

# CHAPTER 2

## BACKGROUND<sup>1</sup>

### Introduction

2.1 At the twenty-first and twenty-second sessions of the UNESCO World Heritage Committee (WHC) and its Bureau, in 1997 and 1998, reports were received from the World Conservation Union (IUCN) concerning the state of conservation of the Kakadu National Park World Heritage area. These reports noted potential threats to the natural and cultural values of the Park resulting from the proposal to commence construction of a uranium mine on the Jabiluka mineral lease ‘within an enclave of the World Heritage property’.<sup>2</sup>

2.2 In October 1996, IUCN’s World Conservation Congress passed a resolution to oppose the development of the Jabiluka and Koongarra uranium mines if it should be shown that such mining would threaten Kakadu’s World Heritage values. This resolution and a statement from IUCN were presented to the Bureau at its twenty-second session in June 1998.

2.3 In 1997 and 1998, the Commonwealth Government provided reports to the WHC and the Bureau to demonstrate its commitment to the conservation of the World Heritage values of Kakadu National Park. These reports detailed the assessment and approvals process involving the Commonwealth and Northern Territory Governments which allowed the development of the Jabiluka uranium mine to proceed. They also outlined the assessment process being conducted to determine the milling and tailings management options for the Jabiluka mine.

2.4 The WHC considered the technical data and information concerning the Jabiluka proposal and its environmental and cultural impacts voluminous and complex. Additionally, ‘different stakeholders [held] diverse and often contradictory views on the potential impacts which the mining proposal would have on the World Heritage Values of Kakadu National Park’.<sup>3</sup> For these reasons the Bureau of the World Heritage Committee at its twenty-second session requested the Chairperson of the Committee to lead a mission to Australia and Kakadu National Park.

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1 Information in this chapter has been drawn from a variety of sources, including material published by the UNESCO World Heritage Committee, Environment Australia, the NT Department of Lands, Planning and Environment and the Kakadu Board of Management. A list of general references is included as Appendix 3 to this report.

2 UNESCO World Heritage Committee, *Report on the mission to Kakadu National Park, Australia, 26 October to 1 November 1998*, p 1:  
<http://www.biodiversity.environment.gov.au/kakadu/pdfs/inf18e.pdf>

3 UNESCO World Heritage Committee, *Report on the mission to Kakadu National Park, Australia, 26 October to 1 November 1998*, p 1.

2.5 The mission was originally scheduled for 4 to 10 October 1998 but was postponed at the request of the Commonwealth Minister for the Environment and Heritage. It subsequently took place from 26 October to 1 November 1998.

2.6 The mission team consisted of Professor Francesco Francioni (Chairperson, World Heritage Committee), Dr Bernd von Droste (Director, UNESCO World Heritage Centre), Dr Patrick Dugan (IUCN), Dr Patricia Parker (International Council on Monuments and Sites – ICOMOS), Dr John Cook (US National Park Service) and two Australian nationals, Professor Jon Altman and Dr Roy Green.

2.7 During their stay in Australia, the mission team visited Kakadu National Park, including the Jabiluka and Ranger mine sites, Darwin and Canberra. They met, and heard the views of, the Commonwealth Government; the Government of the Northern Territory; representatives of affected Aboriginal people, including the Traditional Owners of the Jabiluka mineral lease area, the Mirrar-Gundjehmi people; Australian non-Government organisations and other relevant national and local groups representing academia, the mining industry and others.

2.8 Prior to the mission, the WHC received a number of additional submissions from a variety of interested parties, including conservation groups, Aboriginal groups and others. Those opposed to the uranium mine on the Jabiluka mineral lease requested that the WHC place Kakadu National Park on the List of World Heritage in Danger in order to send the strongest possible message to the Australian Government that the mining of uranium at Jabiluka threatened the natural and cultural values of the Park:

[We] ... ask you to place the World Heritage listed Kakadu National Park on the list of 'World Heritage in Danger', on account of plans to proceed with a large uranium development at Jabiluka.<sup>4</sup>

2.9 Following its mission to Kakadu National Park, the WHC concluded that as a result of mining activities on the Jabiluka mineral lease, 'Kakadu National Park is exposed to a number of serious threats which are placing it under both ascertained and potential danger'.<sup>5</sup> It made sixteen recommendations in its report on the mission, presented at the twenty-second session of the WHC at Kyoto, Japan between 30 November and 5 December 1998, including 'that the proposal to mine and mill uranium at Jabiluka should not proceed'.<sup>6</sup>

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4 Friends of the Earth, Environment Centre of the Northern Territory and The Wilderness Society, Letter to WHC Chairperson, Teresa Franco, 1997, p 1, quoted in: Environment Centre of the Northern Territory, Submission 38, p 8.

5 UNESCO World Heritage Committee, *Report on the mission to Kakadu National Park, Australia, 26 October to 1 November 1998*, p v.

6 UNESCO World Heritage Committee, *Report on the mission to Kakadu National Park, Australia, 26 October to 1 November 1998*, Recommendation 1, p v.

2.10 Of the seven members of the Mission, the two Government-appointed Australian members did not endorse four of the recommendations in the report and had reservations about a further three recommendations.

2.11 The World Heritage Committee requested Australian authorities to provide, by 15 April 1999, a report on their efforts to prevent further damage and to mitigate all the threats identified in the UNESCO mission report. The Australian Government's response to the mission's findings are contained in two documents: *Australia's Kakadu: Protecting World Heritage*, Response by the Government of Australia to the UNESCO World Heritage Committee Regarding Kakadu National Park; and the Supervising Scientist's *Assessment of the Jabiluka Project: Report of the Supervising Scientist to the World Heritage Committee*. These were submitted to the WHC in April 1999.

2.12 Other interested parties in Australia, and the WHC's own advisory bodies, the IUCN, ICOMOS and the International Council for Science (ICSU), have subsequently commented on the documents provided to the WHC by the Commonwealth Government. The World Heritage Committee will consider the issues and make a decision on whether to place Kakadu National Park on the List of World Heritage in Danger at its 3rd Extraordinary Session in Paris on 12 July 1999.<sup>7</sup> This issue is discussed further in Chapter 6, below.

### **Kakadu National Park**

2.13 Kakadu National Park is a place of national and international cultural and environmental significance. Located in the Alligator Rivers Region of the Northern Territory, east of Darwin, it covers an area of 19,804 square kilometres. It extends from coastal areas in the north to hills and basins in the south, and from the western rim of the Arnhem Land plateau and escarpment complex in the east to wooded savannas and rivers in the west.

2.14 Major landforms and habitats within the Park include the sandstone plateau and escarpment, extensive areas of savanna woodlands and open forest, rivers, billabongs, floodplains, mangroves and mudflats. The sandstone escarpment and plateau have shallow, strongly leached infertile soils, while the coastal riverine plains and the lowlands have acidic soils which support extensive wetlands.

2.15 The Park is renowned for its biodiversity; it has the widest range of habitats and the greatest number of species of any similar-sized area in monsoonal north Australia. It is representative of ecosystems across northern Australia but also contains unique and threatened areas and species.

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7 UNESCO World Heritage Committee, *Report on the mission to Kakadu National Park, Australia, 26 October to 1 November 1998*.

2.16 Approximately 1,700 species of plants have been recorded in Kakadu, many of which are unique to the region. More than a third of Australia's migratory bird species are found in Kakadu: two and a half million birds flock in the wetlands of the Magela and Nourlangie floodplains alone. There are over sixty mammal species and a wide range of reptile, fish and insect species.

2.17 Kakadu is on the Register of the National Estate and is listed on the World Heritage List for both its cultural and natural values. Its wetlands are recognised under the Convention on Wetlands of International Importance (the Ramsar convention). Other international treaties for the protection of wildlife and habitats relevant to the management of Kakadu include:

- The agreement between the Government of Australia and the Government of Japan for the protection of Migratory Birds and Birds in Danger of Extinction and their Environment (JAMBA). Forty six of the 76 birds listed under this agreement occur in the Park;
- The agreement between the Government of Australia and the Government of the People's Republic of China for the protection of Migratory Birds and Birds in Danger of Extinction and their Environment (CAMBA). Fifty of the 81 birds listed under this agreement occur in the Park; and
- The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention). Twenty-one of the species listed under this convention are found in the Park.

2.18 Kakadu was declared a national park under the *National Parks and Wildlife Conservation Act 1975* in three stages, from 1979 to 1987. Supplementary proclamations were added in 1989 and 1991. The areas covered by the Koongarra, Ranger and Jabiluka mineral leases are not part of Kakadu National Park. They are geographically surrounded by the Park but have been excised from the Park since its inception and thus from the World Heritage Area.

2.19 The Ranger and Jabiluka leases, located in the north-east area of the Park, together comprise 152 square kilometres. The Jabiluka mineral lease contains areas of the Magela wetlands, sandy plains and escarpment outliers of the Arnhem Land plateau. The uranium ore body is located beneath an outlier of Kombolgie sandstone. The lease area is no different from the surrounding country in terms of landforms and vegetation; it is an integral part of the landscape rather than being something distinct simply because it overlies a body of uranium ore.

2.20 Approximately fifty per cent of Kakadu National Park is owned by Aboriginal people who live there and continue to use the land for practical and spiritual purposes. Title in the Aboriginal land is held by Aboriginal land trusts. These trusts have leased the land to the Director of National Parks and Wildlife. The Park is jointly managed by the Aboriginal Traditional Owners and the Director of the National Parks and Wildlife Service.

2.21 The township of Jabiru, within the Park, was established in 1981 to house people associated with uranium mining in the region. It has also become an important tourist centre. An upper limit of 3,500 was placed on its population and in June 1998 it was populated by 1,480 people.

2.22 Major pieces of Commonwealth legislation which influence the management of Kakadu National Park and the mineral leases include the *National Parks and Wildlife Conservation Act 1975*, under which the Park was established and which provides for joint management with the Traditional Owners, and the *Aboriginal Land Rights (Northern Territory) Act 1976*. The *Environment Protection (Alligator Rivers Region) Act 1978* provides for the appointment of a Supervising Scientist to monitor the environmental effects of mining operations in the region.

2.23 Projects likely to have significant environmental impacts are subject to assessment under the *Environment Protection (Impact of Proposals) Act 1974*.<sup>8</sup> This Act specifies the environmental impact evaluation processes which are required for major projects to proceed. The Jabiluka proposal has also been subject to Northern Territory impact assessment under the *Environmental Assessment Act 1982* (NT).

2.24 Other relevant Commonwealth environment and heritage legislation includes the *Australian Heritage Commission Act 1975*, the *World Heritage Properties Conservation Act 1983* and the *Endangered Species Protection Act 1992*.

### **Kakadu and World Heritage**

2.25 Kakadu National Park was inscribed on the World Heritage List, for both its natural and cultural values, in three stages: 6,144 square kilometres of Stage I in 1981, a further 6,929 square kilometres of Stage II in 1987, and Stage III in 1992, which brought the total area to 19,804 square kilometres.

2.26 The Stage I and II nominations were inscribed on the basis of cultural heritage criterion (iii), for outstanding art and archaeological sites; and natural heritage criteria (ii), (iii) and (iv), for a wide range of ecosystems of high integrity, habitats and species, scenic values and scientific research and educational values.<sup>9</sup> The Stage III nomination was made on the basis of cultural heritage criteria (i) and (vi) and natural heritage criterion (ii), (iii) and (iv). (See Chapter 6, below.)

### **Aboriginal History**

2.27 Archaeological records indicate that the Alligator Rivers Region has sustained human occupation continuously for at least 50,000 years, from the earliest date that humans are thought to have arrived in Australia.

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8 On 23 June 1999 the Environment Protection and Biodiversity Bill 1998 was passed by the Senate. It contains provisions for environmental assessment and when proclaimed will supersede the EPIP Act.

9 UNESCO World Heritage Committee, *Report on the mission to Kakadu National Park, Australia, 26 October to 1 November 1998*.

2.28 Kakadu National Park contains some of the oldest and best preserved archaeological sites in Australia, including extensive galleries of rock art. There are numerous outstanding art and archaeological sites with a high concentration of sites along the Arnhem Land escarpment. There are also many sacred sites of great religious significance to the Aboriginal people.

2.29 More than two hundred Aboriginal sites, relating to habitation and shelter, art, religion and burial have been identified within the Jabiluka lease area.<sup>10</sup> Malakunanga II, possibly one of the earliest sites of human occupation in Australia, providing some of the world's oldest evidence for the use of grindstones for food preparation, edge-ground axes and the preparation of pigments, is located in the Jabiluka mineral lease area, approximately two kilometres from the mine site.

2.30 It is estimated that the Aboriginal population of the Kakadu area when Europeans first came to the area was approximately 2,000, which subsequently declined to approximately 140 in 1979 as a result of disease and social dislocation. Following the creation of the Kakadu National Park this increased to 533 Aboriginal people living in the Park in 1996. There are ten or more permanent Aboriginal living areas in the Park.

2.31 There are currently sixteen clans of Traditional Owners of Kakadu. Three groups which have a direct interest in land decisions and management of Jabiluka are the Gagudju Association, the Djabulukgu Association and the Gundjehmi Aboriginal Corporation. The Mirrar-Gundjehmi people are the Traditional Owners of the Jabiluka mine site, the Ranger uranium mine site and the land covered by the town of Jabiru.

### **Aboriginal Land Rights**

2.32 In 1973 the Commonwealth Government established a Commission of Inquiry, headed by Mr Justice Woodward, to consider appropriate ways and means to establish Aboriginal land rights in the Northern Territory. The Commission considered how to recognise Aboriginal land interests while providing for conservation management of the land.

2.33 Following Justice Woodward's second report, delivered on 3 May 1974, the *Aboriginal Land Rights (Northern Territory) Act 1976* (the Land Rights Act) was passed. The Act provided for grants of unalienated land to Aboriginal people in the Northern Territory and established Aboriginal Land Councils to represent the interests of Traditional Owners. It also gave Traditional Owners a veto over development on their land, although this could be overridden by 'national interest' provisions.

2.34 The Ranger Uranium Environmental Inquiry (the Fox Inquiry) was established in July 1975 to inquire into the environmental consequences of mining uranium in the Alligator Rivers Region. Most of the recommendations of the inquiry were accepted

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10 Environment Australia, *Australia's Kakadu: Protecting World Heritage*, Response by the Australian Government to the World Heritage Committee Regarding Kakadu National Park, April 1999, p 36.

by the Commonwealth Government, including the granting of Aboriginal title and the establishment of both a national park and a uranium industry. The Office of the Supervising Scientist was established to monitor the effects of uranium mining on the environment.

2.35 Under the Land Rights Act the Northern Land Council was established to represent the Traditional Owners of the region. Various land trusts were also set up to hold title to land on behalf of the Traditional Owners.

2.36 Most of the land that was to become Kakadu National Park Stage 1 was granted to the Kakadu Aboriginal Land Trust in September 1978. In November 1978 the Trust leased the land to the Director of the Commonwealth National Parks and Wildlife Service for the purpose of a National Park and in April 1979 Stage 1 of Kakadu National Park was declared.

2.37 In June 1982 the Jabiluka project area, 73 square kilometres, was granted to the Jabiluka Aboriginal Land Trust.

2.38 In March 1978 an Aboriginal land claim was lodged for the land to be included in Stage 2 of Kakadu National Park. Stage 2 was proclaimed in February 1984. The claim was partially successful and a lease agreement was signed between the Director of the National Parks and Wildlife Service and the Jabiluka Aboriginal Land Trust in March 1991. Claims for the areas not granted have yet to be determined.

2.39 In June 1987 a land claim was lodged for land in the proposed Stage 3 of Kakadu National Park. Stage 3 was declared in stages in June 1987, November 1989 and June 1991. In January 1996 approximately half of the land claimed was granted to the Gunlom Aboriginal Land Trust and in March of that year the Trust leased its land to the Director of the National Parks and Wildlife Service.<sup>11</sup>

2.40 Thus, in 1998 approximately fifty per cent of the land in Kakadu National Park was Aboriginal land under the *Aboriginal Land Rights (Northern Territory) Act 1976*. Most of the remaining area is under Aboriginal Land Claim.

2.41 In addition to the Land Rights Act there is a range of Commonwealth and Northern Territory legislation relating to aboriginal land, sacred sites and native title, including the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*, the *Native Title Act 1993*, the *Northern Territory Aboriginal Sacred Sites Act 1989* (NT) and the *Aboriginal Land Act 1978* (NT).

### **The Jabiluka Project**

2.42 Uranium was first mined in Australia in the 1930s. A number of small uranium mines operated in the Alligator Rivers Region in the 1950s and 1960s. In the late 1960s and early 1970s Australia underwent a commodities boom and this prompted a

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11 Environment Australia, *Australia's Kakadu: Protecting World Heritage*, April 1999, pp 18-19.

period of intense exploration. The uranium deposits at Ranger, Jabiluka and Nabarlek were discovered at this time. Following the report of the Ranger Uranium Environmental Inquiry (the Fox Report) in 1977, the Nabarlek mine commenced operations in 1979, followed by the Ranger mine in 1980.

2.43 The Jabiluka site contains one of the world's largest high-grade deposits of uranium. It is believed that the deposit could yield over 90,000 tonnes of uranium oxide (at an average grade of 0.46 per cent) over a 28 year mine life. Some estimates put the possible sales of the mine over its life at \$8 billion, dependent on world uranium prices. *The Australian*, citing an Access Economics study, estimated in 1996 that assuming 'unconstrained growth in an expanding market' new uranium developments would add a maximum \$800 million a year to the 1994-95 exports of \$188 million.<sup>12</sup> However, there are differing views in relation to the true value of the mine to the Australian economy.<sup>13</sup>

2.44 The Jabiluka mine is located inside the geographical boundaries of the Kakadu National Park, though legally excised from the Park area since its inception. This excision frees the site from the *National Parks and Wildlife Conservation Act 1975*, which prohibits mining within the Park. The uranium deposit lies close to the floodplain of Magela Creek, a tributary of the East Alligator River, beneath an escarpment twenty kilometres north of the Ranger uranium mine.

2.45 The Jabiluka deposit was first discovered in November 1971 by Pancontinental Mining and Getty Oil Development Ltd. An environmental impact statement for the project was submitted in 1979 but further development of the mine was stalled in 1983 when the newly elected Hawke Labor Government restricted uranium mining to three mines: Ranger mine south of the Jabiluka deposit, Nabarlek in Arnhem Land, and Olympic Dam in South Australia.

2.46 The approval of the Ranger mine was coincident with the initial establishment of Kakadu National Park in 1978, and occurred two years after the enactment of the *Aboriginal Land Rights (Northern Territory) Act 1976*. The Park was then inscribed onto the World Heritage list in three stages (see above).

2.47 The Jabiluka uranium mine was first approved under a 1982 agreement between Pancontinental Mining and the Northern Land Council, subject to the provisions of the *Aboriginal Land Rights (Northern Territory) Act 1976* having been satisfactorily adhered to. Key among these was a provision (in Section 48A) which stated that an agreement would only have legal force if the Minister for Aboriginal Affairs was satisfied that the Northern Land Council (NLC) had negotiated according to the wishes of the Traditional Owners, and that 'the traditional Aboriginal owners of

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12 Nicolas Rothwell, 'Yellowcake Dreaming', *The Australian*, 27 April 1996; Energy Resources of Australia, Jabiluka Overview, <http://www.energyres.com.au/jabiluka/overview.html>

13 For example: Mr Rob Gillespie, Gillespie Economics, Submission 3; The Wilderness Society (NSW), Submissions 47 and 47A.



the land understand the nature and purpose of the agreement and, as a group, consent to it'. This is now the subject of dispute.<sup>14</sup>

2.48 In 1991 Pancontinental informed the Northern Land Council (NLC) that it wished to sell its interest in Jabiluka to Energy Resources of Australia (ERA) Ltd, which operated the Ranger mine. Under the 1991 Deed of Transfer negotiated with the NLC, one key term stated that ERA would have to obtain the consent of Traditional Owners before it could mill Jabiluka ore at Ranger.

2.49 When the Liberal-National Coalition was elected in 1996, it removed Labor's limitations on the number of mines. Henceforth, development would be subject to the existing suite of environmental and land rights legislation and, indirectly, to Australia's international obligations regarding World Heritage protection and the sale and export of uranium.

2.50 The original Pancontinental proposal was for an open cut mine, with a tailings dam and milling facilities located on the Jabiluka lease. In 1996 ERA submitted a revised proposal for an underground mine, from which the ore would be trucked to Ranger for milling there. Tailings would be disposed of in the mined-out pits at Ranger. This new proposal would entail the construction of a 22 kilometre road between the two sites, and require the consent of the Traditional Owners. This option was known as the Ranger Mill Alternative (RMA) and was outlined in a 1997 Environmental Impact Statement (EIS) prepared by ERA.

2.51 When it became clear that the Traditional Owners of the Jabiluka lease, the Mirrar-Gundjehmi, would refuse to allow the construction of the access road or milling at Ranger, ERA developed a second option which involved the milling of mined ore and tailings disposal at the Jabiluka site. ERA's preferred option, outlined in a Public Environment Report (PER) of 1998, was for the disposal of half the tailings underground in mined-out shafts, and the remainder in purpose-built pits near the surface. A second option was for the whole of the tailings to be disposed of underground, which would involve the excavation of more rock to create room. These options were known as the Jabiluka Mill Alternative (JMA).

2.52 Construction work on the mine began in June 1998. It is projected that the first uranium will be recovered in 2001. The blasting and excavation of the tunnel to the underground ore body (known as a 'decline') began in September 1998 and is now complete. Excavation for the water containment pond was completed in August 1998 and a pond liner (which has been the target of vandalism) installed in September. Erosion control work has also been undertaken. The operations phase of the mine is expected to be up to 28 years, with extraction commencing at 100,000 tonnes per annum in year one, increasing to a rate of 900,000 tonnes per annum from year fourteen on.

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14 *Aboriginal Land Rights (Northern Territory) Act 1976*, s. 48A(4); Gundjehmi Aboriginal Corporation, "We are not talking about mining": *The History of Duress and the Jabiluka Project*, July 1997, at: [http://www.mirrar.net/index\\_main.htm](http://www.mirrar.net/index_main.htm)

2.53 As a result of opposition to the development of the mine, representations from non-government organisations were made to the Bureau of the UNESCO World Heritage Committee to place Kakadu National Park on the List of World Heritage In Danger. Concerns which were raised included the impact of the Jabiluka mine on the integrity of World Heritage values of the Park and on the heritage of the Mirrar, Traditional Owners of the Jabiluka site. These concerns, and others, are discussed in the following chapters.