The Flying Fox Case

CHRIS McGRATH

LLB (Hons), BSc, LLM (Environmental Law), PhD candidate (QUT), Barrister-at-Law

In the first full trial under the Environment Protection and Biodiversity Conservation Act 1999 (Cth), Booth v Bosworth [2001] FCA 1453 (the Flying Fox Case), Justice Branson of the Federal Court has granted an injunction restraining an action found to be causing a significant impact on the world heritage values of the Wet Tropics World Heritage Area. The case is a crucial test of the new offence provisions for matters of national environmental significance under the EPBC Act and a landmark case highlighting the importance of open standing for public interest litigation to protect the environment. This article analyses the decision and its implications for the administration of the EPBC Act.

Introduction

The *Environment Protection and Biodiversity Conservation Act* 1999 (Cth) (EPBC Act), which commenced on 16 July 2000, reflects two decades of development of Commonwealth environmental powers catalysed by the decision of the High Court in *The Commonwealth v Tasmania* (1983) 158 CLR 1 (the *Tasmanian Dam Case*). The Act fundamentally and radically changes the Australian environmental legal system and is a major component of the legislative scheme to fulfil Australia's international environmental legal obligations.[1] The Act also contains many complex and novel legal concepts, the interpretation of which will largely determine the nature and width of its application in practice.

The first full trial under the EPBC Act,[2] *Booth v Bosworth* [2001] FCA 1453 (the *Flying Fox Case*), has now been decided.[3] This case, in which the author was the junior counsel for the applicant,[4] involved a number of key issues for the protection of World Heritage and conservation of biodiversity under the EPBC Act and the operation of the Act generally, including:

- testing the offence provisions for matters of national environmental significance;[5]
- analysing the meaning of a "significant impact";
- analysing the meaning of the "world heritage values of a declared World Heritage property";
- analysing the meaning of "likely to have";
- establishing that an action taken outside a World Heritage area can be regulated if it causes a significant impact on world heritage values;

[1] See generally, C McGrath, "An introduction to the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*, its implications for State environmental legislation and public interest litigation" (2000) 6 (28) QEPR 102; C McGrath, *Major Pieces of the Queensland Environmental Legal System*, (Environmental Law Publishing, Brisbane, 2001).

[2] At the time of writing there had been three decisions concerning interim injunction applications under the EPBC Act: *Booth v Bosworth* [2000] FCA 1878 (Spender J); *Schneiders v The State of Queensland* [2001] FCA 553 (Dowsett J); and *Jones v The State of Queensland* [2001] FCA 756 (Drummond J). See C McGrath, "Casenote: Booth v Bosworth" (2001) 18 (1) EPLJ 23 and C McGrath, "The Fraser Island Dingo Case" (2001) 18 (3) EPLJ 269.

[3] The judgment is available on the internet at <www.federalcourt.gov.au>. The law and facts are stated as at 25 October 2001. At the time of writing, no appeal had been made but neither had the appeal period expired.

[4] Acknowledgment must be made of the rest of the applicant's legal team, Dr Ted Christie of counsel, Mr Stephen Keim of counsel and Ms Elisa Nichols and Mr Rob Stevenson, solicitors of the Environmental Defenders' Office (Qld) Inc, for their contribution and commitment to this case.

[5] The current list of matters of national environmental significance under the EPBC Act is: the world heritage values of a declared World Heritage property; the ecological character of a declared Ramsar wetland; listed threatened species and ecological communities; listed migratory species; nuclear actions; and Commonwealth marine areas.

- challenging the role that politics play in the prosecution of environmental offences and listing of threatened species, particularly where agricultural interests are involved; and
- highlighting the importance of open standing for public interest litigation.

The aim of this article is to analyse the decision in the *Flying Fox Case* and to discuss the implications of the decision for the administration of the EPBC Act. Analysis of the decision reveals the important changes that have occurred for the protection of World Heritage properties and the conservation of biodiversity in Australia under the EPBC Act. It also indicates that the application of the Act is more far-reaching and fundamental than previously appreciated.

Background to the Flying Fox Case

In November 2000 the North Queensland Conservation Council Inc (NQCC) received information of a farmer in north Queensland who was electrocuting thousands of flying foxes to protect his lychee crop. Dr Carol Booth inspected the site and found a series of 14 aerial electric grids constructed within a 60 hectare lychee orchard on the property. The electric grids consisted of 20 horizontal electrified wires, spaced 25cm apart, strung between poles at 4-9m height (slightly above tree-top level), each grid stretching for 470-820m in length, a total of 6.4km of electric grids. When flying foxes collide with any two of the wires (which are alternated earth – live), they create a circuit and are electrocuted by a high voltage current.[6] Dr Booth recorded over four nights the death of 300-500 Spectacled Flying Foxes (*Pteropus conspicillatus*) per night on the electric grid system.

The Spectacled Flying Fox is distributed in and around the rainforests of coastal north-eastern Queensland,[7] now largely contained with the Wet Tropics World Heritage Area. The species is considered to be a specialist frugivore, important for seed dispersal, evolutionary processes and general ecological function within the rainforest.[8] Field surveys estimated the total number of Spectacled Flying Foxes to be 113,960 (±14,100) in November 1998, 74,400 (±8650) in November 1999 and 79,980 (±9045) in November 2000.[9] Although anecdotal evidence suggests the total number of Spectacled Flying Foxes has dramatically declined from 800,000 during the 1980s, the species is classified as a "common mammal" under the *Nature Conservation Act* 1992 (Qld) and is not listed as threatened under the EPBC Act.

Dr Booth conveyed her observations of the large number of deaths to NQCC, which informed the Queensland Parks and Wildlife Service (QPWS). Although not listed as rare or threatened, as a native mammal the Spectacled Flying Fox is a protected animal under the *Nature Conservation Act* 1992 (Qld) and the taking (including killing or injuring) of it is an offence against s 88 of the Act unless, as relevant to this case, authorised under a permit issued under the *Nature Conservation Regulation* 1994 (Qld). NQCC learnt from QPWS that no permit had been issued for the taking of Spectacled Flying Foxes on the farm in question. NQCC then requested that QPWS take action to stop the killing of Spectacled Flying Foxes at the farm.

The QPWS responded by visiting the farm owners and issuing on 28 November 2000 a retrospective permit to take 100 Rainbow Lorikeets (*Trichoglossus haematodus*) and 500 Spectacled Flying Foxes between 24 November 2000 and 23 January 2001. Subsequent representations to the QPWS that the killing of Spectacled Flying Foxes grossly exceeded the permit were ignored.

Unsatisfied by the permissive response of the QPWS, due to the relationship of the Spectacled Flying Fox to the Wet Tropics World Heritage Area, NQCC conveyed the information concerning the killing of Spectacled Flying Foxes to Environment Australia (that is, the Commonwealth Department of

[6] P Rigden, J Page and J Chapman, *To Net or Not to Net? Flying Fox Control in Orchards Through Netting Protection*, Queensland Department of Primary Industries, Brisbane, 2000, pp 29 and 46.

[7] GC Richards, "The Spectacled Flying-fox, *Pteropus conspicillatus* (Chiroptera: Pteropodidae), in north Queensland. 1. Roost sites and distribution patterns." *Australian Mammalogy* (1990) 13: 17-24.

[8] GC Richards, "The Spectacled Flying-fox, *Pteropus conspicillatus* (Chiroptera: Pteropodidae), in north Queensland. 2. Diet, seed dispersal and feeding ecology." *Australian Mammalogy* (1990) 13: 25-31; GC Richards, "A review of ecological interactions of fruit bats in Australian ecosystems" Symp Zool Soc Lond (1995) No. 67: 79-96.

[9] O Whybird, *November 2000 Spectacled Flying-fox Survey*, Phoniscus, Millaa Millaa, 2001.

Environment and Heritage). The Commonwealth response was to request further information.

Dr Booth also informed the farm owners, both orally and in writing, that the operation of the electric grids breached the *Nature Conservation Act* 1992 (Qld) and the EPBC Act. She requested that they cease operating the electric grids immediately and refer their operation for approval under the EPBC Act. They refused to do so.

The interim injunction application

Due to the refusal of the farm owners to cease operating the electric grids, the delay in the response of government agencies and the high rate of the killing of Spectacled Flying Foxes each night, Dr Booth made an application for an injunction under s 475 of the EPBC Act and sought an interim injunction to restrain the killing of Spectacled Flying Foxes pending the hearing of the full application.

Justice Spender heard the application for an interim injunction on 13 December 2001 in Brisbane.[10] While clearly concerned by the scale of respondents' activities and the impacts on the world heritage values, Justice Spender declined to grant the interim injunction, principally because of the short time remaining in the lychee season (and therefore the operation of the electric grids) at the time of the hearing.[11]

The full trial in the Federal Court

Justice Branson heard the full trial on 18-20 July 2001 for an application under s 475 of the EPBC Act for:

- a prohibitory injunction restraining the respondents from causing, procuring or allowing the death or injury, whether by electrocution, shooting or otherwise, of flying foxes on or about the respondents' property at Lots 107 and 108, Crown Plan CWL652, Parish of Meunga, County of Cardwell, in the State of Queensland; and
- an order that the respondents and/or their agents dismantle any construction or device on the respondents' property at Lots 107 and 108, Crown Plan CWL652, Parish of Meunga, County of Cardwell, in the State of Queensland used for killing flying foxes by electrocution.

The court granted the injunction sought subject to the qualification that the injunction was limited to killing Spectacled Flying Foxes by electrocution, rather than flying foxes generally, and that the injunction would end if the respondents (i.e. the farm owners) obtained an approval from the Commonwealth Environment Minister under the EPBC Act.[12] The court declined to grant the order to dismantle the grid.

In reaching this decision there were two principal issues to be decided by the court:

1. whether the action by the respondents in operating a system of electric grids on their lychee fruit farm to electrocute flying foxes has, will have, or is likely to have a significant impact on the world heritage values of the Wet Tropics World Heritage Area; and
2. whether the court should exercise its discretion to grant the injunction and consequential order sought.

The applicant's standing was not at issue. Section 475(5) of the EPBC Act widens standing to seek an injunction to remedy or restrain an offence or other contravention of the Act. Justice Spender rejected an argument that the applicant did not have standing at the hearing of the interim injunction[13] and the respondents did not pursue this issue at the full trial. This aspect of the case itself marks a fundamental change over the previous position in which procedural obstacles blocked access to justice for public interest litigation to protect the environment.[14]

The application was brought under s 475 for an alleged breach of s 12 of the EPBC Act.[15] As relevant here, these provide:

> **"475 Injunctions for contravention of the Act**
> *Applications for injunctions*
> (1) If a person has engaged, engages or proposes to engage in conduct consisting of an act or

[10] *Booth v Bosworth* [2000] FCA 1878 (Spender J).
[11] See McGrath, op cit n 2.

[12] In response to this the first respondent lodged an application under the EPBC Act on 22 October 2001. At the time of writing, no decision had been made on this application.
[13] *Booth v Bosworth* [2000] FCA 1878 (Spender J) at para 5.
[14] See McGrath, op cit n 2.
[15] Note that the Spectacled Flying Fox is not (yet) listed as a threatened species under the EPBC Act and therefore ss 18 and 18A of the Act were not relevant.

omission that constitutes an offence or other contravention of this Act or the regulations:

(a) the Minister; or

(b) an interested person (other than an unincorporated organisation); or

(c) a person acting on behalf of an unincorporated organisation that is an interested person;

may apply to the Federal Court for an injunction.

Prohibitory injunctions

(2) If a person has engaged, is engaging or is proposing to engage in conduct constituting an offence or other contravention of this Act or the regulations, the Court may grant an injunction restraining the person from engaging in the conduct.

Additional orders with prohibitory injunctions

(3) If the court grants an injunction restraining a person from engaging in conduct and in the Court's opinion it is desirable to do so, the Court may make an order requiring the person to do something (including repair or mitigate damage to the environment). ...

12 Requirement for approval of activities with a significant impact on a declared World Heritage property

(1) A person must not take an action that:

(a) has or will have a significant impact on the world heritage values of a declared World Heritage property; or

(b) is likely to have a significant impact on the world heritage values of a declared World Heritage property.

Civil Penalty:

(a) for an individual – 5,000 penalty units;

(b) for a body corporate- 50,000 penalty units.

(2) Subsection (1) does not apply to an action if [the action has been approved or is otherwise authorised under the EPBC Act].

(3) A property has *world heritage values* only if it contains natural heritage or cultural heritage. The *world heritage values* of the property are the natural heritage and cultural heritage contained in the property.

(4) In this Act:

cultural heritage has the meaning given by the World Heritage Convention.

natural heritage has the meaning given by the World Heritage Convention."

There are six elements to the cause of action contained in s 12:

- a person;
- takes an action;
- that has, will have or is likely to have;
- a significant impact;
- on the world heritage values;
- of a declared World Heritage property.

The first and last of these elements were admitted by the respondents, the dispute at trial revolved around the issues of:

- whether the respondents' actions had been proven to cause a significant impact on the world heritage values of the Wet Tropics World Heritage Area;
- what were the world heritage values of the Wet Tropics World Heritage Area;
- whether the economic impact on the respondents of the grant of the injunction was such as to warrant the court not granting the injunction even if the court was satisfied a breach of s 12 had occurred.

In summary, the key findings of fact by Branson J in relation to these issues were as follows:

- the operation of the electric grid killed in the order of 18,000 Spectacled Flying Foxes in the 2000-2001 lychee season, of which 9,900-10,800 were females;
- in early November 2000 the total Australian population of Spectacled Flying Foxes did not exceed 100,000;
- the operation of the electric grid in the 2000-2001 lychee season killed roughly 20 per cent of the Australian population of Spectacled Flying Foxes;
- unless restrained the future operation of the electric grid would continue to cause the death of comparable numbers of Spectacled Flying Foxes subject only to this species becoming increasingly rare in those areas of Australia from which flying foxes may be attracted to the farm;
- the Spectacled Flying Fox is part of the world heritage values of the Wet Tropics World Heritage Area;
- the operation of the electric grid in the 2000-

2001 lychee season had a significant impact on the population of Spectacled Flying Foxes;
- the probable impact of the operation of the electric grid, if allowed to continue on an annual basis during future lychee seasons, will be an ongoing dramatic decline in the Spectacled Flying Fox population leading to a halving of the population of Spectacled Flying Foxes in less than five (5) years, which would render the Spectacled Flying Fox an endangered species in the Wet Tropics World Heritage Area;
- the continued operation of the electric grid will have, or is likely to have, a significant impact on the world heritage values of the Wet Tropics World Heritage Area;[16] and
- the court's discretion should be exercised in favour of the grant of an injunction.

However, further analysis is required to understand the depth and complexity of the case and the issues in dispute. To begin this analysis, although not acknowledged by Branson J, it is useful first to appreciate the basis upon which the statutory provisions at the heart of the case were to be interpreted.

A court's fundamental task in interpreting a statute is to determine the meaning that the legislature intended the words to have, which normally is found in the ordinary and natural meaning of the words having regard to their context in the Act as a whole.[17] However, a technical meaning may be preferred where it is clear from the context and subject matter that this was the meaning the legislature intended the words to have.[18] In addition, s 15AA of the *Acts Interpretation Act* 1901 (Cth) requires that in the interpretation of a provision of an Act, a construction that would promote the purpose or object underlying the Act (whether that purpose or object is expressly stated in the Act or not) shall be preferred to a construction that would not promote that purpose or object. In *Project Blue Sky Inc v Australian Broadcasting Authority* (1998) 194 CLR 355 at 384, in a joint judgement, McHugh, Gummow, Kirby and Hayne JJ summarised these principles as follows:[19]

> "However, the duty of a court is to give the words of a statutory provision the meaning that the legislature is taken to have intended them to have. Ordinarily, that meaning (the legal meaning) will correspond with the grammatical meaning of the provision. But not always. The context of the words, the consequences of a literal or grammatical construction, the purpose of the statute or the canons of construction[20] may require the words of a legislative provision to be read in a way that does not correspond with the literal or grammatical meaning."

It is also necessary to consider whether the interpretation accorded by any relevant international treaty to the terms used in s 12 of the EPBC Act can or should be adopted. There are three reasons for doing so. Firstly, there are express references to terms defined in the World Heritage Convention[21] in s 12. Secondly, s 15AB(2)(d) of the *Acts Interpretation Act* 1901 (Cth) includes "any treaty or other international agreement that is referred to in the Act" as extrinsic material that may be referred to in ascertainment of the meaning of a provision. Thirdly, as a principle of statutory interpretation of the common law as stated by Mason CJ and Deane J in *Minister for Immigration and Ethnic Affairs v Teoh* (1995) 183 CLR 273 at 287:

> "Where a statute or subordinate legislation is

[16] While the final statement of the court's findings in para 106 refers only to "the continued operation of the Grid is likely to have a significant impact", paras 104-106 together indicate that in fact the court found the operation of the grid had (in 2000) a significant impact and that the continued operation of the grid would have, or was likely to have, a significant impact.

[17] *Cooper Brookes (Wollongong) Proprietary Limited v Federal Commissioner of Taxation* (1981) 147 CLR 297 at 304-306, 310-311 and 320-321; *Project Blue Sky Inc v Australian Broadcasting Authority* (1998) 194 CLR 355 at 384; *ASIC v DB Management Pty Ltd* (1999) 199 CLR 321 at 338.

[18] *David and Jones v State of Western Australia* (1905) 2 CLR 29 at 42-3, 46 and 51; *Herbert Adams Pty Ltd v Federal Commissioner for Taxation* (1932) 47 CLR 222 at 227; *Marine Power Australia Pty Ltd & Anor v Comptroller-General of Customs & Ors* (1989) 89 ALR 561 (FCA) at 572.

[19] Approved in *ASIC v DB Management Pty Ltd* (1999) 199 CLR 321 at 338 per Gleeson CJ, Gaudron, Gummow, Hayne and Callinan JJ.

[20] For example, the presumption that, in the absence of unmistakable and unambiguous language, the legislature has not intended to interfere with basic rights, freedoms or immunities: *Coco v The Queen* (1994) 179 CLR 427 at 437.

[21] *Convention for the Protection of the World Cultural and Natural Heritage* ATS 1975 No. 47. Entry into force generally: 17 December 1975.

ambiguous, the courts should favour that construction which accords with Australia's obligations under a treaty or international convention to which Australia is a party,[22] at least in those cases in which the legislation is enacted after, or in contemplation of, entry into, or ratification of, the relevant international instrument. That is because Parliament, prima facie, intends to give effect to Australia's obligations under international law."

On the basis of these principles of statutory interpretation, the six elements of s 12 of the EPBC Act may be interpreted and applied to the facts of this case. Without fully acknowledging this, this was the basis that Branson J proceeded upon.[23] Applying these principles, the meaning of "action", "significant impact", "likely to have" and "world heritage values" may be interpreted.

"Action"

In her judgment at para 12, Branson J stated "Section 523 of the Act defines an 'action' as follows [her Honour then set out s 523]". With the greatest respect, neither s 523 nor the EPBC Act defines "action". Read in context, ss 523-524A do nothing more than qualify the plain meaning of "action". In the context of the EPBC Act, the plain meaning of "action" is the process or state of acting or of being active; something done; an act; or deed.[24] The plain meaning of "act" is anything done or performed; a doing; deed; the process of doing.[25] Sections 523-524A of the EPBC Act then provide:

"**523 *Actions***

(1) Subject to this Subdivision, *action* includes:

(a) a project; and
(b) a development; and
(c) an undertaking; and
(d) an activity or series of activities; and
(e) an alteration of any of the things mentioned in paragraph (a), (b), (c) or (d).

524 Things that are not *actions*

(1) (This section applies to a decision by each of the following kinds of person (*government body*):

(a) the Commonwealth;
(b) a Commonwealth agency;
(c) a State;
(d) a self-governing Territory;
(e) an agency of a State or self-governing Territory;
(f) an authority established by a law applying in a Territory that is not a self-governing Territory.

(2) A decision by a government body to grant a governmental authorisation (however described) for another person to take an action is not an *action*. ...

524A Provision of grant funding is not an *action*

Provision of funding by way of a grant by one of the following is not an *action*:

(a) the Commonwealth;
(b) a Commonwealth agency;
(c) a State;
(d) a self-governing Territory;
(e) an agency of a State or self-governing Territory;
(f) an authority established by a law applying in a Territory that is not a self-governing Territory."

Based on the plain meaning of "action" and the qualifications given to it in ss 523-524A, the meaning that can be attributed to it in the EPBC Act is, a physical activity or series of activities not being a government decision or grant of funding.[26] This interpretation is also consistent with the reference to "*activities* that are likely to have significant impacts on the environment" in the objects clause of the Act (s 3(2)(d)).

Applying this interpretation to the facts of the *Flying Fox Case*, the physical activity or series of activities of the respondents on their farm in operating annually a series of electric grids for the purpose of killing flying foxes comes within this definition and therefore is an action for the purpose

[22] *Chu Kheng Lim v Minister for Immigration* (1992) 176 CLR 1 at 38.
[23] See in particular *Booth v Bosworth* [2001] FCA 1453 at paras 7 and 57-59.
[24] *The Macquarie Dictionary*, 3rd ed, 1997, p 20.
[25] Ibid, p 19.
[26] Similarly, see *Tasmanian Conservation Trust Inc v Minister for Resources* (1995) 55 FCR 516 at 536.

of the EPBC Act. The respondents did not contend that they would cease to operate the grids at any point in the future.

It is also important to appreciate, though this is not obvious from the judgment, that it was not the killing of flying foxes over the previous 15 years (the length of time the respondents admitted the grid had been operated for) or during the 2000 lychee season that was sought to be restrained, but the future operation of the grids and other activities (such as shooting) during each lychee season for the foreseeable future. Section 523 of the EPBC Act was important in this regard as it widened the definition of "action" to include, "an activity or series of activities". The operation of the electric grids, shooting of flying foxes and associated activities in future lychee seasons therefore constituted the action sought to be restrained. It was therefore the cumulative impact of the operation of the electric grids annually for 6-8 weeks, shooting and associated activities, for the foreseeable future that was sought to be restrained and upon which the court decided the case.[27] This has important implications for the ability of the EPBC Act to regulate cumulative impacts.

Finally, before turning from the meaning of the term "action" and its application to the facts of this case, the issue of whether a prior Commonwealth or State approval existed to exempt the respondents' action from the operation of the EPBC Act under ss 43A and 43B should be noted. Sections 43A and 43B, which replace the now repealed ss 522B and 523(2), are transitional provisions of the EPBC Act that provide a final qualification to the application of the Act to actions. The transitional provisions contained in ss 43A and 43B did not apply as the action was not specifically authorised by a law of the Commonwealth or Queensland before the commencement of the EPBC Act on 16 July 2000 nor was it an existing lawful use of land at that date.

"That has, will have or is likely to have"

The question of whether an action "has, will have or is likely to have" a significant impact involves the issue of causation, a central component of which is the standard of proof that is required. At trial it was common ground that the standard of proof required was on the balance of probabilities. Justice Branson analysed the test to be applied having regard to s 140 of the *Evidence Act* 1995 (Cth) and the decisions of the High Court in *Briginshaw v Briginshaw* (1938) 60 CLR 336 and *Neat Holdings Pty Ltd v Karajan Holdings Pty Ltd* (1992) 110 ALR 449. These establish that the strength of evidence necessary to prove a fact may vary according to the nature of what is sought to be proven and other factors (that is, proof on the balance of probabilities is "a sliding scale"). Of considerable importance to environmental law generally, her Honour's judgment is the first occasion (to the knowledge of the author) in which a court has taken account of the public interest in the subject matter of the proceedings (that is, the protection of world heritage values) as tending to lower the proof required. Her Honour stated:[28]

> "I also take into account as tending, again to a limited degree, to counteract the [gravity of the matters alleged, etc], the objects of the Act (see s 3) and the fact that the existence of the cause of action, and the wide class of persons authorised by s 475(6) to invoke the cause of action, reflect the national and international public interest in the subject matter of the proceeding, namely the protection of alleged world heritage values of a world heritage property."

In addition to this issue, a particularly important dispute developed over the test of "likely to have" with the applicant arguing, based on a large body of precedent set out below, that this meant "a real chance or possibility regardless of whether it is less or more than fifty per cent". Justice Branson hinted at this approach without deciding the issue.[29] The resolution of this issue has immense implications for the scope and application of the EPBC Act. An adoption of the "real chance or possibility" test will expand the operation of the Act immeasurably. The reasoning behind such a test will therefore be set out in full here.

The use of the terms "has or will have ... or is likely to have" in s 12(1)(a) and (b) of the EPBC Act, in a disjunctive manner and separate paragraphs strongly indicates that these terms are not synonyms and that the legislature intended each

[27] *Booth v Bosworth* [2001] FCA 1453 at paras 7 and 50.

[28] Ibid at para 72.

[29] Ibid at paras 96-98.

to have a separate meaning.[30] In particular, while both "will have" and "likely to have" refer to future conduct, they are clearly not intended to be tautological.

The plain meaning of the word "likely" is:[31]

> "likely ... 1. probably or apparently going or destined (to do, be, etc): *likely to happen*. 2. seeming like truth, fact, or certainly, or reasonably to be believed or expected; probable: *a likely storey*. 3. a. apparently suitable: *a likely spot to build on*. b. promising, as for the yielding of gold, oil, etc.: *she thought it a likely area*. 4. promising: *a fine likely boy – adverb* 5. probably."

In *Australian Telecommunications Commission v Kreig Enterprises Pty Ltd* (1976) 27 FLR 400 (Sup Ct SA) at 406-410 Bray CJ, in construing the meaning of s 139B of the *Post and Telegraph Act* 1901 (Cth), found the phrase "was likely to interfere with" should be given its ordinary and natural meaning of "probable" and that there is a more than fifty per cent chance of the thing happening.

The reasoning of Bray CJ in *Kreig* was cited in a dictum of Bowen CJ (with whom Evatt J agreed) in construing the meaning of "would have or is likely to have" used in s 45D of the *Trade Practices Act* 1974 (Cth) (TPA) in *Tillmans Butcheries Pty Ltd v Australasian Meat Industry Employees' Union* (1979) 42 FLR 331 at 339-340. However, Bowen CJ specifically did not decide the point.

However, Deane J in *Tillmans* held (at 345-348):

> "'LIKELY'
>
> The word 'likely' can, in some context, mean 'probably' in the sense in which that word is commonly used by lawyers and layment, that is to say, more likely than not or more than a fifty per cent chance ... It can also, in an appropriate context, refer to a real or not remote chance or possibility regardless of whether it is less or more than fifty per cent. When used with the latter meaning in a phrase which is descriptive of conduct, the word is equivalent to 'prone', 'with a propensity' or 'liable'.
>
> ...
>
> The conclusion which I have reached is that, in the context of s 45D(1), the preferable view is that the word 'likely' is not synonymous with 'more likely than not' and that if relevant conduct is engaged in for the purpose of causing loss or damage to the business of the relevant corporation, it will suffice, for the purposes of the subsection, if that conduct is, in the circumstances, such that there is a real change or possibility that it will, if pursued, cause such loss or damage. Whether or not such conduct is likely (in that sense) to have that effect is a question to be determined by reference to well-established standards of what could reasonably be expected to be the consequence of the relevant conduct in the circumstances."

In *Global Sportsman Pty Ltd v Mirror Newspapers Pty Ltd* (1984) 2 FCR 82 at 87 the Full Court of the Federal Court (Bowen CJ, Lockhart and Fitzgerald JJ), interpreting the meaning of "conduct which is likely to mislead or deceive" in s 52(1) of the TPA, adopted the approach of Deane J in *Tillmans*. The court held that conduct is likely to mislead or deceive if there is a "real or not remote chance or possibility regardless of whether it is less or more than fifty per cent".[32]

In *News Limited v Australian Rugby Football Limited* (1996) 64 FCR 410 at 564-565 in construing the meaning of "is or likely to be or ... would be or would be likely to be" in s 4D(1) of the TPA, the Full Court of the Federal Court (Lockhart, von Doussa and Sackville JJ) adopted the approach of Deane J in *Tillmans*. The Full Court held that the phrase "would be likely to be" conveys a lower degree of likelihood that the phrase "would be" and means a "real chance or possibility".[33]

Justice Deane's approach in *Tillmans* was also adopted by the NSW Land and Environment Court

[30] A court construing a statutory provision must strive to give meaning to every word of the provision and that no word should interpreted as superfluous, void or insignificant if a construction can be given to the word which is useful and pertinent: *The Commonwealth v Baume* (1905) 2 CLR 405 at 414 and 419; *Chu Kheng Lim v Minister for Immigration Local Government & Ethnic Affairs* (1992) 176 CLR 1 at 12-13.

[31] *The Macquarie Dictionary*, 3rd ed, 1997, p 1244.

[32] See also *Trade Practices Commission v Ansett Transport Industries (Operations) Pty Ltd* (1978) 32 FLR 305; *Radio 2UE Sydney Pty Ltd v Stereo FM Pty Ltd* (1980) 62 FLR 437 at 446; *Trade Practices Commission v TNT Management Pty Ltd* (1985) 6 FCR 1 at 48-51.

[33] Followed in *South Sydney District Rugby League Football Club Ltd v News Limited* [2001] FCA 862 per Merkel J at para 235. See also the dictum of Heerey J at para 116.

in *Randwick Municipal Council v Crawley* (1986) 60 LGRA 277 at 279-281 per Stein J. In interpreting the phrase "would be likely to" in s 37(1) of the *Strata Titles Act* 1973 (NSW), Stein J accepted that "there must be proved a real chance or possibility and certainty more than a remote or bare chance". Subsequent cases in that court dealing with environmental legislation have adopted the same approach.[34]

In *Boughey v The Queen* (1986) 161 CLR 10 (with reference to *Tillmanns* and *Kreig*) a majority of the High Court (Mason, Wilson and Deane JJ with whom Gibbs CJ agreed; Brennan J dissenting) found that the phrase "likely to cause death" in s 157(1) of the *Criminal Code* 1924 (Tas) conveys a notion of substantial, real and not remote chance, regardless of whether it is more or less than 50 per cent. The majority held that, in that context, "likely" should not be construed to mean more likely than not or to assume a specific degree of mathematical probability not conveyed as a matter of ordinary language or by the statutory context.

In *Marks v GIO Australia Holdings Ltd* (1998) 196 CLR 494 at 504-505, in relation to s 87 of the TPA, Gaudron J held:

> "the appellants' entitlement to relief under s 87 does not depend on proof of actual loss or damage. Relief may be granted under that section if a person is 'likely to suffer' loss or damage. And as a matter of ordinary language, the expression 'likely to suffer' imports only that loss or damage is a real chance or possibility, not that it is more likely than not. [See as to the meaning of "likely" in s 45D of the Act, *Tillmanns Butcheries Pty Ltd v Australasian Meat Industry Employees' Union* (1979) 27 ALR 367 at 380-382 per Deane J]."

These decisions are strong authority for adopting Deane J's approach in *Tillmans* and giving a meaning to "likely to have" in s 12 (and other sections) of the EPBC Act of "a real chance or possibility regardless of whether it is less or more than fifty per cent". While referring to *Tillmans* (at para 97), Branson J "found it not necessary to reach a concluded view on [this issue]". This would seem to indicate that her Honour had found that the evidence regarding the impact of the continued operation of the electric grid satisfied the more difficult test of "will have" (that is, that it was proven a significant impact would occur in the future on the balance of probabilities) and that the lower test of "likely to have" was not strictly necessary to consider. While her Honour's findings of fact (at para 104) support this conclusion, her Honour went on to state (at para 106) that:

> "I find the continued operation of the Grid is *likely* to have a significant impact on the world heritage values of the Wet Tropics World Heritage Area." (emphasis added)

This aspect of her Honour's judgment is confusing. While her Honour's findings of fact support the findings that the operation of the electric grid had (in 2000) and will have (in future years) a significant impact on the world heritage values of the Wet Tropics World Heritage Area, her Honour stated that she found "the continued operation of the Grid is likely" to have the relevant impact. Given the tripartite nature of the test in s 12, the conclusion that the continued operation of the electric grid "is likely" to have a significant impact on the world heritage values appears to understate the true reasoning of the Court (at para 104), namely that the operation of the electric grid has and will have a significant impact on the world heritage values of the Wet Tropic World Heritage Area.

"Significant impact"

Justice Branson stated that the "parties were in broad agreement that in the context of s 12 of the Act a 'significant impact' is, as expressed in the applicant's written submissions, an 'impact that is important, notable or of consequence having regard to its context or intensity'".[35] Her Honour subsequently adopted and applied this test.[36]

[34] *Jarasius v Forestry Commission (NSW)* (1988) 71 LGRA 79 at 94 per Hemmings J; *Bailey v Forestry Commission of New South Wales* (1989) 67 LGRA 200 at 211 per Hemmings J; *Drummoyne Municipal Council v Roads and Traffic Authority of NSW* (1989) 67 LGRA 155 at 163 per Stein J; *Oshlack v Richmond River Shire Council and Iron Gates Developments Pty Ltd* (1993) 82 LGERA 222 at 233 per Stein J. The same approach was adopted by the NSW Supreme Court in *Concord, North Sydney, Woollahra & Manly Councils v Optus Networks Pty Ltd* (1996) 90 LGERA 232 at 264 per Dunford J.

[35] *Booth v Bosworth* [2001] FCA 1453 at para 99.

[36] Ibid at paras 105-106. Note also paras 89-95 where the context of the impacts was considered.

However, her Honour did not explain the basis for this test and gave only a summary of the case law that was cited in support of it.[37] Given the importance of this issue for the application of the Act, the full basis of this test will be set out here.

"Significant impact" is not defined in the EPBC Act. Section 524B allowed the Commonwealth to make regulations prescribing the matters to be taken into account in determining whether an impact that an action has, will have or is likely to have is significant; however, the Commonwealth never did so and that section had been repealed and a new s 25A inserted by the time of trial.[38] Section 25A allows for regulations to provide that a specified action is taken to be an action to which a specified regulatory provision applies. No such regulations had been made at the time of trial.

Environment Australia, which is the Commonwealth agency administering the EPBC Act, has published *Administrative Guidelines*[39] to provide guidance in determining whether a significant impact has, will have or is likely to occur. These guidelines purport to provide criteria by which a significant impact may be determined. It was submitted that the court should disregard the *Administrative Guidelines*, principally because they were not created under any statutory power and could be no more than a statement of government policy, which is irrelevant to a court in interpreting a statute.[40] Justice Branson appeared to accept this submission although no reference was made to the *Administrative Guidelines* in her judgment.

In relation to international law, while the terms "significant reduction" and "significant adverse effect" are used in the Biodiversity Convention,[41] no definition of these terms is provided. Consequently these terms are interpreted "in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in light of its object and purpose".[42] This principle is synonymous with the plain meaning and purposive rules of statutory interpretation normally applied to municipal statutes.

It was submitted that the term "significant impact" should be given its plain meaning read in context and together with the purpose and objects of the EPBC Act and relevant international treaties. Read in the context of s 12 of the EPBC Act, the relevant definition of "significant" provided in the *Macquarie Dictionary* is "important; of consequence".[43] Similarly, the relevant definition of "significant" provided in the *Oxford English Dictionary* is "important, notable".[44] The meaning of "significant" adopted by Branson J reflected a combination of these two definitions.

There has also been considerable case law on the meaning of "significant" in other legislation, which may guide its interpretation and illustrate its application.[45] In particular, the cases concerning environmental issues demonstrate the need to have regard to the context or intensity of an impact to determine its significance, which was expressly recognised by Branson J.

The plain meaning of significant was applied in *McVeigh & Anor v Willarra Pty Ltd & Ors* (1984) 54 ALR 65 at 108 (McGregor J); (1984) 6 FCR 587 at 596 (Toohey, Wilcox and Spender JJ), which involved judicial review of a Minister's decision that a film contained "significant Australian content". In that case it was held (as obiter in the Full Court) that the ordinary meaning of "significant" was "important; notable; of consequence".

In *Jarasius v Forestry Commission (NSW)* (1988) 71 LGRA 79 (LEC (NSW)) at 93-94, Hemmings J held (as obiter) that for the purposes of s 112 of the *Environmental Planning and Assessment Act* 1979

[37] Ibid at para 99.

[38] *Environment Protection and Biodiversity Conservation Amendment (Wildlife Protection) Act* 2001 (Cth), s 85.

[39] Environment Australia, *Administrative guidelines for determining whether an action has, will have, or is likely to have a significant impact on a matter of national environmental significance under the Environmental Protection and Biodiversity Conservation Act 1999*, Environment Australia, Canberra, 2000.

[40] The curial nature of a court is fundamentally different to bodies such as the Administrative Appeals Tribunal in which government policy is a legitimate consideration: *Drake v Minister for Immigration and Ethnic Affairs* (1979) 46 FLR 409 at 419-421; (1979) 2 ALD 634 at 643.

[41] *Convention on Biological Diversity* ATS 1993 No. 32. Entry into force for Australia 29 December 1993.

[42] Article 31 (Interpretation of Treaties) *Vienna Convention on the Law of Treaties* ATS 1974 No.2.

[43] *The Macquarie Dictionary*, 3rd ed, 1997, p 1974.

[44] *The Oxford English Dictionary*, 2nd ed, 1989, Vol XV, p 458.

[45] See also BJ Preston, "The Environmental Impact Statement Threshold Test: When is an Activity Likely to Significantly Affect the Environment?" (1990) EPLJ 147.

(NSW) the phrase "likely to significantly affect the environment" should be interpreted as follows:[46]

> "The respondent submits that because 'significantly' is not defined in the EP&A Act, the meaning in the *Macquarie Dictionary* should be applied, that is, 'important', and that word means 'more than ordinary'. Without deciding it, I am prepared in this case to assume that that is the appropriate test."

In *Drummoyne Municipal Council v Roads and Traffic Authority of New South Wales* (1989) 67 LGRA 155 (LEC (NSW)), a case involving a rather adventurous claim that new traffic signs represented a significant effect to the environment, Stein J stated (at 163):

> "I am prepared to suggest that a significant effect must be an important or notable effect on the environment, as compared with an effect which is something less than that, that is, non-significant or non-notable. But I must stress that the assessment of the significance must depend upon an assessment of the facts constituting the environment and the activity and its likely effect on that environment."

In *Oshlack v Richmond River Shire Council and Iron Gates Developments Pty Ltd* (1993) 82 LGERA 222 (LEC (NSW)) at 233, Stein J confirmed the earlier decisions of the Land and Environment Court regarding the meaning of "likely" and "significantly":

> "A body of law has developed in relation to the interpretation of Pt 5 of the [*Environmental Planning and Assessment Act* 1979 (NSW)] and the meaning of 'likely' and 'significantly': *Jarasius v Forestry Commission of New South Wales* (1988) 71 LGRA 79; *Bailey v Forestry Commission of New South Wales* (1989) 67 LGRA 200; *Drummoyne Municipal Council v Maritime Services Board* (1991) 72 LGRA 186; *Bentham v Kiama Municipal Council* (1986) 59 LGRA 94; *Leichhardt Municipal Council v Maritime Services Board* (1985) 57 LGRA 169. In the context of Pt 5 'likely' has been held to mean a 'real chance or possibility' and 'significantly' to mean 'important', 'notable', 'weighty' or 'more than ordinary': *Jarasius v Forestry Commission of New South Wales*. I see no reason why these constructions should not be imported into the similarly worded provisions of ss 4A, 77(3)(d1) and 90(1)(c2)."

The reasoning of Stein J in *Drummoyne* was adopted in *Tasmanian Conservation Trust Inc v Minister for Resources & Gunns Ltd* (1995) 55 FCR 516.[47] That case involved judicial review of a decision to grant a woodchip export licence. In finding that the relevant Commonwealth Minister had failed to consider whether the proposed action "affected or was likely to affect the environment to a significant extent" and nullifying the purported decision, Sackville J held (at 541):

> "In considering whether the proposed action would have a significant effect on the environment, it is appropriate, in my view, in the words of Cripps J in *Kivi v Forestry Commission of New South Wales* (1982) 47 LGRA 38 at 47 to:
>
> > '... look to the whole undertaking of which the relevant activity forms a part to understand the cumulative and continuing effect of the activity on the environment'.
>
> However, this does not mean that the significance of a particular activity can only be assessed by reference to its impact upon the whole area in which some aspect of the activity is to take place ... site specific impacts can be significant, depending on the circumstances. ...
>
> Despite the deficiencies of the evidence, I think it sufficiently established that Gunns' proposed action ... would have had a significant effect on the environment. If the word 'significant' needs elaboration in this context, I use it in the sense of 'an important or notable effect on the environment': *Drummoyne Municipal Council v Roads and Traffic Authority of New South Wales* (1989) 67 LGRA (LEC(NSW), Stein J) at 163. In my view this is so whether one considers the proposed action as an entire undertaking or in terms of its effects on particular sites."

Similarly, in *Concord, North Sydney, Woollahra & Manly Councils v Optus Networks Pty Ltd* (1996)

[46] This test was followed in *Bailey v Forestry Commission of New South Wales* (1989) 67 LGRA 200 (LEC(NSW)) at 211-212 by Hemmings J and in *Rundle v Tweed Shire Council & Anor* (1989) 68 LGRA 308 (LEC(NSW)) at 331 by Bignold J.

[47] Cf. *Re Truswell and Minister for Communication and the Arts* (1996) 42 ALD 275 at 294-5.

90 LGERA 232 (NSW Sup Ct), in considering the construction of whether the "effect of the activity on the environment will be, or is likely to be, significant" in the context of the Telecommunications National Code and the *Telecommunications Act* 1991 (Cth), Dunford J held (at 264):

> "A number of cases were referred to relating to the meaning of the words 'likely' and 'significant' including *Byron Shire Business for the Future Inc v Byron Council* (1994) 84 LGERA 434 at 446-7; *Oshlack v Richmond River Council* (1993) 82 LGERA 222 at 233; *Jarasius v Forestry Commission (NSW)* (1990) 71 LGRA 79 at 93; *Bailey v Forestry Commission (NSW)* (1989) 67 LGRA 200 at 211; *Drummoyne Municipal Council v Roads & Traffic Authority (NSW)* (1989) 67 LGRA 155 at 163; and I accept that 'significant' means important, notable, weighty or more than ordinary, and 'likely' does not mean more probable that not, but having a real chance or possibility."

Without reference to these earlier (NSW) decisions, in considering whether a subdivision would "have a significant impact on a State controlled road" under the *Transport Infrastructure Act* 1994 (Qld) in *Pacific Exchange Corporation Pty Ltd v Gold Coast City Council* (1997) QPELR 129, Skoien SJDC held (at 135):

> "The primary meaning of the word 'significant' given by the Shorter Oxford English Dictionary is 'full of meaning or import'. The word does not make sense if read that way ... It must, in each case, bear the secondary dictionary meaning of 'important, notable'. It is frequently, perhaps most commonly, used in that sense, often, one suspects, by people ignorant of its primary meaning.
>
> So the test to be applied is whether the subdivision will have an important or notable ... impact on the Gold Coast Highway."

In *R v Lockyer* (1996) 89 ACrimR 457 at 459, in the context of determining whether evidence was of "significant probative value" within the meaning of s 97 of the *Evidence Act* 1995 (NSW), Hunt CJ at CL held:

> "There is no definition of 'significant' probative value as that phrase is used in s 97. In its context as I have outlined it, however, 'significant' probative value must mean something more than mere relevance but something less than a 'substantial' degree of relevance. ...
>
> One of the primary meanings of the adjective 'significant' is 'important' or 'of consequence'. In my opinion, that is the sense in which it is used in s 97."

In *R v Lock* (1997) 91 ACrimR 356 at 361 Hunt CJ at CL affirmed this test. The test of significance stated by Hunt CJ at CL in *Lockyer* and *Lock* has subsequently been approved on numerous occasions by the NSW Court of Criminal Appeal[48] and cited with apparent approval by Kirby J in *Gipp v R* (1998) 194 CLR 106 at 156.

In *Jacara Pty Ltd v Perpetual Trustees WA Ltd* [2000] FCA 1886 at paras 72-74, in considering s 97 of the *Evidence Act* 1995 (Cth), Sackville J (with whom Whitlam and Mansfield JJ agreed) stated:[49]

> "The tendency rule stated in s 97(1) of the *Evidence Act* departs from the common law position ... The fact that tendency evidence is relevant to a fact in issue is not enough to make it admissible. Even if relevant, it will not be admissible if the court thinks that the evidence would not have 'significant probative value'. As Lehane J pointed out in *Zaknic Pty Ltd v Svelte Corp Pty Ltd* (1995) 61 FCR 171, at 175-176:
>
> > 'What is clearly required, if [tendency] evidence is to be admissible, is that it could rationally affect the assessment of the probability of the relevant fact in issue to a significant extent; ie, more is required than mere statutory relevance.'
>
> Precisely what more is required has been expressed in different ways. In *R v Lockyer* (1996) 89 A Crim R 457 (S Ct NSW), Hunt CJ at CL said (at 459) that:
>
> "Significant" probative value must mean

[48] *R v AH* (1997) 42 NSWLR 702 at 709 per Ireland J (with whom Hunt CJ at CL and Levine J agreed); *R v Fordham* (1997) 98 ACrimR 359 at 370 per Howie AJ (with whom Hunt CJ at CL and Smart J agreed); *R v GLC* [2000] NSWCCA 90 at para 15 per Sully, Simpson JJ and Carruthers AJ; *R v Martin* [2000] NSWCCA 332 at para 67 per Ireland AJ (with whom Fitzgerald JA and Smart AJ agreed) and *R v AN* [2000] NSWCCA 372 at para 53 per Kirby J (with whom Priestley JA and James J agreed). The test in *Lockyer* was also applied in *R v Toki (No 3)* (2000) 116 ACrimR 536 (NSW Sup Ct) per Howie J.

[49] See also *Conway & Anor v The Queen* (2000) 98 FCR 204 at 233-234.

> something more than mere relevance but something less than a "substantial" degree of relevance'.

His Honour thought that this meant evidence that is 'important' or 'of consequence' in establishing the fact in issue. This approach of Hunt CJ at CL was quoted with apparent approval in *R v Martin* [2000] NSWCA, at [67]. See also *R v AH* (1997) 42 NSWLR 702 at 709, per Ireland J. Lehane J in *Zaknic*, deriving guidance from the pre-Evidence Act cases, thought that the tendency evidence would have to be 'clearly and strongly probative of the relevant fact in issue' (at 176).

I doubt that it is useful to attempt any more precise reformulation of the terms of s 97(1) of the *Evidence Act*. The statutory language provides the standard that is to be applied and judicial statements as to the construction of the legislation cannot supplant that language: *Ogden Industries Pty Ltd v Lucas* [1970] AC 113 (PC), at 127, quoted in *Brennan v Comcare* (1994) 50 FCR 555, at 572, per Gummow J."

In *Emaaas Pty Ltd v Mobil Oil Australia Ltd* (Unreported, Qld Sup Ct, 22/12/99), in the context of the interpretation of a commercial lease containing a term allowing termination where streets to the leased premises had been "significantly altered", Byrne J held "significant" to mean a major or substantial physical change. This interpretation was overturned by the Queensland Court of Appeal: *Emaaas Pty Ltd v Mobil Oil Australia Ltd* [2000] QCA 513 (Pincus, Thomas JJA and White J). Thomas JA held (at para 25):

> "The word 'significant' is not a synonym for 'substantial', although it is often used in that way. It is richer in meaning than the quantity-orientated 'substantial'. The Oxford English Dictionary Second Edition definition of the word includes the following entries:
>
> '1. Full of meaning or import; highly expressive or suggestive ...
>
> 2. Having or conveying a meaning; signifying something ...
>
> 3. Expressive or indicative of something ...'
>
> The word has been considered in a variety of legal contexts, both in statutes and other legal instrument, and while I will not attempt a review of the authorities it is useful to note that on a number of occasions the terms 'important' or 'of consequence' have been adopted as useful synonyms [See for example *Lock* (1997) 91 A Crim R 356 at 361 per Hunt CJ at CL, *Lockyer* (1996) 89 A Crim R 457 at 459 per Hunt CJ at CL, *McVeigh and Anor v Willara Pty Ltd and Ors* (1984) 57 ALR 343 at 352 per Toohey, Wilcox and Spender JJ, and *TPC v TNT Management Pty Ltd* (1985) 6 FCR at 50 per Franki J (although in that case the definition was expressed as 'at least not unimportant')]. The comments of an American court adopted by Young J in *Coomb v Bahama Palm Trading Pty Ltd* [1991] Aust Contract Reports 90-002 at 89,123 suitably illustrate the flexibility of the word:
>
> > 'While ... determination of the meaning of "significant" is a question of law, one must add immediately that to make this determination on the basis of the dictionary would be impossible. Although all words may be "chameleons, which reflect the colour of their environment", "significant" has that quality more than most. It covers a spectrum ranging from "not trivial" through "appreciable" to "important" and even "momentous".'
>
> It is a word then which takes its meaning very much from the context in which it is used."

In contrast to the above authorities, two appellate court decisions apply the term "significant" without any further definition. In *Environmental Protection Authority and Ors; Ex parte Chapple* (1995) 89 LGERA 310 the Full Court of the Supreme Court of Western Australia (Kennedy, Pidgeon, Ipp JJ) considered the meaning of "likely to have a significant effect on the environment" in the context of the *Environmental Protection Act* 1986 (WA) but used the terms without further definition. Similarly, in *Brisbane Land Pty Ltd v Pine Rivers Shire Council (No 2)* (2000) 1 Qd R 363 at 368 the Queensland Court of Appeal (McMurdo P, Pincus JA, Jones J) considered the meaning of "significant impact on the planning of a State-controlled road" in the *Transport Infrastructure Act* 1994 (Qld) but adopted the plain meaning of the term "significant" without further definition.

Similarly, the meaning of "significant Aboriginal area" has been considered extensively in the context of the *Aboriginal and Torres Strait Islander Heritage Protection Act* 1984 (Cth) but generally the definition provided in s 3 of the statute has been

adopted (that is, "of particular significance to Aboriginals in accordance with Aboriginal tradition") without further elaboration: *Tickner v Bropho* (1993) 40 FCR 165; *Tickner v Bropho* (1993) 40 FCR 183; *Tickner & Ors v Chapman & Ors* (1995) 57 FCR 451; *Minister for Aboriginal & Torres State Affairs v Minister for Lands (WA) & Ors* (1996) 67 FLR 40; *Kartinyeri v Commonwealth of Australia* (1998) 195 CLR 337.

In addition, although not referred to by Branson J, the interpretation of the term "significant impact" as meaning an impact that is important, notable or of consequence having regard to its context or intensity is supported by extrinsic material. In 1991 the Australian and New Zealand Environment and Conservation Council (ANZECC) provided a definition of "environmental significance" in a report to the Prime Minister and First Ministers, entitled, *A National Approach to Environmental Impact Assessment in Australia*.[50] The ANZECC comprises the Environment Ministers of the Commonwealth, the States and the Territories of Australia and New Zealand and it is suggested that this document may be referred to as an extrinsic aid in interpreting the meaning of "significant impact" in the EPBC Act.[51] It provides:[52]

> "Environmental Significance
>
> The [Environmental Impact Assessment (EIA)] process is normally initiated if a proposal appears likely to have a significant effect on the environment. The concept of environmental significance is applied at a number of points in the process including referral proposals, level of assessment applied and evaluation of potential impacts.
>
> In the EIA context, the concept of environmental significance is a judgement on the degree of importance and consequence of anticipated change imposed on the environment by a proposal.
>
> This judgement is based upon the following factors:
>
> - character of the receiving environment and the use and value which society has assigned to it
> - magnitude, spatial extent and duration of anticipated change
> - resilience of the environment to cope with change
> - confidence of the prediction of change
> - existence of policies, programmes, plans and procedures against which the need for applying the EIA process to a proposal can be determined
> - existence of environmental standards against which a proposal can be assessed
> - degree of controversy on environmental issues likely to be associated with a proposal."

The test contemplated in the ANZECC report of significance being the degree of importance and consequence having regard to a number of factors concerning the context or intensity of the impact, is consistent with the plain meaning of "significant impact" and case law. In this sense, the extrinsic material confirms the plain meaning.[53]

Finally, it is necessary to consider whether the suggested test for significant impact is consistent with the objects of the EPBC Act, the Biodiversity Convention and the World Heritage Convention and the Commonwealth's constitutional power. It is suggested that the test adopted by Branson J does so. While the broadest possible interpretation of "significant impact" such as "any impact, however small" might be said to promote the objects of the EPBC Act, Biodiversity Convention and World Heritage Convention to an even greater degree by giving the EPBC Act a wider ambit of operation, such an interpretation would both strain the plain meaning of the words and lead to the Act being applied in increasingly tenuous situations.[54] Allowing even the most tenuous link to trigger the EPBC Act would possibly produce a result that was both unworkable and unconstitutional having regard to the federal context within which the EPBC Act operates and the nexus with Australia's international

[50] ANZECC, *A National Approach to Environmental Impact Assessment in Australia*, ANZECC Secretariat, Canberra, October 1991.

[51] Section 15AB *Acts Interpretation Act* 1901 (Cth).

[52] ANZECC, op cit n 49 at p 2.

[53] Section 15AB(1)(a) *Acts Interpretation Act* 1901 (Cth).

[54] Note that the *Explanatory Memorandum to the EPBC Bill 1999 (Cth)* provides (at p 23) in relation to s 12 that, "not all actions impacting on a world heritage property will have, or are likely to have, a *significant impact* on the *world heritage values* of that property. This clause therefore does not regulate all actions affecting a world heritage property." (Emphasis in original text).

legal obligations required for the validity of Commonwealth laws enacted pursuant to s 51(xxix) of the Constitution.[55] Equally, a more narrow definition than its plain meaning allows (if any is available) would tend to defeat the purposes of the EPBC Act, Biodiversity Convention and World Heritage Convention.

In summary, the test proposed by Branson J for significant impact of "an impact that is important, notable or of consequence having regard to its context or intensity" is consistent with its plain meaning, case law, extrinsic material and the objects of the EPBC Act, Biodiversity Convention and World Heritage Convention. It also satisfies the Constitutional constraints of Commonwealth legislative power. Consequently, it is suggested that the Federal Court will follow this test when considering the EPBC Act in the future and that therefore, the test is authoritative.

"The world heritage values"

Section 12(3) and (4) of the EPBC Act states that the "world heritage values of the property are the natural heritage and cultural heritage contained in the property" and that "natural heritage has the same meaning given by the World Heritage Convention".

In relation to natural heritage, Art 2 of the World Heritage Convention provides:

> "For the purpose of this Convention, the following shall be considered as 'natural heritage':
>
> natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;
>
> geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation;
>
> natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty."

A World Heritage Committee is established under Article 8 of the Convention and Article 11 provides:

> "1. Every State Party to this Convention shall, in so far as possible, submit to the World Heritage Committee an inventory of property forming part of the cultural and natural heritage, situated in its territory and suitable for inclusion in the list provided for in paragraph 2 of this Article. This inventory, which shall not be considered exhaustive, shall include documentation about the location of the property in question and its significance.
>
> 2. On the basis of the inventories submitted by States in accordance with paragraph 1, the Committee shall establish, keep up to date and publish, under the title of "World Heritage List", a list of properties forming part of the cultural heritage and natural heritage, as defined in Articles 1 and 2 of this Convention, which it considers as having outstanding universal values in terms of such criteria as it shall have established. An updated list shall be distributed at least every two years. ...
>
> 5. The Committee shall define the criteria on the basis of which a property belonging to the cultural or natural heritage may be included in either of the lists mentioned in paragraphs 2 and 4 of this article."

In accordance with Art 11(5), the World Heritage Committee has defined the criteria for natural and cultural heritage to be considered of outstanding universal value and published criteria in the *Operational Guidelines for the Implementation of the World Heritage Convention* (the *Operational Guidelines*), which are reviewed periodically by the Committee. Together with associated conditions of integrity, the current edition of the *Operational Guidelines* list four criteria for determining outstanding universal value of natural heritage (Nb. The Wet Tropics World Heritage Area is listed for all four criteria):[56]

[55] Note s 15A (Construction of Acts to be subject to Constitution) *Acts Interpretation Act* 1901 (Cth). See generally: *R v Burgess; Ex parte Henry* (1936) 55 CLR 608; *Koowarta v Bjelke*-Peterson (1982) 153 CLR 168; *Commonwealth v Tasmania* (1983) 158 CLR 1; *Richardson v Forestry Commission* (1988) 164 CLR 261; *Queensland v Commonwealth* (1989) 167 CLR 232; *Victoria v Commonwealth* (1996) 187 CLR 416 at 487-488.

[56] UNESCO, *Operational Guidelines for the Implementation of the World Heritage Convention*, UNESCO World Heritage Centre, Paris, March 1999, p 10. Nb. Provided as annexure "C" to *Booth v Bosworth* [2001] FCA 1453.

1. Be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of land forms, or significant geomorphic or physiographic features; or
2. Be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals; or
3. Contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance; or
4. Contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

To determine whether the Spectacled Flying Fox was part of, or contributed to, the world heritage values of the Wet Tropics World Heritage Area the applicant submitted that the Court should look to the nomination document prepared by the Australian Government,[57] the IUCN report presented to the World Heritage Committee[58] and the *Operational Guidelines* together with any relevant expert evidence. The applicant submitted that authority for the court making reference to the nomination and listing documents is found in *Queensland v The Commonwealth* (1989) 167 CLR 232 (the *Wet Tropics Case*) at 240-1, where the joint judgment of Mason CJ, Brennan, Deane, Toohey, Gaudron, McHugh JJ stated:[59]

"In one sense, the status of a particular property as one of outstanding universal value forming part of the cultural heritage or natural heritage is an objective fact, ascertainable by reference to its qualities; but, as evaluation involves matters of judgment and degree, an evaluation of the property made by competent authorities under the Convention is the best evidence of its status available to the international community. The competent authorities to make an evaluation for the purposes of the Convention are, in the first place, the State Party on whose territory a property is situated and, if the State Party submits a property in an inventory under Art 11 par 1, the Committee under Art 11, par 2. ...

Although the status of a property as part of the cultural heritage or natural heritage follows from its qualities rather than from their evaluation either by the relevant State Party or by the World Heritage Committee (as Gaudron J recognized in *Richardson v Forestry Commission*),[60] a State Party which evaluates a property as part of the cultural heritage or natural heritage and submits it to the Committee for listing thereby furnishes the international community with evidence of that status ...

From the viewpoint of the international community, the submission by a State Party of a property for inclusion in the World Heritage List and inclusion of the property in the List by the Committee are the means by which the status of a property is ascertained and the duties attaching to that status are established. The State Party's submission of a property is some evidence of its status but the Committee's listing of a property is conclusive."

Justice Branson did not acknowledge this authority but proceeded upon this basis in her judgment.[61] Her Honour accepted that the *Operational Guidelines* were relevant to determining world heritage values based on an interpretation of the World Heritage Convention and Art 31 of the *Vienna Convention on the Law of Treaties* as a subsequent agreement and practice adopted by the parties regarding the interpretation of the Convention.[62] Having regard to the criteria of

[57] Commonwealth of Australia, *Nomination of Wet Tropical Rainforests of North-East Australia by the Government of Australia for inclusion in the World Heritage List*, Department of the Arts, Sport, the Environment, Tourism and Territories, Canberra, December 1987.

[58] International Union for the Conservation of Nature, *Documentation on World Heritage Properties (Natural) – Wet Tropical Rainforests* (486) *Australia*, IUCN, Gland, Oct 1988.

[59] Discussed in *Australian Heritage Commission v Mount Isa Mines Ltd* (1995) 60 FCR 456 at 478-481 by Beaumont and Beazley JJ (Black CJ dissenting). While this decision was reversed in *Australian Heritage Commission v Mount Isa Mines Ltd* (1997) 187 CLR 297, the correctness of the *Wet Tropics Case* was not questioned.

[60] (1988) 164 CLR 261 at 341.

[61] *Booth v Bosworth* [2001] FCA 1453, paras 54-68.

[62] In addition, although not relied upon by Branson J, it is

outstanding universal value for which the Wet Tropics World Heritage Area was included in the World Heritage List and the nomination document and IUCN report as evidence of the natural heritage of the area fulfilling those criteria, her Honour made the following findings of fact:[63]

> "I am consequently satisfied that the Spectacled Flying Fox contributes to the world heritage values of the Wet Tropics World Heritage Area as part of the record of the mixing of the faunas of the two continental plates.
>
> I am further satisfied that the Spectacled Flying Fox contributes to the world heritage values of the Wet Tropics World Heritage Area on the following bases. First, I am satisfied that the Spectacled Flying Fox contributes to the genetic diversity and biological diversity of the Wet Tropics World Heritage Area. For this reason I am satisfied that the species contributes to the character of the Wet Tropics World Heritage Area as a '*superlative natural phenomena*' by reason of its being '*one of the most significant regional ecosystems in the world*'. Secondly, for the same reason, I am satisfied that the species constitutes part of the biological diversity for which the Wet Tropics World Heritage Area is a most important and significant natural habitat for *in-situ* conservation."

Her Honour held that the loss of a single species could constitute a significant impact on the world heritage values of a World Heritage property:[64]

> "Having regard to the objects of the Act, which include the conservation of biodiversity, and the terms of the World Heritage Convention, which include a recital which emphasises the international recognition of the significance of the 'deterioration' of natural heritage ... in my view, a dramatic decline in the population of a species, so as to render the species endangered, where that species forms a part (other than an inconsequential part) of the record of the Earth's evolutionary history or of the biological diversity of a most important and significant habitat for in-situ conservation of biological diversity is to be understood as having an impact that is important, notable or of consequence. I reject the submission of the respondents that before this conclusion can properly be reached it would have to be established that the Spectacled Flying Fox is itself, when compared with other species, a species of outstanding universal value."

Although not evident in the judgment, the approach of Branson J to determining whether the Spectacled Flying Fox was part of, or contributed to, the world heritage values of the Wet Tropics World Heritage Area substantially mirrored the evidence of Mr Peter Valentine, a world heritage expert called by the applicant. Mr Valentine's evidence, which was essentially unchallenged, set out the nomination document, IUCN report and *Operational Guidelines*, before making substantially the same findings as Branson J arrived at (although Mr Valentine referred to the role of flying foxes in pollination and seed dispersal). Given the complexity of the case and the similarity to Mr Valentine's evidence, it can only be concluded that Branson J based her approach and findings on Mr Valentine's evidence. It goes almost without saying that the issue of what constitutes world heritage values is clearly one upon which expert evidence is admissible.[65] In *Richardson v Forestry Commission* (1988) 164 CLR 261, Mason CJ, Brennan and Gaudron JJ cited expert evidence to determine (at least provisionally) the content of world heritage values of the property in dispute in that case.[66]

Consequently, while it is not apparent on the face of the judgment, determination of the world heritage values of a declared World Heritage property for the purposes of the EPBC Act would appear to be based on two issues (the first of which is a question of law, the second of which is a question of fact):[67]

suggested that reference to the *Operational Guidelines* is permitted as evidence of an established technical meaning of the term "outstanding universal significance" and consequently of "world heritage values": *David and Jones v State of Western Australia* (1905) 2 CLR 29 at 42-3, 46 and 51; *Herbert Adams Pty Ltd v Federal Commissioner for Taxation* (1932) 47 CLR 222 at 227; *Marine Power Australia Pty Ltd & Anor v Comptroller-General of Customs & Ors* (1989) 89 ALR 561 (FCA) at 572.

[63] *Booth v Bosworth* [2001] FCA 1453 at para 68.

[64] Ibid at para 105.

[65] *Clark v Ryan* (1960) 103 CLR 486 at 489-492; *Weal v Bottom* (1966) 40 ALJR 436 at 438-9.

[66] *Richardson v Forestry Commission* (1988) 164 CLR 261 at 263-4, 272-3, 294-295 and 346-7.

[67] The first addresses the meaning of the term "world heritage values" (a question of law) while the second deals with its content (a question of fact).

1. The legal meaning of world heritage values based upon the definition of "world heritage values" contained in the EPBC Act, the definition of "natural heritage" and "cultural heritage" contained in the World Heritage Convention and the criteria for determining "outstanding universal value" and the associated conditions of integrity stated in the relevant edition[68] of the *Operational Guidelines.*
2. Evidence of the content of world heritage values provided by:
   (a) the nomination document prepared by the Australian Government for inclusion of the property in the World Heritage List;
   (b) the IUCN report presented to the World Heritage Committee for inclusion of the property in the World Heritage List;
   (c) the criteria for determining "outstanding universal value" and the associated conditions of integrity provided in the *Operational Guidelines* for which the property was in fact included in the World Heritage List;
   (d) any management plan or scientific report describing the world heritage values of the property that has been adopted by the Australian Government or the World Heritage Committee; and
   (e) expert evidence of the world heritage values of the property based upon the nomination document, IUCN report, the *Operational Guidelines* and any relevant management plan or scientific report.

Apparently (though not expressly) based on this approach, Branson J found that the Spectacled Flying Fox constituted part of the world heritage values of the Wet Tropics World Heritage Area and concluded that the proposed operation of the electric grids by the respondents constituted a contravention of s 12 of the EPBC Act.

Discretion to grant an injunction under s 475

It was submitted that the statutory power to grant a prohibitory injunction under s 475(2) and make a consequential order under s 475(3) of the EPBC was at the court's discretion in all of the relevant facts and circumstances of the case.[69] The following were suggested as the principal factors that the court should take into account in determining whether or not to grant the injunction and make the order applied for:

- the general principles of injunctive relief;
- the respondents' breach of s 12 of the EPBC Act;
- the scope and purpose of the EPBC Act;
- the public interest;
- the inadequacy of damages;
- the availability of non-lethal alternatives to protect the respondents' crop;
- the economic impacts of the grant of the injunction on the respondents; and
- whether the form of the injunction is appropriate.

In relation to the economic impact of the grant of the injunction, a net contractor was subpoenaed by the applicant who provided a quote that the contractor had given to the respondents for erecting full exclusion netting over the respondents' lychee orchard. Although the quote was for a smaller area, the cost of netting the respondents' 60 hectare lychee farm was approximately $1m. While this is a considerable sum of money, balanced against this were the facts that the nets would totally exclude flying foxes and birds, would last for at least 10 years, could be insured against cyclones, could be leased to off-set the capital expenditure and that the respondents (had claimed that they) currently suffer annual losses in excess of $200,000 from flying fox and bird damage. These losses were (claimed to be) suffered even with the operation of the electric grids. They would be avoided by the erection of full

[68] Two editions of the *Operational Guidelines* were tendered at trial: December 1988 and March 1999. Justice Branson erroneously cited these as "December 1988" and "December 1998" respectively. Having regard to paragraphs 56 (lines 7-8), 59, 62 and 64 and annexures B and C of her judgment, the relevant criteria for determining the world heritage values for the purposes of the trial were those provided in the March 1999 edition (i.e. the current edition at the time of trial). This approach is consistent with Art 11 of the World Heritage Convention and, therefore, s 12(4) of the EPBC Act.

[69] *ICI Australia Operations Pty Ltd v Trade Practices Commission* (1992) 38 FCR 248; *Australian Competition and Consumer Commission v Z-Tek Computer Pty Ltd* (1997) 148 ALR 339 (FCA).

exclusion netting. It would therefore appear that netting of the orchard would pay for itself in approximately 5 years and from that point would increase the profitability of the farm. While this evidence suggests that, on purely economic terms, it seems a sound decision for the respondents to cease the operation of their electric grids and to net their orchard, Branson J found that is was not economically feasible for the respondents to proceed immediately to protect the whole of their lychee orchard with netting.[70] However, in weighing this factor in the discretion of the court to grant the injunction, Branson J stated:[71]

> "In weighing the factors which support the exercise of the court's discretion in favour of the grant of the an injunction under subs 475(2) of the Act against those factors which tell against the grant of such an injunction, it seems to me that it would be a rare case in which a court could be satisfied that the financial interests of private individuals, or even the interests of a local community, should prevail over interests recognised by the international community and the Parliament of Australia as being of international importance."

One final important evidentiary aspect of the case was that the respondents, who it would be expected were in the best position to know how many flying foxes were killed on their property annually, chose not to give evidence at the trial. The court took a very dim view of this failure to give evidence.[72] Applying the principle in *Jones v Dunkel* (1959) 101 CLR 298, the court drew an inference that their evidence would not have assisted their case. This contributed to the critical finding of fact that the large numbers of Spectacled Flying Foxes alleged by the applicant to have been killed by the operation of the electric grids were correct and reflected the number in fact killed by the respondents annually.

Application for approval under the EPBC Act

Justice Branson granted the injunction sought subject to the qualification that the injunction was limited to killing Spectacled Flying Foxes by electrocution, rather than flying foxes generally, and that the injunction would end if the respondents obtained an approval from the Commonwealth Environment Minister under the EPBC Act. In response, on 22 October 2001, the first respondent applied under s 68 of the EPBC Act for approval of the operation of the electric grid.[73] Given the evidence amassed by the applicant in this case and the consequential findings of fact made by Branson J, in particular the high rate of killing and the relatively small population of Spectacled Flying Foxes remaining, it seems almost impossible for the Commonwealth Environment Minister to approve the operation of the electric grid under the EPBC Act.[74] The applicant will also need to tread extremely carefully to avoid providing false or misleading information and therefore creating a liability for prosecution under s 489 of the Act. Given the apparent certainty that the application must be refused, the referral would appear to be linked to a wider political agenda.

Conclusion

There were three key evidentiary features of the *Flying Fox Case*:

1. the scale and repetition of the respondents' action;
2. the vulnerability of the Spectacled Flying Foxes to decline; and
3. the importance of this species as a world heritage value itself and for the ecological and evolutionary processes of the Wet Tropics World Heritage Area.[75]

Viewed with hindsight, it seems that the respondents and their legal advisors based their litigation strategy on the assumption that the applicant (who had few financial resources to devote to the litigation) would fail to gather the necessary evidentiary basis and legal support to succeed in the trial. This assumption mistook the importance that the applicant, her lawyers and the experts who

[70] *Booth v Bosworth* [2001] FCA 1453, para 110.
[71] Ibid, para 115.
[72] Ibid, paras 30-42.

[73] See Environment Australia's website at <http://www.ea.gov.au/cgi-bin/epbc/epbc_ap.pl>
[74] Note s 137 of the EPBC Act and Schedule 5 of the *Environment Protection and Biodiversity Conservation Regulations* 2000 (Cth) in particular.
[75] Note that Branson J (at para 101) found that the evidence presented at trial was insufficient to support the second limb of this issue.

agreed to give evidence attached to the case and the time and effort that these people would devote to succeeding in the trial. A major tactical windfall was also gained by the applicant when, in the weeks leading up to trial, her solicitor, Ms Elisa Nichols, discovered that a orchard netting expert had provided a quote to the respondents to net their orchard. Up to that point the respondents were proceeding to trial backed by expert reports that assumed it was impossible to net the orchard. The applicant then subpoenaed the netting expert, which had the effect that the respondents were unable to call or rely upon their economic evidence because it was shown to be based on a false assumption. Ultimately, the applicant commenced the trial with an extremely strong evidentiary basis provided by a number of Australia's leading experts in their respective fields. The strength of evidence presented by the applicant ultimately won the trial.

In addition to the strength of evidence upon which the case was decided, the case has addressed many of the key legal issues of the EPBC Act, including the central test of "significant impact", the meaning of "likely to have" and the meaning of the "world heritage values of a declared World Heritage property". The width of the test for "likely to have", in particular, has immense implications for the application of the Act. One other major point (not directly evident in the decision) is that the Commonwealth's *Administrative Guidelines on Significance* are incorrect and should not be applied.

While some criticism of the court's reasoning has been made in the above analysis, this criticism is relatively superficial. Justice Branson should rightly be congratulated for addressing such a range of complex factual and legal issues with both intelligence and practical commonsense. The suggested mistakes and omissions in her Honour's judgment are relatively minor and the judgment gives a far clearer understanding of the operation of the EPBC Act than previously existed. Given this it can be said that further judicial analysis is needed to confirm precisely what tests should be applied for the EPBC Act; however, Branson J's reasoning is, for now, authoritative and workable.

In addition to the factual and legal issues of the case, at a wider political and administrative level the case illustrates some disturbing aspects of the protection of World Heritage and biodiversity by Queensland and Commonwealth environmental regulators. Notwithstanding the acquiescence of the QPWS and initial hesitation of Environment Australia, the applicant had hoped that it would only be necessary to make the interim injunction application and that government regulators would then take over the case. However, this did not occur, apparently because neither the Queensland nor Commonwealth governments wanted to risk the political ramifications of regulating agricultural activities. The respondents gained support from various agricultural lobby groups and refused to discontinue their use of electric grids against flying foxes. The applicant was therefore forced to continue the action on to full trial, thereby accepting a risk of considerable legal costs being awarded against her should she fail. This is a shameful reflection of the role of politics and the general immunity of agricultural activities to environmental regulation.

However, despite its earlier actions, apparently over many years, in acquiescing to the practice of mass culling of flying foxes by fruit growers, the Honourable Dean Wells MLA, Queensland Minister for Environment and Heritage, has recently announced that QPWS will no longer issue damage mitigation permits under the *Nature Conservation Regulation* 1994 (Qld) for the operation of electric grids, effectively outlawing their operation.[76] Provided this public stance is backed by on-the-ground enforcement, the operation of these electric grids appears destined to cease.

In addition to stopping the operation of the electric grids and refusal of the pending application for approval under the EPBC Act, a further issue that must now be confronted is the need for listing of the Spectacled Flying Fox as a threatened species. The Commonwealth government is currently considering the listing of the Spectacled Flying Fox species under the EPBC Act.[77] The scientific evidence presented at trial of a 90 per cent decline in population numbers in 10 years supports a listing of the species as Critically Endangered under the IUCN criteria.[78] The known impacts of habitat

[76] D Wells, *Queensland Parliamentary Hansard*, 8 August 2001, pp 2331-2333.

[77] Ibid, p 2331.

[78] Australasian Bat Society, *Spectacled Flying Fox (P. conspicillatus) case for listing as Critically Endangered under IUCN criterion A*, unpublished paper, April 2000.

clearing and operation of electric grids in addition to other sources of mortality support:[79]

- the listing of the species as vulnerable under s 184 of the EPBC Act;[80]
- the listing of the species as vulnerable wildlife under s 78 of the *Nature Conservation Act* 1992 (Qld); and
- the listing of the operation of electric grids as a key threatening process under s 184 of the EPBC Act.[81]

Unfortunately, it is not purely science and sound environmental management practice that determines listing of threatened species and key threatening processes, whatever criteria are stated in Australian legislation.[82] Politics and the implications of listing of a fruit eating bat as a threatened species for the agricultural-sector play a prominent role in listing of threatened species and of key threatening processes. Despite the scientific evidence, the listing of the Spectacled Flying Fox as threatened remains in doubt.

While the future of the Spectacled Flying Fox remains in doubt, the Flying Fox Case marks a watershed for Australian environmental law, particularly for Queensland. It is clear that the operation of the new EPBC Act presents a new range of legal challenges and opportunities for public interest litigation and environmental management in Australia. The role of politics in these processes is patent and seemingly entrenched in the bureaucracies of both Queensland and Commonwealth environmental regulators. The true challenge for the future is to place sound policy and environmental management principles above the entrenched inertia against them. It is these factors upon which the real protection of World Heritage properties and maintenance of biodiversity in Australia depend.

Editors note:

In a further judgment delivered on 6 December 2001, *Booth v Bosworth* [2001] FCA 1718, Branson J awarded costs to the applicant and set out the final form in which the injunction was granted.

[79] The facts of this case also indicate the need for the EPBC Act to be amended to allow for interim/emergency listing of threatened species, pending full listing, based on an immediate threat or on the strength of a nomination.

[80] Having regard to ss 179 and 186 of the EPBC Act and r 7.01 of the *Environment Protection and Biodiversity Conservation Regulations* 2000 (Cth).

[81] Having regard to s 188(4)(a) of the EPBC Act.

[82] See, for instance, s 186(2) EPBC Act.