

# Environmental Defenders Office of Northern Queensland Inc.

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28 August 2009

Species Information Section  
Department of the Environment, Water,  
Heritage and the Arts  
GPO Box 787  
CANBERRA ACT 2601  
**By email:** [speciespolicy@environment.gov.au](mailto:speciespolicy@environment.gov.au)

Dear Sir/Madam

**EPBC ACT POLICY STATEMENT 3.15 (draft)  
SIGNIFICANT IMPACT GUIDELINES FOR THE ENDANGERED SOUTHERN CASSOWARY  
(CASUARIUS CASUARIUS JOHNSONII) WET TROPICS POPULATION**

The Environmental Defenders Office of Northern Queensland Inc. (“EDO-NQ”) is an independent not-for-profit community legal centre which specialises in public interest environmental law.

The EDO-NQ is one of nine independent EDOs throughout Australia, together forming the Australian Network of Environmental Defenders Offices (“ANEDO”). Both EDO-NQ and ANEDO regularly lodge submissions on law reform and legal policy review initiatives at all levels of government. You can learn more about EDO-NQ at [www.edo.org.au/edong](http://www.edo.org.au/edong) and ANEDO at [www.edo.org.au](http://www.edo.org.au)

The endangered southern cassowary (*casuarius casuarius johnsonii*) (“Southern Cassowary”) is well recognised as a keystone species in tropical rainforests in Australia, and indeed vitally important to the continued biodiversity, health and ecological function of those rainforests. We congratulate the Commonwealth for finally developing Significant Impact Guidelines specifically in relation to the Southern Cassowary.

We are thankful for and welcome the opportunity to lodge submissions and provide feedback on *EPBC Act Policy Statement 3.15 (draft) Significant Impact Guidelines for the Endangered Southern Cassowary (Casuarius casuarius johnsonii) Wet Tropics*

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*Population* (which we will refer to as the “Guidelines” throughout these submissions, for convenience and ease of reference).

Of course, if you would like to discuss any aspect of these submissions, please do not hesitate to contact me on the contact details provided.

Yours faithfully  
**EDONQ**

A handwritten signature in blue ink, consisting of several overlapping loops and a long horizontal stroke extending to the left.

**Adam Millar**  
**Principal Solicitor & Coordinator**  
*Encl.*

## SUBMISSION ON

### ***EPBC ACT POLICY STATEMENT 3.15 (draft)*** ***NATIONALLY THREATENED SPECIES AND ECOLOGICAL COMMUNITIES*** ***SIGNIFICANT IMPACT GUIDELINES FOR THE ENDANGERED SOUTHERN*** ***CASSOWARY (CASUARIUS CASUARIUS JOHNSONII) WET TROPICS*** ***POPULATION***

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## 1. Introduction

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The endangered southern cassowary (*casuarius casuarius johnsonii*) (“Southern Cassowary”) is well recognised as a keystone species in tropical rainforests in Australia, and indeed vitally important to the continued biodiversity, health and ecological function of those rainforests.

We congratulate the Commonwealth for developing a set of Significant Impact Guidelines for the Southern Cassowary to assist in the assessment of proposed actions under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (“EPBC Act”) which may have significant impacts upon the endangered Southern Cassowary.

Whilst EDO-NQ generally supports the positive step that the Guidelines are in efforts to protect and conserve both the endangered Southern Cassowary and its habitat (and therefore its ecological function), we do have some observations and recommendations which we submit will, if adopted, make the Guidelines and even more robust and effective tool in that regard.

It is vitally important that all appropriate steps be taken to ensure as best as possible that the endangered Southern Cassowary, its habitat and ecological function is protected, conserved and maintained. This is so not only because of intrinsic values, but also because so much of the tourism economy in Northern Queensland depends on the health and well-being of the Wet Tropics World Heritage Area of North Queensland, which itself depends on the health and well-being of the endangered Southern Cassowary.

We trust that you will receive these submissions and our recommendations in the spirit in which they are provided, and give them due consideration when finalising the Guidelines.

References in these submissions to page numbers in the Guidelines are references to page numbers in the Word version of the Guidelines which was available for download from the website for the Department of the Environment, Water, Heritage and the Arts (“DEWHA”)<sup>1</sup>.

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<sup>1</sup> <http://www.environment.gov.au/epbc/publications/casuarius-casuarius-johnsonii.html>

## 2. Key recommendations

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1. *The Guidelines should be amended so that the Southern Cassowary (Causarius casuarius johnsonii) is referred to by the term “Southern Cassowary” throughout the Guidelines, instead of the term “cassowary”.*
2. *The Guidelines should be amended so that the relevant Minister from whom approval is required under the EPBC Act is referred to (initially at least) as the “Commonwealth Minister for the Environment” rather than the current reference of “Minister for the Environment, Heritage and the Arts”.*
3. *The following considerations must be given elevated importance in the Guidelines, given that it is widely recognised and accepted that the Southern Cassowary is a keystone species in tropical rainforests in Australia, and indeed vitally important to the continued biodiversity, health and ecological function of those rainforests:*
  - a. *the sensitivity, value and quality of the environment which is impacted upon by the relevant proposed action(s); and*
  - b. *the intensity, duration, magnitude and geographic extent of the impact.*
4. *The Guidelines should be amended so as to insert a statement to the following effect:*
  - a. *without approval it is an offence under the EPBC Act to take any action which has, will have or is likely to have a significant impact on a matter of NES; and*
  - b. *matters of NES which are protected by the EPBC Act include the following:*
    - i. *World Heritage Areas;*
    - ii. *National Heritage places;*
    - iii. *International recognised (i.e. Ramsar) wetlands;*
    - iv. *Listed threatened species and communities;*
    - v. *Listed migratory species;*
    - vi. *Commonwealth marine areas (e.g. the Great Barrier Reef Marine Park);*
  - c. *details of listed threatened species and communities and listed migratory species are available from the DEWHA website.*

5. *The Guidelines should be amended so that the following sentence in section 3 (“What other laws protect cassowaries?”) reads as follows:*

*“If your activity could affect the species or individual animals, in addition to contacting the Commonwealth, you should contact the relevant state and local authorities regarding your obligations in that jurisdiction.*

[our underlining]

6. *The Guidelines should be amended so that the following statement which appears in section four (“The cassowary in Australia”) is repeated and re-iterated as often as possible:*

*“The Southern Cassowary is a keystone species in tropical rainforest (i.e. one whose conservation is crucial to other species within an ecosystem). It is a key species in the dispersion of many rainforest plant seeds, and the only long distance disperser of some species with large fleshy fruits”.*

7. *The Commonwealth Minister for the Environment and DEWHA should be given more resources so as to enable them to exercise more control over the manner in which surveys of Southern Cassowary are conducted to better ensure that surveys are conducted in a manner which would maximise the chances of detecting the species.*

8. *Regulations should be brought into operation which prescribe the minimum qualifications which a person must have in order to be a “suitably qualified person” to conduct those surveys, and that such regulations be developed in consultation with recognised experts in the field.*

9. *Amendments are urgently required to the EPBC Act to ensure that when approval for each proposed action is being considered under the EPBC Act that cumulative impacts of no-site, off-site, direct and indirect impacts are considered in relation to each proposed act.*

10. *The following statement be removed from section 7 (“What type of actions are likely to have a significant impact on the cassowary?”) in the paragraph immediately above Table 2 (“Significant impact thresholds for the cassowary”):*

*Actions are less likely to be significant in habitat patches which are very small, highly isolated, and greatly fragmented.*

11. *The first dot-point in column one of row one (“Clearing”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to read as follows:*
- Clearing habitat
12. *The second dot-point in column one of row one (“Clearing”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to read as follows:*
- Forestry operations (including selective logging) that:
    - remove cassowary food trees.
13. *The second dot-point in column two of row one (“Clearing”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to read as follows:*
- Clearing which decreases availability, quality and access by cassowaries to water across seasons.
14. *Column three of row one (“Clearing”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to include the following significant impact threshold:*
- Clearing of any part of a movement corridor which adversely impacts on the movement of Southern Cassowaries.
15. *Column one of row two (“Habitat degradation”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to read as follows:*
- Actions that will result in habitat degradation which is anything more than minor e.g.:
    - Exotic plant invasion – (weeds)
    - Exotic animal invasion – (pigs and dogs)
    - Vehicle use – (off-road vehicles and motorbikes)
16. *Column two of row two (“Habitat degradation”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to read as follows:*
- Decrease in availability, quality and access to water across seasons.

17. *Column three of row two (“Habitat degradation”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to include the following significant impact threshold:*
- Any action which causes habitat degradation in any part of a movement corridor which adversely impacts on the movement of Southern Cassowaries.
18. *Column one of row three (“Fragmentation and isolation of habitat and populations”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to read as follows:*
- Any action that reduces or prevents movement and connectivity in any more than a minor manner e.g.:
    - Road development.
    - Fencing^.
    - Drainage channels.
    - Powerlines and service infrastructure.
    - Subdivision of land.
19. *Column two of row three (“Fragmentation and isolation of habitat and populations”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to read as follows:*
- Any action that reduces or prevents movement and connectivity in any more than a minor manner of cassowaries along waterways.
20. *This part of the Guidelines should be amended so as to insert a statement to the following effect:*
- a. *without approval it is an offence under the EPBC Act to take any action which has, will have or is likely to have a significant impact on a matter of NES; and*
  - b. *matters of NES which are protected by the EPBC Act include the following:*
    - i. *World Heritage Areas;*
    - ii. *National Heritage places;*
    - iii. *International recognised (i.e Ramsar) wetlands;*
    - iv. *Listed threatened species and communities;*
    - v. *Listed migratory species;*
    - vi. *Commonwealth marine areas (e.g. the Great Barrier Reef Marine Park);*
  - c. *details of listed threatened species and communities and listed migratory species are available from the DEWHA website.*

21. *The measures in the first row (“Avoiding impacts”) of Table 3 (“Suggested mitigation measures for the cassowary”) which deal with dogs and cats should be amended to read as follows:*

- Exclude dogs and cats from cassowary habitat.
- Implement a policy where dogs and cats are controlled and fenced/secured so that they are excluded from cassowary habitat. Dogs to be under leash and supervision when outside the property.
- Design dog free developments and include buffer zones.

22. *The measure in the first row (“Avoiding impacts”) of Table 3 (“Suggested mitigation measures for the cassowary”) which deals with logging activities be amended so as to read as follows:*

- Avoid logging activities in cassowary habitat.

23. *The following measure in the second row (“Minimising impacts”) of Table 3 (“Suggested mitigation measures for the cassowary”) be removed:*

- A cattle fence with 3-4 strand plain wire and electric fences are suitable in an agricultural context only.

24. *The measure in the second row (“Minimising impacts”) of Table 3 (“Suggested mitigation measures for the cassowary”) be amended:*

- a. *so as to make it clear that offsets are not appropriate in relation to impacts on cassowary habitat; and*
- b. *so that the final dot-point in that second row reads as follows:*
  - Consider fencing on a case by case basis (**See Figure 3**). Appropriate fencing will depend on the situation, size, location and area where the activity will occur, and the impacts it may have upon cassowaries and their habitat. Fencing will not be appropriate if it:
    - fragments habitat
    - reduces connectivity
    - isolates cassowaries and their access to habitat, and
    - funnels cassowaries towards roads, leading to mortality

25. *The sixth dot-point the third row (“Managing habitat”) of Table 3 (“Suggested mitigation measures for the cassowary”) be amended so as to read as follows:*
- Evaluate the location of roads and cassowary road crossing points relative to corridors. Road crossings through corridors should be avoided unless there is no practicable alternative (excluding financial considerations). Where there are no practicable alternative, road corridors through corridors need to be designed to minimise impacts. If unavoidable and necessary, proven measures should be put in place to ensure safe crossing.
26. *The seventh dot-point in the third row (“Managing habitat”) of Table 3 (“Suggested mitigation measures for the cassowary”) be amended:*
- a. *so as to make it clear that offsets of cassowary habitat is not appropriate;*  
*or*
  - b. *alternatively, so as to make it clear that offsets of cassowary habitat will only be allowed after the relevant proposed offset is established and it is demonstrated by clear evidence that the relevant proposed offset performs an ecological function of a value no less than the value of the habitat which was cleared or otherwise removed.*
27. *All of the measures in Table 3 (“Suggested mitigation measures for the cassowary”) of the Guidelines be made conditions, so far as they are relevant, to any and all EPBC Act approvals which may result in significant impacts on habitat of Southern Cassowary (Wet Tropics population).*

### 3. Submissions

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For convenience we will deal with proposed amendments of, or additions to, the Guidelines in turn under relevant headings

#### **Introduction** (*section 1*)

##### References to the Southern Cassowary

There are three types of Southern Cassowary which remain extant at present:

1. The Southern Cassowary (*Casuarius casuarius johnsonii*);
2. Bennett's Cassowary (*Casuarius bennetti*); and
3. The Northern Cassowary (*Casuarius unappendiculatus*).

However, the following statement appears on page 3 of the Guidelines, under the heading "Introduction":

*This document will from now on refer to Casuarius casuarius johnsonii as 'cassowary' for ease of reference.*

Although only the Southern Cassowary is known in Australia, it would be clearer and more accurate to use the term "Southern Cassowary" throughout the Guidelines, rather than simply "cassowary" (which is a description of the genus "casuarius" only, and not the species within the genus).

##### Recommendation 1:

1. *The Guidelines should be amended so that the Southern Cassowary (Causarius casuarius johnsonii) is referred to by the term "Southern Cassowary" throughout the Guidelines, instead of the term "cassowary".*

##### References to the Commonwealth Minister for the Environment

The following statement appears on page 3 of the Guidelines:

*Under the EPBC Act, an action will require approval from the **Minister for the Environment, Heritage and the Arts** (the Minister) if that action has, will have, or is likely to have a 'significant' impact on a matter of NES.*

[our highlighting]

We note that:

1. it is the Commonwealth Minister for the Environment from whom approval is to be sought in those circumstances; and
2. the fact that the current Commonwealth Minister for the Environment currently also has the portfolios for Heritage and the Arts is a current Ministerial arrangement which is subject to the discretion of the Government of the day.

We submit that the statement should read as follows for the following reasons:

1. it is more accurate both in its grammar and use of terminology; and
2. it will assist the accuracy of the document enduring for a period beyond the expiration of those current Ministerial arrangements (suggested amendments shown):

*Under the EPBC Act, an action will require approval from the Commonwealth Minister for the Environment, ~~Heritage and the Arts~~ (“the Minister”) if that action has, will have, or is likely to have a ‘significant’ impact on a matter of NES.*

[our underlining and striking out]

*Recommendation 2:*

2. *The Guidelines should be amended so that the relevant Minister from whom approval is required under the EPBC Act is referred to (initially at least) as the “Commonwealth Minister for the Environment” rather than the current reference of “Minister for the Environment, Heritage and the Arts”.*

*Reference to “Significant Impact”*

The following text appears on page 3 of the Guidelines in relation to the term “Significant Impact”.

*A ‘significant impact’ is an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an ‘action’ is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impact.*

Whilst we agree with these statements, in general we submit that those considerations must be given elevated importance and be more heavily considered given that it is widely recognised and accepted that the Southern Cassowary is a keystone species in tropical rainforests in Australia, and indeed vitally important to the continued biodiversity, health and ecological function of those rainforests.

Recommendation 3:

3. *The following considerations must be given elevated importance in the Guidelines, given that it is widely recognised and accepted that the Southern Cassowary is a keystone species in tropical rainforests in Australia, and indeed vitally important to the continued biodiversity, health and ecological function of those rainforests:*
  - a. *the sensitivity, value and quality of the environment which is impacted upon by the relevant proposed action(s); and*
  - b. *the intensity, duration, magnitude and geographic extent of the impact.*

**How to interpret and apply these guidelines (section 2)**

The following appears on page 4 of the Guidelines, as the final paragraph in this section:

*If you think that your action is likely to have a significant impact on the cassowary or any other matter of NES, or if you are unsure, you should refer the action to the Minister, (see section 8).*

We submit that at this point in the Guidelines a statement(s) should be inserted to the following effect:

1. without approval it is an offence under the EPBC Act to take any action which has, will have or is likely to have a significant impact on a matter of NES; and
2. matters of NES which are protected by the EPBC Act include the following:
  - a. World Heritage Areas;
  - b. National Heritage places;
  - c. International recognised (i.e Ramsar) wetlands;
  - d. Listed threatened species and communities;
  - e. Listed migratory species;
  - f. Commonwealth marine areas (e.g. the Great Barrier Reef Marine Park);
3. details of listed threatened species and communities and listed migratory species are available from the DEWHA website.

Recommendation 4:

4. *The Guidelines should be amended so as to insert a statement to the following effect:*
  - a. *without approval it is an offence under the EPBC Act to take any action which has, will have or is likely to have a significant impact on a matter of NES; and*
  - b. *matters of NES which are protected by the EPBC Act include the following:*
    - i. *World Heritage Areas;*
    - ii. *National Heritage places;*
    - iii. *International recognised (i.e Ramsar) wetlands;*
    - iv. *Listed threatened species and communities;*
    - v. *Listed migratory species;*
    - vi. *Commonwealth marine areas (e.g. the Great Barrier Reef Marine Park);*
  - c. *details of listed threatened species and communities and listed migratory species are available from the DEWHA website.*

**What other laws protect the cassowary? (section 3)**

The following sentence appears as the final sentence in the final paragraph in this section:

*If your activity could affect the species or individual animals you should contact the relevant state and local authorities regarding your obligations in that jurisdiction.*

We submit that this sentence should be amended to suggest that the recommended action should be undertaken *in addition to* contacting the Commonwealth; the way in which it reads at present may risk the reader forming the impression that they need only contact “the relevant state and local authorities” if the “activity could affect the species or individuals animals”.

We submit that the required relevant amendment would be quite simple:

*If your activity could affect the species or individual animals, in addition to contacting the Commonwealth, you should contact the relevant state and local authorities regarding your obligations in that jurisdiction.*

[our underlining]

Recommendation 5:

5. *The Guidelines should be amended so that the following sentence in section 3 (“What other laws protect cassowaries?”) reads as follows:*

If your activity could affect the species or individual animals, in addition to contacting the Commonwealth, you should contact the relevant state and local authorities regarding your obligations in that jurisdiction.

*[our underlining]*

**The cassowary in Australia (section 4)**

We congratulate the Commonwealth for including the following paragraph under the sub-heading “*Life history and ecology*” in this section. The following statement is an important and strong statement which is too often forgotten, particularly when considering the impacts (potential and actual) of development on the Southern Cassowary.

*The Southern Cassowary is a keystone species in tropical rainforest (i.e. one whose conservation is crucial to other species within an ecosystem). It is a key species in the dispersion of many rainforest plant seeds, and the only long distance disperser of some species with large fleshy fruits.*

We recommend that such statement be repeated as often as possible in the Guidelines to better ensure that the message is effectively communicated that the Southern Cassowary is vitally important to the continued biodiversity, health and ecological function of tropical rainforests in Queensland, and therefore the ongoing wellbeing of communities throughout North Queensland whom depend on those communities for much of their income.

Recommendation 6:

6. *The Guidelines should be amended so that the following statement which appears in section four (“The cassowary in Australia”) is repeated and re-iterated as often as possible:*

The Southern Cassowary is a keystone species in tropical rainforest (i.e. one whose conservation is crucial to other species within an ecosystem). It is a key species in the dispersion of many rainforest plant seeds, and the only long distance disperser of some species with large fleshy fruits.

**Principal threats to the cassowary** (*section 5*)

We support the inclusion in the Guidelines of:

1. a list of some of the traits which make the Southern Cassowary “sensitive to certain development activities”; and
2. a list of the principal threats to the Southern Cassowary (which the Guidelines not are listed in the Recovery Plan for the Southern Cassowary).

**Survey guidelines for the cassowary** (*section 6*)

This section includes a number of points which are offered as a “guide to conducting surveys for the cassowary”.

Whilst we agree with those guiding points (whether or not we submit that there should be further guiding points included), we submit that it misguided and foolhardy to expect that all, indeed even a fair proportion, of proponents (most of whom, we submit, would be developers) would conduct surveys in a manner which would “maximise the chance of detecting the species”.

In our view, it may be possible, indeed likely, that developers could generally view an increased number of detections of Southern Cassowaries in and/or around the proposed development site:

1. as a factor which would increase the likelihood of having their proposed action determined to be a “controlled action” under the EPBC Act, and therefore having to submit to the EPBC Act process for obtaining Commonwealth approval for the proposed action (with obvious additional cost and time demands);
2. as a factor which would be unfavourable to actually obtaining the required approval.

Whilst we support the inclusion of such a guiding point in the Guidelines, we submit that additional powers and resources need to be provided to the Commonwealth Minister for the Environment and DEWHA to enable them to exercise more control over the manner in which surveys are conducted (perhaps even to commission independent surveys), at the proponent’s cost and expense. Failure to do so will essentially create (continue?) a system of self-regulation, which is clearly inappropriate in all of the circumstances. The suggested measures would better ensure that surveys are conducted in a manner which would maximise the chance of detecting the species.

Further to the above, we submit that regulations should be brought into operation which prescribe the minimum qualifications which a person must have in order to be a “suitably qualified person” for the purposes of conducting surveys for the Southern Cassowary.

Recommendations 7 & 8:

7. *The Commonwealth Minister for the Environment and DEWHA should be given more resources so as to enable them to exercise more control over the manner in which surveys of Southern Cassowary are conducted to better ensure that surveys are conducted in a manner which would maximise the chances of detecting the species.*
8. *Regulations should be brought into operation which prescribe the minimum qualifications which a person must have in order to be a “suitably qualified person” to conduct those surveys, and that such regulations be developed in consultation with recognised experts in the field.*

**What types of actions are likely to have a significant impact on the cassowary?**  
(section 7)

We support and welcome the following statement which appears on page 11 in the first paragraph in section 7:

*The potential for a significant impact on a listed threatened species will depend on the:*

- *intensity, duration, magnitude and geographic extent of the impact*
- *sensitivity, value and quality of the environment on and around the site*
- *cumulative effects of on-site, off-site, direct and indirect impacts, and*
- *presence of this species and other matters of national environmental significance.*

We particularly support and welcome the inclusion in that list of “cumulative effects of on-site, off-site, direct and indirect impacts”, however submit that amendments are urgently required to the EPBC Act to properly reflect those concerns by ensuring that the *cumulative* effects of each proposal are considered.

Recommendation 9:

9. *Amendments are urgently required to the EPBC Act to ensure that when approval for each proposed action is being considered under the EPBC Act that cumulative impacts of on-site, off-site, direct and indirect impacts are considered in relation to each proposed act.*

We also support the approach taken in this section to provide a table (Table 2) which sets out a number of impacts which, section 7 states, has a real chance or possibility of causing a significant impact on the Southern Cassowary (the first sentence in paragraph 2 of this section).

However, we disagree with the following statement, which appears to us to be illogical:

*Actions are less likely to be significant in habitat patches which are very small, highly isolated, and greatly fragmented.*

It would seem to us that such habitat patches as those referred to (i.e. those which are very small, highly isolated and greatly fragmented) are already heavily impacted on, and therefore any further impact (even minor) from an action will be more likely to be significant. Further, greater protection should be afforded to such patches so that habitat connectivity can have a greater chance to be revived and re-established, and so that further habitat fragmentation, isolation and reduction can be better prevented.

*Recommendation 10:*

10. *The following statement be removed from section 7 (“What type of actions are likely to have a significant impact on the cassowary?”) in the paragraph immediately above Table 2 (“Significant impact thresholds for the cassowary”):*

*Actions are less likely to be significant in habitat patches which are very small, highly isolated, and greatly fragmented.*

*Table 2: Significant impact thresholds for the cassowary*

We have the following observations and recommendations in relation to this table:

*Clearing threats*

*Clearing threat – column 1*

- Given that the Guidelines recognise that the habitat clearing, habitat fragmentation and habitat degradation are principal threats to the Southern Cassowary, it sensibly follows that *any* clearing, fragmentation or degradation of any Southern Cassowary habitat, even for or in relation to “a single residential dwelling on an existing lot”, is a threat to the Southern Cassowary.
- In short, the Guidelines should properly take a stronger line on the clearing, fragmentation and degradation of Southern Cassowary habitat, and provide that any of those actions will more likely than not have a significant impact on the Southern Cassowary. In those circumstances, and consistent with the

precautionary principle, the onus should be on the proponent to clearly demonstrate that such a proposed action will not have such an impact.

Recommendation 11:

11. *The first dot-point in column one of row one (“Clearing”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to read as follows:*

- Clearing habitat
- We support the statement that forestry operations (including selective logging) which remove Southern Cassowary food trees should be a significant impact threshold.
- We do not support the inclusion of what appears to be an arbitrary and scientifically unsupported threshold of ‘canopy opening’ of 10%. There is no statement as to what the stated “10%” is a proportion of (i.e. of what lot is it a proportion of?). In any event, a prescription of an arbitrary proportion is inappropriate and misguided, and we submit that it should be abandoned. We further submit that a threshold should be inserted in its place which is in terms of land area, rather than a proportion of an undefined whole.

Recommendation 12:

12. *The second dot-point in column one of row one (“Clearing”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to read as follows:*

- Forestry operations (including selective logging) that:
  - remove cassowary food trees.
- We support the following as a significant impact threshold:
 

*Subdivision of land that results in clearing of habitat and/or intensification of use within that habitat.*

*Clearing threat – column 2*

- We submit that the statement which appears in this column should be amended to remove the word “substantially”, so that it reads as follows:
 

*Clearing which ~~substantially~~ decreases availability, quality and access by cassowaries to water across seasons.*

[our strikeout]

Recommendation 13:

13. The second dot-point in column two of row one (“Clearing”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to read as follows:

- Clearing which decreases availability, quality and access by cassowaries to water across seasons.

Clearing threat – column 3

- A significant impact threshold should be inserted here as follows:

*Clearing of any part of a movement corridor which adversely impacts on the movement of Southern Cassowaries.*

Recommendation 14:

14. Column three of row one (“Clearing”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to include the following significant impact threshold:

- Clearing of any part of a movement corridor which adversely impacts on the movement of Southern Cassowaries.

Habitat degradation threatsHabitat degradation threat – column 1

- We submit that the statement at the first dot-point which appears in this column should be amended to remove the word “substantial”, and so that it reads as follows:

- Actions that will result in ~~substantial~~ habitat degradation which is anything more than minor e.g.:
  - Exotic plant invasion – (weeds)
  - Exotic animal invasion – (pigs and dogs)
  - Vehicle use – (off-road vehicles and motorbikes)

[our strikeout and underlining]

Recommendation 15:

15. Column one of row two (“Habitat degradation”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to read as follows:

- Actions that will result in habitat degradation which is anything more than minor e.g.:
  - Exotic plant invasion – (weeds)
  - Exotic animal invasion – (pigs and dogs)

- Vehicle use – (off-road vehicles and motorbikes)

*Habitat degradation threat – column 2*

- We submit that the statement which appears in this column should be amended to remove the word “substantial”, so that it reads as follows:
  - ~~Substantial~~ decrease in availability, quality and access to water across seasons.

[our strikeout]

Recommendation 16:

16. Column two of row two (“Habitat degradation”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to read as follows:

- Decrease in availability, quality and access to water across seasons.
- We otherwise support the significant impact thresholds which appear in this column.

*Habitat degradation threat – column 3*

- A significant impact threshold should be inserted here as follows:
  - Any action which causes habitat degradation in any part of a movement corridor which adversely impacts on the movement of Southern Cassowaries.

Recommendation 17:

17. Column three of row two (“Habitat degradation”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to include the following significant impact threshold:

- Any action which causes habitat degradation in any part of a movement corridor which adversely impacts on the movement of Southern Cassowaries.

Fragmentation and isolation threats

*Fragmentation and isolation threat – column 1*

- We submit that the statement which appears in this column should be amended to remove the word “substantially”, and so that it reads as follows:
  - Any action that ~~substantially~~ reduces or prevents movement and connectivity in any more than a minor manner e.g.:
    - Road development.

- Fencing<sup>^</sup>.
- Drainage channels.
- Powerlines and service infrastructure.
- Subdivision of land.

*[our strikeout and underlining]*

Recommendation 18:

18. *Column one of row three (“Fragmentation and isolation of habitat and populations”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to read as follows:*

- Any action that reduces or prevents movement and connectivity in any more than a minor manner e.g.:
  - Road development.
  - Fencing<sup>^</sup>.
  - Drainage channels.
  - Powerlines and service infrastructure.
  - Subdivision of land.

*Fragmentation and isolation threat – column 2*

- We support the inclusion of the significant impact threshold at dot-point 1 in this column, without amendment.
- However, we submit that the significant impact threshold which appears at dot-point 2 in this column should be amended to remove the word “substantially”, and so that it reads as follows:
  - Any action that ~~substantially~~ reduces or prevents movement and connectivity in any more than a minor manner of cassowaries along waterways.

*[our strikeout and underlining]*

Recommendation 19:

19. *Column two of row three (“Fragmentation and isolation of habitat and populations”) in Table 2 (“Significant impact thresholds for the cassowary”) be amended to read as follows:*

- Any action that reduces or prevents movement and connectivity in any more than a minor manner of cassowaries along waterways.

*Fragmentation and isolation threat – column 3*

- We support the significant impact threshold in this column, without amendment.

Roads and traffic threats

*Roads and traffic threat – column 1*

- We support the inclusion of the significant impact thresholds in this column, without amendment.

*Roads and traffic threat – column 2*

- We support the inclusion of the significant impact thresholds in this column, without amendment.

*Roads and traffic threat – column 3*

- We support the inclusion of the significant impact thresholds in this column, without amendment.

**What does this mean for actions that may significantly impact the cassowary?**

*(section 8)*

The following appears on page 18 of the Guidelines, as the first paragraph in this section:

*If you plan to undertake an action that may have a significant impact on the cassowary then you should refer the proposal to the Minister before commencing the action.*

Similar to our submissions in relation to section 2 above, we submit that at this point in the Guidelines a statement(s) should be inserted to the following effect:

1. without approval it is an offence under the EPBC Act to take any action which has, will have or is likely to have a significant impact on a matter of NES; and
2. matters of NES which are protected by the EPBC Act include the following:
  - a. World Heritage Areas;
  - b. National Heritage places;
  - c. International recognised (i.e Ramsar) wetlands;
  - d. Listed threatened species and communities;
  - e. Listed migratory species;
  - f. Commonwealth marine areas (e.g. the Great Barrier Reef Marine Park);
3. details of listed threatened species and communities and listed migratory species are available from the DEWHA website.

Recommendation 20:

20. *This part of the Guidelines should be amended so as to insert a statement to the following effect:*
- a. *without approval it is an offence under the EPBC Act to take any action which has, will have or is likely to have a significant impact on a matter of NES; and*
  - b. *matters of NES which are protected by the EPBC Act include the following:*
    - i. *World Heritage Areas;*
    - ii. *National Heritage places;*
    - iii. *International recognised (i.e Ramsar) wetlands;*
    - iv. *Listed threatened species and communities;*
    - v. *Listed migratory species;*
    - vi. *Commonwealth marine areas (e.g. the Great Barrier Reef Marine Park);*
  - c. *details of listed threatened species and communities and listed migratory species are available from the DEWHA website.*

**How can my actions avoid having a significant impact on the cassowary? (section 9)**Table 3: Suggested mitigation measures for the cassowary

We have the following observations and recommendations in relation to this table:

*Avoiding impacts*

- The following dot-point appears as a suggested measure to avoid impacts upon the Southern Cassowary:
  - *Exclude dogs and cats from cassowary habitat wherever possible.*
- We submit that:
  - Not only is it *always* possible to exclude dogs and cats from Southern Cassowary habitat, such exclusion is indeed vitally important and absolutely necessary; and
  - The measures in the section of the table which deal with dogs and cats should be amended to read as follows:
    - *Exclude dogs and cats from cassowary habitat ~~wherever possible~~.*
    - *Implement a policy where dogs and cats are ~~properly~~ controlled and ~~adequately~~ fenced/secured so that they are excluded from*

*cassowary habitat*. Dogs to be under leash and supervision when outside the property.

- Design dog free developments and include buffer zones.

[our strikeout and underlining]

*Recommendation 21:*

21. The measures in the first row (“Avoiding impacts”) of Table 3 (“Suggested mitigation measures for the cassowary”) which deal with dogs and cats should be amended to read as follows:

- Exclude dogs and cats from cassowary habitat.
  - Implement a policy where dogs and cats are controlled and fenced/secured so that they are excluded from cassowary habitat. Dogs to be under leash and supervision when outside the property.
  - Design dog free developments and include buffer zones.
- We submit that logging activities should not be permitted in any manner in Southern Cassowary habitat.

*Recommendation 22:*

22. The measure in the first row (“Avoiding impacts”) of Table 3 (“Suggested mitigation measures for the cassowary”) which deals with logging activities be amended so as to read as follows:

- Avoid logging activities in cassowary habitat.

*Minimising impacts*

- The following dot-point appears as a suggested measure to mitigate impacts upon the Southern Cassowary:
  - A cattle fence with 3-4 strand plain wire and electric fences are suitable in an agricultural context only.
- We submit that:
  - Electric fences are never appropriate in or around cassowary habitat, whether it be in an agricultural context or not.
  - Electric fences may be fine on the inside of the property, however appropriate non-electric cassowary fencing should be on the outside of the property and any electric fencing (i.e. two fence lines are required).

- Electric fencing may well do more harm than barbed wire which is noted below as being unacceptable.

Recommendation 23:

23. *The following measure in the second row (“Minimising impacts”) of Table 3 (“Suggested mitigation measures for the cassowary”) be removed:*

- A cattle fence with 3-4 strand plain wire and electric fences are suitable in an agricultural context only.
- We further submit that:
  - In the absence of any clear evidence to the contrary, offsets are not appropriate in relation to impacts on cassowary habitat, either as suggested in the final dot-point under “Minimising impacts”, or otherwise; and
  - The final dot-point under “Minimising impacts” should properly be amended to read as follows:

*Consider fencing on a case by case basis (See Figure 3). Appropriate fencing will depend on the situation, size, location and area where the activity will occur, and the impacts it may have upon cassowaries and their habitat. ~~In some situations fencing is not appropriate because-~~ Fencing will not be appropriate if it:*

- *fragments habitat*
- *reduces connectivity*
- *isolates cassowaries and their access to habitat, and*
- *funnels cassowaries towards roads, leading to mortality*

*~~Offset of these impacts may be achieved by a buffer around fencing in some circumstances.~~*

[our strikeout and underlining]

Recommendation 24:

24. *The measure in the second row (“Minimising impacts”) of Table 3 (“Suggested mitigation measures for the cassowary”) be amended:*

- a. *so as to make it clear that offsets are not appropriate in relation to impacts on cassowary habitat; and*
- b. *so that the final dot-point in that second row reads as follows:*
  - Consider fencing on a case by case basis (See Figure 3). Appropriate fencing will depend on the situation, size, location and area where the activity will occur, and the impacts it may

have upon cassowaries and their habitat. Fencing will not be appropriate if it:

- fragments habitat
- reduces connectivity
- isolates cassowaries and their access to habitat, and
- funnels cassowaries towards roads, leading to mortality

### *Managing habitat*

- Subject to the following, we generally support the suggested measures for managing habitat.
- The second suggested measure contains a reference to “a 5:1 ratio”. We presume that it is a length:width ratio, however this should properly be clarified to avoid confusion.
- The sixth dot-point should be amended to read as follows:
  - *Evaluate the location of roads and cassowary road crossing points relative to corridors. Road crossings through corridors should be avoided unless there is no practicable alternative (excluding financial considerations). Where there are no practicable alternative, road corridors through corridors need to be designed to minimise impacts. If unavoidable and necessary, proven measures should be put in place to ensure safe crossing.*

[our underlining]

### Recommendation 25:

25. *The sixth dot-point the third row (“Managing habitat”) of Table 3 (“Suggested mitigation measures for the cassowary”) be amended so as to read as follows:*

- Evaluate the location of roads and cassowary road crossing points relative to corridors. Road crossings through corridors should be avoided unless there is no practicable alternative (excluding financial considerations). Where there are no practicable alternative, road corridors through corridors need to be designed to minimise impacts. If unavoidable and necessary, proven measures should be put in place to ensure safe crossing.
- The seventh dot-point in this part of the table seems to support a vegetation offset arrangement. EDO-NQ is strenuously opposed to any offsetting arrangements which allow or facilitate the clearing or other removal of cassowary habitat. If offsetting is to be allowed, it must only be permitted after the relevant offset is established and demonstrated by clear evidence that it performs an ecological function of a value no less than the value of the habitat which was cleared or otherwise removed.

Recommendation 26:

26. *The seventh dot-point in the third row (“Managing habitat”) of Table 3 (“Suggested mitigation measures for the cassowary”) be amended:*
- a. *so as to make it clear that offsets of cassowary habitat is not appropriate; or*
  - b. *alternatively, so as to make it clear that offsets of cassowary habitat will only be allowed after the relevant proposed offset is established and it is demonstrated by clear evidence that the relevant proposed offset performs an ecological function of a value no less than the value of the habitat which was cleared or otherwise removed.*

In addition to the above, in general we submit that any EPBC Act approvals should include the measures in Table 3 as conditions to the approval, as far as they are relevant.

Recommendation 27:

27. *All of the measures in Table 3 (“Suggested mitigation measures for the cassowary”) of the Guidelines be made conditions, so far as they are relevant, to any and all EPBC Act approvals which may result in significant impacts on habitat of Southern Cassowary (Wet Tropics population).*