourism in Jabiru should provide long-term development financial benefit to the Gaqudju Association and some employment opportunities, but on the other privacy will become more of a for Aborigines. On balance, the Committee considers appropriate planning and administration of the town and Park should minimise further unacceptable effects. Matters such as enforcement of limited access to Aboriginal areas, appropriate and Aboriginal housing will licensing laws require careful consideration.

Recommendation

The Committee recommends that in monitoring the planning and future development of Jabiru, ANPWS, in consultation with the Jabiru Town Council and the Gagudju Association, should consider the effect of future development on Aborigines and ensure that there are no adverse consequences.

Environmental Impact

- 20. The Ranger Uranium Environmental Inquiry identified the following kinds of environmental damage as a likely consequence of the establishment of a town such as Jabiru:
 - . disturbance of flora and fauna;
 - . littering and dumping rubbish;
 - . lighting fires;
 - vandalism;
 - . keeping pets which could become feral;
 - use of four-wheel drive vehicles and trail bikes off road; and
 - . damage to archaeological sites.
- 21. In order to reduce and prevent these impacts, constraints have been imposed on Park users through the plan of management and other regulations. The Inquiry also concluded that firm environmental controls should be communicated to new arrivals at the outset and that Ranger and ANPWS should conduct induction courses for new employees⁴¹, Ranger being responsible for describing the mining controls and ANPWS for discussing the Park regulations. As discussed earlier, this is being done.
- 22. The Ranger Uranium Environmental Inquiry concluded that:

[t]he evidence is clear that domestic dogs and cats must without exception be excluded from the region because of the destruction that they could cause to native wildlife, particularly if they go wild'.42

Despite this, each family at Jabiru is allowed to keep two registered dogs. 43 Moreover, concern was expressed that the restrictions on animal ownership which apply to Jabiru residents do not apply to residents in other parts of the Park. Outside of Jabiru goats, pigs, cats and horses are kept and Ranger argued

that these pose a threat to the ecology of the Park, whoever keeps them. 44 Evidence indicated that there were cats in Jabiru 4 and along watercourses in the Park. 46 The Department of Health contended it was difficult to estimate the damage these animals caused in an area such as the Park. 47 Control was carried out on an 'opportunistic' basis. 48 The Committee received no evidence of feral dogs creating any problems.

- 23. There are claims of infringement of Park regulations on the part of Jabiru residents. Although hunting is prohibited under the plan of management, a local bow-hunter's association is reputed to exist in the town and there is anecdotal evidence to suggest Jabiru residents are the 'worst offenders in poaching large numbers of fish'. 49 One study in the region indicated that people living in Jabiru regard themselves as locals, and as therefore having more 'rights' than other visitors. 50
- Town services inevitably have the potential to affect 24. the environment. For example sewage is treated and discharged into Magela Creek via Corndorl Creek. 51 There was no suggestion during the Committee's inquiry that there had been environmental problems caused by any of the town services, although there was a potential for adverse effects. Friends of the Earth considered that the Office of the Supervising Scientist should have the power to monitor releases from the town and from Mudginberri abattoir, which could influence water quality and interact with mining wastes. They asserted that a combination of industrial and domestic wastes is 'one of the nastiest combinations you can come up with so far as toxic wastes are concerned'.52 The Committee notes in this context that the Supervising Scientist, in his submission to the Committee, included Jabiru waste as a potential and actual source of environmental impact. 53 Mr A. Dix concluded that the establishment of Jabiru had increased rates of erosion; dirt tracks had caused a run-off into the river systems, but the consequential environmental effects were unknown.54

25. The former Commonwealth Department of Health pointed out that another source of chemical contamination was fertilizer run-off from lawns in Jabiru. This caused nutrient enrichment of the billabongs receiving the runoff and, as a result, algal bloom occurs. 55

Recommendation

The Committee recommends that the Office of the Supervising Scientist should be given a clearly defined and on-going responsibility to monitor the environmental impacts of Jabiru on the Park ecosystems.

General Impact

- 26. It could be argued that, of all development that has taken place so far in the region, Jabiru has the greatest impact on the Park. Now that tourists are being catered for it must be seen as a permanent development, not solely dependent on the mining industry, although the size of the town will still vary in accordance with mining requirements.
- 27. One witness asserted that the establishment of Jabiru was 'by far the most damaging impact of mining, particularly in respect of the social and recreational activities of miners.' 56 He commented that:
 - [i]t is conceivable that the impacts of Jabiru residents on Kakadu are far more serious than impacts associated with tourism. The reasons are manyfold and include:
 - town residents develop an intimate knowledge of the area and learn how to access places and resources not available to most tourists;

- because they are residents, they tend to assume ownership rights in the area, even to the extent of developing antagonistic attitudes towards tourist activity and Aboriginal rights;
- mining, being in many respects the antithesis of park objectives, tends to attract staff that are unsympathetic towards park management priorities. Many are from backgrounds that do little to induce an understanding of the issues.⁵⁷
- 28. The Australian Conservation Foundation was entirely opposed to the existence of Jabiru. The Foundation took the view that it was not only incongruous to have a town in the middle of a national park, but that the consequential development of roads and other infrastructure was unacceptable.⁵⁸

FUTURE DEVELOPMENT

- 29. The development of Jabiru to cater for tourists was favoured by a majority of the submissions mentioning this issue.
- 80 per cent of residents were in favour 30. the area.59 encouraging tourism in Specific groups organisations in favour of the development included Ranger 60, the Jabiru Town Council, the Northern Territory Government, 61 Victorian Friends of the Earth, 62 the Park Management, and Darwin Tourist Promotion Board. 63 The Australian Conservation opposed to Jabiru's existence, asserted that Foundation. development of Jabiru for tourism should not take place. claimed that all kinds of proposals would be put forward, such as one for an additional airstrip, and the situation would become very difficult from a Park planning point of view. 64 Foundation argued a new town should be created outside the Park boundaries and the whole question of accommodation for Park visitors should be a question of Park management, not just a simple matter of using Jabiru because it is there. 65

- 31. The Gagudju Association has indicated its approval for the development of Jabiru for tourists by putting forward a proposal for a new motel to accommodate visitors to the Park. The Association took the view this would be unlikely to increase the impact already felt⁶⁶ and would 'also take mounting pressure off the fragile environment of Kakadu National Park'. ⁶⁷ The motel is now completed.
- 32. Whilst recognising the control imposed by the Northern Territory Building Authority, local town planning and by-laws, the Committee nevertheless finds it somewhat surprising that no environmental impact study or environmental evaluation was undertaken before the tourist development proposal for Jabiru was agreed upon. The plan of management was in operation at this time and specifically states 'all proposed developments in Kakadu National Park will be subject to environmental evaluation which may be conducted by ANPWS staff, consultants or outside agencies'. 68

Recommendation

The Committee recommends that in future all proposed developments in Jabiru, and in other parts of Kakadu National Park, be subject to an environmental evaluation, as stipulated in the Park plan of management and required under certain circumstances by the Environment Protection (Impact of Proposals) Act 1974.

33. Although Dr Zehner detected some community uncertainty about what would happen to the town if mining ceased, he thought an alternative tourism-based economy would take over.⁶⁹ The population in Jabiru was relatively young at present and tourism would become more attractive as a source of employment for Jabiru residents in about five or ten years.⁷⁰ Strong support for the development of tourism was evident from all sections of the Jabiru community.⁷¹ The Jabiru Town Council contended that tourists were already coming to Jabiru and their needs should be

accommodated. Residents felt that tourism would bring money into the town and create jobs so that Jabiru would become more of an open town. Tourists had often been turned away and the lack of facilities had been an embarrassment to them and to the Council. 72

34. One of the most important aspects of the development in Jabiru is the effect it will have on the Aboriginal community in the Park. The Ranger Uranium Environmental Inquiry had been pessimistic about the development of the town. Expert evidence indicated that:

the rapid development of a European community within and adjacent to, an Aboriginal traditional society has in the past always caused the breakdown of the traditional culture and the generation of intense social and psychological stresses within the Aboriginals. 73

Although there have been certain pressures exerted on Aboriginal people in relation to the exploitation of mining and tourism and the existence of Jabiru, the Committee takes the view that the consequences of building Jabiru have not been so dire. In particular, despite the views of the Ranger Uranium Environmental Inquiry, no evidence has been offered that Jabiru in itself has been the cause of any intense social or cultural pressure.

35. It is difficult to predict whether an overall increase in the number of residents in the town, albeit many of them less permanent than the present population, will precipitate a change in character, and increase what pressures already exist on the Aboriginal population to an unacceptable level. Since the Gagudju Association favours development, it would appear that the Aboriginal people themselves are not unduly concerned, although the Association does not of course speak for all Aboriginal people in the Park.

- 36. Whether tourism development in Jabiru would be of general sociological benefit to residents is questionable, given a suggestion in evidence that a change in the status of Jabiru could have some effect on the relationship between Aborigines and non-Aboriginal residents. In seeking information on the implications of Jabiru being a predominantly white enclave in a region with a permanent Aboriginal population, the Committee was told that Aboriginal and non-Aboriginal communities in Jabiru had a certain stability, if not necessarily 'a good working relationship', but that would continue only as long as the community stayed relatively closed. 74
- 37. The Committee concludes that Jabiru should be developed to provide facilities for tourists. It is already a tourist attraction and on the itinerary of some commercial tours. Approximately 80 000 tourists visit Jabiru each year. 75 It has some appeal as a mining town and is a source of supplies for long stay tourists. 76 The Committee considers one town within the Park is sufficient for this purpose. Any additional population centres should be in areas outside the Park boundaries, with the possible exception of a development in Stage 3. This, however, should not be undertaken without due consideration being given to its social, cultural and environmental impacts.

Recommendation

The Committee recommends that no additional population centre should be developed in Stages 1 and 2 of Kakadu National Park and that any proposal for a tourist development in Stage 3 of the Park should be subject to a stringent environmental impact study. This should take into full account the potential sociological impacts and, in particular, the potential impact on Aborigines having interests in the area.

- 38. The Committee understands that underdevelopment in which was originally designed for a population of 3500, caused problems. Businesses already depend on tourist income profitability. 77 Tourist development will improve their for situation. At this stage the Committee sees no reason to provide a population above 3500. Once the tourist industry is in Jabiru the Committee believes that a study of the effects of the industry on the town and in the region should be undertaken. Matters to be considered should be the social and environmental impact of this development on the local Aboriginal and the implications for future town planning and future planning for the Park. Should further tourist development be considered, these studies should be taken into account before any decision is taken to develop either within or outside the In this connection it should be noted that Jabiru is able to support a larger population, at least as far as water and sewerage supply systems are concerned. These were overdesigned for a population of 6000, as part of 'good town planning'. 78
- 39. With the opening of the new motel in Jabiru the Committee wishes to draw attention to problems that may arise should government policy change in the future and restrictions on number of uranium mines be removed. The Committee makes no attempt to provide a solution, only to draw attention to a possible future dilemma, should for example Jabiluka and or Koongarra be developed. In this situation, the 'good town planning' over-provision for the projected population of Jabiru would suggest accommodation for mine workers might provided in Jabiru, along with tourist accommodation. the Committee believes that any proposal along these lines should be considered only after consultation with Aboriginal groups. The Committee is aware, for example, that the agreements negotiated in relation to Koongarra specify that no by Denison

non-Aboriginal person, other than the Project site manager and dependants, will reside in Jabiru. During production all non-Aboriginal employees will reside in Darwin and be flown to the mine site to work for a roster period. 79

- 1. Ranger Uranium Environmental Inquiry (RUEI) Second Report 1977 AGPS p. 223 2. Evidence p. 549 3. Evidence p. 549 4. Evidence p. 559 5. A A Heath and Partners Pty Ltd, Jabiru, Advanced Design Study Final Report 6. Evidence p. 551 7. Evidence p. 550 8. Evidence p. 543 9. Evidence p. 561 10. Evidence p. 861 11. Australian National Parks and Wildlife Service (ANPWS), 1980, Kakadu National Park Plan of Management p. 301 12. Evidence p. 544 13. Evidence p. 763 14. Evidence p. 543 15. Evidence p. 543 16. Evidence p. 586 17. Evidence p. 592 18. Robert B Zehner and John P Lea, 1984, Jabiru Community Survey, School for Town Planning, University of New South Wales p. 31 19. ibid p. 33 20. Evidence p. 582 21. Evidence p. 583 22. ANPWS 1986 Kakadu National Park Plan of Management p. 58 23. Robert B Zehner and John P Lea op cit p. 29 24. Evidence p. 582 25. Evidence p. 1199 26. Robert Lawrence and Maggie Brady, Aborigines and Tourism, A study of the Impact of Tourism on Aborigines in the Kakadu Region, Northern Territory, Ed. Kingsley Palmer, 1985, p. 42 27. Evidence p. 1627 28. Evidence p. 574 29. Evidence p. 582 30. Evidence p. 583 31. ANPWS 1986 op cit p. 62 32. Evidence p. 1626 33. Evidence p. 1224 34. Robert Lawrence and Maggie Brady op cit p. 49 35. ibid p. 46 36. ibid p. 47 37. ibid p. 47 38. ibid p. 49 39. ibid p. 50 40. Evidence p. 579 41. Evidence p. 505 42. RUEI 1977 op cit p. 218 43. ANPWS 1986 op cit p. 60 44. Letter from Mr T Gardner, Ranger Uranium Mines Pty Ltd, to Professor J D Ovington ANPWS dated 10 July 1986 p. 9
- 48. Professor J D Ovington op cit p. 6

45. Evidence p. 1417

47. Evidence p. 1425

46. Letter from Professor J D Ovington ANPWS to Ms E Mountain, National Resources Committee dated 5 December 1986 p. 6

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49. Robert Lawrence and Maggie Brady op cit p. 45
50. ibid p. 50
51. RUEI 1977 op cit p. 221
52. Evidence p. 358
53. Evidence p. 649
54. Evidence p. 107
55. Evidence p. 1425
56. Evidence p. 1278
57. Evidence p. 1278
58. Evidence p. 1466
59. Evidence p. 589
60. Evidence p. 781
61. Evidence p. 756
62. Evidence p. 141
63. Evidence p. 2317
64. Evidence p. 1466
65. Evidence p. 1468
66. Robert Lawrence and Maggie Brady op cit p. 41
67. Evidence p. 759
68. ANPWS 1986 op cit p. 86
69. Evidence p. 575
70. Evidence p.592
71. Evidence p. 589
72. Evidence p. 754
73. RUEI 1977 p. 233
74. Evidence p. 578
75. Evidence p. 763
76. Robert Lawrence and Maggie Brady op cit p. 44
77. Evidence p. 762
78. Evidence p. 768
79. The Koongarra Project. Prepared by Denison Australia Pty Limited
    for the Senate Standing Committee on the Environment
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