



20 NOV 2002

Ms Jo Bragg
Principal Solicitor
Environmental Defenders Office (Qld) Inc
Level 4 Travel House
243 Edward Street
BRISBANE QLD 4000

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: Dear Ms Bragg

Thank you for your letters of 9 October 2002 requesting reasons for my decision of 16 September 2002, on behalf of the World Wide Fund for Nature and Queensland Conservation Council, that the proposal by Sudaw Developments Limited to construct and operate the Nathan Dam (EPBC 2002/770) on the Dawson River, Queensland, is a not a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for both listed migratory species and World Heritage.

I have enclosed statements of my reasons under section 13 of the *Administrative Decisions (Judicial Review) Act 1977* for both parties.

Yours sincerely

DAVID KEMP



STATEMENT OF REASONS FOR DECISION UNDER SECTION 75 OF THE
ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

I, DAVID ALISTAIR KEMP, Minister for the Environment and Heritage, provide the following statement of reasons for my decision of 16 September 2002, under section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC) Act, that the proposed action by Sudaw Developments Limited to construct and operate Nathan Dam on the Dawson River, Queensland, is a controlled action (EPBC referral no 2002/770).

Legislation

1. Section 68 of the EPBC Act relevantly provides:

- (1) A person proposing to take an action that the person thinks may be or is a controlled action must refer the proposal to the Minister for the Minister's decision whether or not the action is a controlled action.
- (2) A person proposing to take an action that the person thinks is not a controlled action may refer the proposal to the Minister for the Minister's decision whether or not the action is a controlled action.

2. Section 74 of the EPBC Act relevantly provides:

- (1) As soon as practicable after receiving a referral of a proposal to take an action, the Minister (the Environment Minister) must:
 - (a) inform any other Minister whom the Environment Minister believes has administrative responsibilities relating to the proposal; and
 - (b) invite each other Minister informed to give the Environment Minister within 10 business days information that relates to the proposed action and is relevant to deciding whether or not the proposed action is a controlled action.
- (2) As soon as practicable after receiving, from the person proposing to take an action or from a Commonwealth agency, a referral of a proposal to take an action in a State or self-governing Territory, the Environment Minister must:
 - (a) inform the appropriate Minister of the State or Territory; and
 - (b) invite that Minister to give the Environment Minister comments within 10 business days on whether the proposed action is a controlled action;

if the Environment Minister thinks the action may have an impact on a matter protected by a provision of Division 1 of Part 3 (about matters of national environmental significance).

- (3) As soon as practicable after receiving a referral of a proposal to take an action, the Environment Minister must cause to be published on the Internet:
- (a) the referral; and
 - (b) an invitation for anyone to give the Minister comments within 10 business days (measured in Canberra) on whether the action is a controlled action.
3. Section 75 of the EPBC Act relevantly provides:
- (1) The Minister must decide:
- (a) whether the action that is the subject of a proposal referred to the Minister is a controlled action; and
 - (b) which provisions of Part 3 (if any) are controlling provisions for the action.
- (1A) In making a decision under subsection (1) about the action, the Minister must consider the comments (if any) received:
- (a) in response to the invitation (if any) under subsection 74(3) for anyone to give the Minister comments on whether the action is a controlled action; and
 - (b) within the period specified in the invitation.
- (2) If, when the Minister makes a decision under subsection (1), it is relevant for the Minister to consider the impacts of an action:
- (a) the Minister must consider all adverse impacts (if any) the action:
 - (i) has or will have; or
 - (ii) is likely to have;on the matter protected by each provision of Part 3; and
 - (b) must not consider any beneficial impacts the action:
 - (i) has or will have; or
 - (ii) is likely to have;on the matter protected by each provision of Part 3.

Background

4. The proposed action was referred by Dr John Hoffman of Sudaw Developments Limited and received by the Department of the Environment and Heritage (the Department) on 19 August 2002. The referral indicated that, in the view of Dr John Hoffman, the action is not a controlled action.

5. Sudaw Developments Limited proposes to construct and operate a 27 metre high roller compacted concrete dam with a capacity of 880,000 ML on the Dawson River, within the Dawson sub-catchment of the subtropical Fitzroy River system, Queensland. The ponded area of the dam will occupy approximately 13,000ha. Viewing and recreational facilities will be built, as well as road and power infrastructure. Operation of the dam will involve regulation of the flow of water.
6. In accordance with subsection 74(1) of the EPBC Act the Minister for Agriculture, Fisheries and Forestry was informed of the referral on 19 August 2002 and invited to provide information relevant to deciding whether or not the action is a controlled action. No comments were received.
7. In accordance with subsection 74(2) of the EPBC Act, the Queensland Minister for the Environment was informed of the referral on 19 August 2002, and invited to provide comment on whether the action is a controlled action. A response and papers and reports on studies undertaken for the Queensland Impact Assessment Study were received from the Minister's delegate.
8. In accordance with subsection 74(3) of the EPBC Act, the referral, together with an invitation for public comment, was published on the Department's web site on 19 August 2002. 19 public comments were received of which 10 raised concerns about or opposed the proposed action.
9. On 16 September 2002 I decided, in accordance with section 75 of the EPBC Act, that the action is a controlled action.

Evidence or other material on which the decision-maker's findings were based

10. The evidence or other material upon which my findings were based are listed below:
 - a brief dated 16 September 2002 from the Department of the Environment and Heritage with the following attachments:
 - a copy of the referral for the action with an attached copy of Review Report on the Impact Assessment Process for the Nathan Dam Proposal (Department of Natural Resources, December 1999);
 - a copy of the response from the delegate of the Queensland Minister for the Environment;
 - a copy of a table summarizing the public submissions and copies of submissions with information addressing the relevant matters; and
 - advice from the Department relating to the potential impacts of the action on matters protected under the EPBC Act.

Findings on material questions of fact

World Heritage

11. I found that the Great Barrier Reef is a listed World Heritage Property and the World Heritage values for the property include the following:

- seagrass beds (over 5000km²) comprising 15 species, 2 endemic;
- mangroves (over 2070km²) including 37 species;
- evidence of morphological and genetic changes in mangrove and seagrass flora across regional scales;
- feeding and/or breeding grounds for international migratory seabirds, cetaceans and sea turtles;
- reef morphologies reflecting historical and on-going geomorphic and oceanographic processes;
- migrating whales, dolphins, dugong, whale sharks, sea turtles, seabirds and concentrations of large fish; and
- on going processes of accretion and erosion of coral reefs, sand banks and coral cays, erosion and deposition processes along the coastline, river deltas and estuaries and continental islands.

12. The proposed construction of Nathan Dam is to take place near Taroom on the Dawson River. The Dawson River has a catchment area of 50,830 km². The Dawson River joins the Mackenzie River to become the Fitzroy River, which has other major tributaries, and which flows east to the coast entering the Great Barrier Reef World Heritage Area (GBRWHA) near Rockhampton, about 500 km by river from the proposed Nathan Dam.

13. I considered the effect of the proposed action on the water flow from the Fitzroy River into the GBRWHA. I found that the average annual discharge from the Dawson River is 1,127,000ML and Nathan Dam will hold about 880,000ML. Approximately 190,000ML of water stored by the Dam is proposed for annual consumption, primarily for irrigation of up to 30,000 hectares. I considered advice provided by the Great Barrier Reef Marine Park Authority (GBRMPA) and the Executive Summary of the *Literature Review and Scoping Study of the Potential Downstream Impacts of the Proposed Nathan Dam on the Dawson River, Fitzroy River and Offshore Environments* that was attached to GBRMPA's advice and reflected in my Department's brief of 16 September 2002.

14. I found that the natural river flows of the Dawson River are extremely variable and that the river system downstream from the proposed Dam is highly regulated. I found that the existing Fitzroy River catchment is highly modified. In particular, there are a number of weirs and one river barrage in the 500 km between the proposed Nathan Dam and the river mouth where the Fitzroy River flows into the GBRWHA. I found that it was not possible to identify any likely significant impact on the GBRWHA that would be caused by modification of the water flow in the Dawson River as a result of the construction and operation of the dam.

15. Some public submissions expressed concern about the cumulative impacts of the proposed action resulting from downstream irrigation of agricultural land. The submissions suggested that irrigation of land adjacent to river-beds, has the

potential to increase nutrient concentrations and other agricultural pollutants downstream of the dam. However, I found that potential impacts of the irrigation of land by persons other than the proponents, using water from the dam, are not impacts of the referred action, which is the construction and operation of the dam.

16. On the basis of my findings referred to in paragraphs 12 to 15, I found that the proposed action is unlikely to have a significant impact on the World Heritage values of the declared World Heritage property.

Listed Threatened Species and Ecological Communities

17. I found that the following listed threatened species and ecological communities are known to occur in the vicinity of the proposed action:

Endangered species

<i>Scientific name</i>	<i>Common name</i>
<i>Digitaria porrecta</i>	Finger Panic Grass
<i>Neochmia ruficauda ruficauda</i>	Star Finch (Eastern), Star Finch (southern)

Vulnerable Species

<i>Scientific name</i>	<i>Common name</i>
<i>Erythrotriorchis radiatus</i>	Red Goshawk
<i>Geophaps scripta scripta</i>	Squatter Pigeon (southern)
<i>Turnix melanogaster</i>	Black-breasted Button-quail
<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat, Large Pied Bat
<i>Nyctophilus timoriensis</i> (South-eastern form)	Eastern Long-eared Bat
<i>Arthraxon hispidus</i>	Hairy-joint Grass
<i>Cadellia pentastylis</i>	Ooline
<i>Commersonia sp. Cadarga</i>	Plant
<i>Dicanthium queenslandicum</i>	King Blue-grass
<i>Denisonia maculata</i>	Ornamental Snake
<i>Egernia rugosa</i>	Yakka Skink
<i>Firina dunmalla</i>	Dunmall's Snake
<i>Paradelma orientalis</i>	Brigalow Scaly-foot
<i>Rheodytes leukops</i>	Fitzroy Tortoise

Ecological Communities

The community of native species dependent on natural discharge of groundwater from the Great Artesian Basin
Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)
Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions
Bluegrass (<i>Dicanthium</i> spp.) dominant grasslands of the Brigalow Belt Bioregions (North and South)

18. I found that the Fitzroy Tortoise is endemic to the Fitzroy catchment. The species prefers deep pools with a rocky substrate connected by riffle zones, and studies have found reduced turtle diversity in impoundments compared to rivers. I found that the species eat a range of foods including Ribbonweed, algae and insect larvae. I found that loss of riffle zones, riparian vegetation and nesting banks from inundation of 13,000 hectares is likely to have a significant impact on movement and connectivity between populations of the species and therefore a likely significant impact on the species.
19. I found that the Ornamental Snake has only been found within the drainage systems of the Fitzroy and Dawson Rivers. Low-lying areas are preferred habitat for the species. I therefore found that the inundation of 13,000 hectares is likely to have significant impact on the species by contributing to the long-term decrease in the size of an important population.
20. I found that populations of Hairy-joint Grass have been found around boggomosses or mound springs near Taroom. I found that the proposed action will result in the inundation of about 38% of the boggomosses in the Taroom area, with which the species is associated. I therefore found that the proposed action is likely to have a significant impact on the species by reducing the area of occupancy of an important population.
21. On the available evidence I found that no likelihood of a significant impact on the other listed threatened species had been established.
22. On the basis of my findings in paragraphs 17 to 21, I found that the proposed action is likely to have a significant impact on listed threatened species and ecological communities.

Listed Migratory Species

23. In relation to listed migratory species, I took account of advice from my Department which had examined the potential impacts on listed migratory species and concluded that no significant impacts on any of those migratory species were likely in relation to the proposed construction and operation of the dam.

24. Some submissions, and in particular that of the Queensland Conservation Council, argued that migratory species would be affected by potential impacts of water flow changes on wetlands and the impacts of irrigation. However for the reasons given in paragraph 14 above, I found that the evidence did not justify a finding that the referred action would have an impact on the water flow changes on wetlands that would result in a significant impact on migratory species. For the reasons given in paragraph 15 above, I did not consider that the potential impacts of irrigation were impacts of the referred action. I therefore did not find that the construction and operation of the dam were likely to have a significant impact on listed migratory species.

Reasons for decision

25. In light of my finding that the proposed action is likely to have a significant impact on listed threatened species and ecological communities, I found that the proposed action is a controlled action and that the controlling provisions for the action are sections 18 and 18A.

26. In making the decision I took account of the precautionary principle.


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MINISTER FOR THE ENVIRONMENT AND HERITAGE

20 / 11 / 2002