



Environmental
Protection
Authority

Thornlie-Cockburn Link – inquiry under section 46 of
the *Environmental Protection Act 1986* to amend
Ministerial statement 1114, as amended by
Ministerial statement 1160
Public Transport Authority of Western Australia

Report 1731
November 2022

Inquiry under section 46 of the *Environmental Protection Act 1986*

The Minister for Environment has requested that the Environmental Protection Authority (EPA) inquire into and report on the matter of amending the implementation conditions relating to conditions 13-1 and 13-3 (Offsets) of Ministerial statement 1114 as amended by Ministerial statement 1160 relating to the Thornlie-Cockburn Link.

Section 46(6) of the *Environmental Protection Act 1986* requires the EPA to prepare a report that includes:

- (a) a recommendation on whether or not the implementation conditions to which the inquiry relates, or any of them, should be amended
- (b) any other recommendations that it thinks appropriate.

The following is the EPA's report to the Minister pursuant to s. 46(6) of the *Environmental Protection Act 1986*.



Prof. Matthew Tonts
Chair

24 November 2022

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1 Proposal

The Thornlie-Cockburn Link (the proposal) is to construct and operate a new 14.5 kilometre (km) dual railway track between Thornlie and Cockburn Central Stations and includes duplication of 3 km of the existing single railway track between Beckenham Junction and Thornlie Station. The proposal also includes two new stations at Ranford and Nicholson Roads and modification of the existing Thornlie and Cockburn Central stations. The proposal includes relocation of the existing freight railway track within the development envelope. The proponent for the proposal is the Public Transport Authority of Western Australia.

The Environmental Protection Authority (EPA) assessed the proposal at the level of Referral Information with Additional Information (four-week public review) and published its report in August 2019 (Report 1646). In this report, the EPA considered the following key environmental factors were relevant to the proposal:

- Flora and vegetation
- Terrestrial fauna
- Inland waters
- Social surroundings
- Terrestrial environmental quality
- Air quality.

In applying the *Statement of environmental principles, factors, objectives and aims of EIA* (EPA 2021b) the factors are unchanged.

The EPA concluded in Report 1646, that the proposal is environmentally acceptable and recommended the proposal may be implemented subject to conditions.

The then Minister for Environment approved the proposal for implementation, subject to the implementation conditions of Ministerial statement (MS) 1114 on 23 September 2019.

Previously approved amendments to the proposal

The following changes to the proposal were approved under s. 45C of the *Environmental Protection Act 1986* (EP Act) on 9 October 2020 (Attachment 3 of MS 1114):

- increase in the development envelope by 4.1 hectares (ha) from 116.8 ha to 120.9 ha
- increase in the authorised extent of clearing of native vegetation by 1 ha, which includes additional clearing of:
 - 0.1 ha of Low lying *Banksia attenuata* woodlands or shrublands ('floristic community type 21c' (FCT 21c)) Priority 3(i) Ecological Community (PEC) from 3.6 ha to 3.7 ha
 - 0.2 ha of *Caladenia huegelii* habitat from 4.2 ha to 4.4 ha

- 0.3 ha of Bush Forever Site 388 (BF388) from 3 ha to 3.3 ha
- 0.2 ha of Conservation Category Wetland (CCW) from 3.2 ha to 3.4 ha
- 0.9 ha of Carnaby's cockatoo foraging habitat from 23 ha to 23.9 ha
- 0.7 ha of forest red-tailed black and Baudin's cockatoo foraging habitat from 16.2 ha to 16.9 ha.

The following changes to the proposal were approved under s. 45C of the EP Act on 21 October 2021 (Attachment 4 of MS 1114):

- increase in the development envelope by 0.6 ha from 118.8 ha to 119.3 ha
- increase in the authorised extent of clearing of native vegetation by 1.5 ha, which includes modified clearing of:
 - a 0.5 ha decrease of Low lying *Banksia attenuata* woodlands or shrublands (FCT 21c) PEC from 3.7 ha to 3.3 ha
 - a 0.5 ha decrease of *Caladenia huegelii* habitat from 4.4 ha to 3.9 ha
 - a 0.27 ha increase of BF388 from 3.3 ha to 3.57 ha
 - a 0.27 ha decrease of CCW from 3.4 ha to 3.13 ha
 - a 0.2 ha decrease of Carnaby's cockatoo foraging habitat from 23.9 ha to 23.7 ha
 - a 0.2 ha increase of forest red-tailed black and Baudin's cockatoo foraging habitat from 16.9 ha to 17.1 ha
 - an increase of three black cockatoo potential breeding trees from 48 to 51.

The following changes to the proposal were approved under s. 45C of the EP Act on 4 May 2022 (Attachment 5 of MS 1114):

- increase in the development envelope by 0.4 ha
- increase in the disturbance footprint by 0.4 ha.

The changes above were to provide additional areas to facilitate the construction of retaining walls. The area had previously been cleared for the purpose of relocating services as per Clearing Permit 9024/1.

Previously approved amendments to the conditions

A change to conditions under s. 46 of the EP Act has been approved:

- On 22 January 2021, conditions 13-1 and 13-3 were changed to align the offset conditions with changes to the extent of native vegetation clearing approved under s. 45C (Attachment 3 of MS 1114) of the EP Act (MS 1160).

Two minor changes to conditions under s. 46C of the EP Act have been approved:

- On 19 November 2019, conditions 13-5, 13-6 and 13-9 were changed to correct an unintentional error (Attachment 1 to MS 1114).
- On 30 July 2020, the conditions were changed to correct a misdescription in the implementation conditions (Attachment 2 of MS 1114).

2 Requested amendments to the conditions

In July 2021, the proponent requested changes to offset conditions 13-1 and 13-3 of MS 1114, as amended by MS 1160, to reflect the changes to the proposal requested and subsequently approved under s. 45C (Attachment 4). The changes were requested in order to accurately reflect the residual impacts of the proposal required to be offset.

In October 2021, the then Minister for Environment requested the EPA inquire into and report on the matter of changing the implementation conditions of MS 1114, as amended by MS 1160, for the Thornlie-Cockburn Link pertaining to offsets.

This report satisfies the requirements of the EPA's inquiry.

3 Inquiry into amending the conditions

The EPA has discretion as to how it conducts this inquiry. In determining the extent and nature of this inquiry, the EPA had regard to information such as:

- the currency of its original assessment (Report 1646, August 2019)
- subsequent s. 46 inquiry (Report 1694, December 2020)
- MS 1114 and MS 1160
- approved changes to the proposal and to conditions
- information provided by the proponent
- advice from relevant decision-making authorities
- any new information regarding the potential impacts of the proposal on the environment.

EPA procedures

The EPA followed the procedures in the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2021* (State of Western Australia 2021) and the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual* (EPA 2021a).

4 Inquiry findings

The EPA considered that the following are the key environmental factors relevant to the amendments to the conditions:

- Flora and vegetation
- Terrestrial fauna
- Inland waters.

4.1 Flora and vegetation

The EPA environmental objective for flora and vegetation is *to protect flora and vegetation so that biological diversity and ecological integrity are maintained.*

Conclusions from EPA Report 1646

The EPA considered there is the potential for direct and indirect impacts from clearing of flora and vegetation, including to Low lying *Banksia attenuata* woodlands or shrublands (FCT21c) PEC, BF388 and *Caladenia huegelii* habitat.

The EPA noted that a portion (2.9 ha) of the 3.6 ha of Low lying *Banksia attenuata* woodlands or shrublands (FCT 21c) PEC could be considered a sub community of the Commonwealth listed Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (TEC). The EPA determined that a significant residual impact remained for the portion of the PEC that could be considered representative of the Commonwealth listed TEC.

To manage these impacts, the EPA recommended:

- there be a limit, through the authorised extent in Schedule 1, on the clearing of:
 - Low lying *Banksia attenuata* woodlands or shrublands (FCT21c) PEC (3.6 ha)
 - *Caladenia huegelii* habitat (4.2 ha)
 - BF388 (3 ha)
- management of indirect impacts from weeds and dieback to areas of adjacent native vegetation (condition 8)
- implementation of offsets (condition 13) to counterbalance the significant residual impact to 2.9 ha of Low lying *Banksia attenuata* woodlands or shrublands (FCT21c) PEC considered a sub community of the Commonwealth listed Banksia Woodlands of the Swan Coastal Plain TEC, 4.2 ha of *Caladenia huegelii* habitat, and 3 ha of BF388.

Conclusions from EPA Report 1694

In its assessment of the proposed changes to the proposal, the EPA considered that the additions to the extent of clearing would not have a significant impact in their own right. However, an offset should be required for them when combined with the

residual impacts of the original proposal for consistency and to deal with the combined impact.

To manage the impacts of the approved change to the proposal, the EPA considered it appropriate to ensure the combined residual impacts of the original proposal and the approved changes to the proposal were offset using the framework of the existing offset conditions. The EPA therefore recommended conditions 13-1(1), 13-1(5), 13-1(7), 13-3(3)(a), 13-3(3)(d) and 13-3(2)(c) be amended to reflect the full extent of the residual impacts of the amended proposal to flora and vegetation.

Assessment of the requested amendments to conditions

The EPA considered that the *Environmental factor guideline – Flora and vegetation* (EPA 2016a) is the current environmental policy and guidance relevant to its assessment of the proposal for this factor.

The EPA considers that the flora and vegetation surveys undertaken for the original assessment remain current for this inquiry given their currency and coverage of the proposal impacts.

The approved changes to the proposal have modified the extent of impact by:

- a 0.4 ha decrease in clearing of Low lying *Banksia attenuata* woodlands or shrublands (FCT21c) PEC from 3.7 ha to 3.3 ha
- a 0.5 ha decrease in clearing of *Caladenia huegelii* habitat from 4.4 ha to 3.9 ha
- a 0.27 ha increase in disturbance of BF388 from 3.3 ha to 3.57 ha.

The EPA notes that of the 3.3 ha of Low lying *Banksia attenuata* woodlands or shrublands (FCT21c) PEC, 2.6 ha is considered to be representative of the *Banksia* woodlands of the Swan Coastal Plain TEC and should be offset. This is a reduction in the extent of impact to this ecological community requiring offset and is aligned with the variation to the conditions of approval for EPBC 2018/8188 under the *Environment Protection and Biodiversity Conservation Act 1999*, dated 19 January 2022. The 19 January 2022 variation to the conditions of approval for EPBC 2018/8188 reduced the authorised extent of clearing of the *Banksia* woodlands of the Swan Coastal Plain TEC to 2.6 ha.

The EPA further notes that of the 3.57 ha of BF388, 3.0 ha is considered regionally significant vegetation and should be offset. This is a reduction in the extent of impact required to be offset. A two-to-one offset ratio was recommended for the loss of BF388 under the framework of the existing conditions. The EPA considers this ratio to be appropriate for this assessment.

The EPA considers it appropriate to ensure the combined residual impact of the original proposal and the approved changes to the proposal are offset using the framework of the existing offset conditions. The EPA has therefore recommended conditions 13-1 and 13-3 are amended to reflect the extent of the residual impacts of the now amended proposal to flora and vegetation.

Having regard to the changed proposal and other relevant information, the EPA has recommended that conditions 13-1 and 13-3 (Offsets) are deleted and replaced with new conditions as set out in section 5 and Appendix A.

4.2 Terrestrial fauna

The EPA environmental objective for terrestrial fauna is *to protect terrestrial fauna so that biological diversity and ecological integrity are maintained.*

Conclusions from EPA Report 1646

The EPA considered the proposal had the potential to impact terrestrial fauna directly through the clearing of fauna habitat, which included habitat for three listed species of black cockatoos, and indirectly through the introduction of light, noise, and vibration. The EPA also considered there was an increased risk of injury, mortality and feral predation during construction and operation.

To manage these impacts, the EPA recommended:

- there is a limit on the clearing of black cockatoo foraging habitat and potential breeding trees through the authorised extent in Schedule 1
- management of construction activities to minimise impacts to the three black cockatoo species and other terrestrial fauna (condition 11)
- implementation of offsets to counterbalance the residual impact of clearing black cockatoo foraging habitat and potential breeding trees (condition 13).

Conclusions from EPA Report 1694

In its assessment of the proposed changes to the proposal, the EPA considered that the additions to the extent of clearing of foraging habitat for three species of cockatoo would not have a significant impact in its own right. However, an offset should be required for them when combined with the residual impacts of the original proposal for consistency and to deal with the combined impact.

To manage the impacts of the approved change to the proposal, the EPA considered it appropriate to ensure the combined residual impacts of the original proposal and the approved changes to the proposal were offset using the framework of the existing offset conditions. The EPA recommended conditions 13-1(2), 13-1(3), 13-3(3)(b) and 13-3(3)(c) be amended to reflect the full extent of the residual impacts of the amended proposal to black cockatoo foraging habitat.

Assessment of the requested amendments to conditions

The EPA considered that the *Environmental factor guideline – Terrestrial fauna* (EPA 2016b) is the current environmental policy and guidance relevant to its assessment of the proposal for this factor.

The EPA considers that the biological surveys undertaken for the original assessment, as supplemented by the information provided with the previous and current applications for amendment to the proposal, and to the conditions, are adequate for this inquiry given their currency and coverage of the proposal impacts.

The approved changes to the proposal have modified the extent of clearing by:

- a 0.2 ha decrease of Carnaby's cockatoo (*Calyptorhynchus latirostris*) foraging habitat from 23.9 ha to 23.7 ha
- a 0.2 ha increase of forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) and Baudin's cockatoo (*Calyptorhynchus baudinii*) foraging habitat from 16.9 ha to 17.1 ha
- an increase of three black cockatoo potential breeding trees from 48 to 51.

During its assessment of the original proposal, the EPA considered there were residual impacts from the clearing of black cockatoo potential breeding trees, as well as foraging habitat for Carnaby's cockatoo, forest red-tailed black cockatoo and Baudin's cockatoo that required offsetting.

The EPA considers it appropriate to ensure the combined residual impact of the original proposal and the approved changes to the proposal, are offset using the framework of the existing offset conditions. The EPA has therefore recommended conditions 13-1 and 13-3 are amended to reflect the extent of the residual impacts of the now amended proposal to terrestrial fauna.

The EPA notes that a three-to-one offset ratio was recommended for the loss of black cockatoo potential breeding trees. The EPA considers this ratio to be appropriate for this assessment.

Having regard to the changed proposal and other relevant information, the EPA has recommended that conditions 13-1 and 13-3 (Offsets) are deleted and replaced with new conditions as set out in section 5 and Appendix A.

4.3 Inland waters

The EPA environmental objective for inland waters is *to maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected.*

Conclusions from EPA Report 1646

The EPA considered the proposal may have potential impacts on the hydrological regimes and water quality of groundwater resources. This includes the Jandakot Underground Water Pollution Control Area and surface water features, including the Canning River, CCW and Resource Enhancement Wetlands.

To manage these impacts, the EPA recommended:

- there is a limit on the clearing of CCW through the authorised extent in Schedule 1

- preparation and implementation of an environmental management plan to minimise impacts to hydrological regimes from groundwater abstraction and dewatering activities (condition 6)
- restrictions on construction activities to ensure there is no unacceptable decline in water quality (condition 7)
- management of acid sulfate soils (condition 9)
- implementation of a three-to-one offset ratio to counterbalance the residual impact to 3.2 ha of CCW (condition 13).

Conclusions from EPA Report 1694

In its assessment of the proposed changes to the proposal, the EPA considered the increases in the extent of clearing of CCW would not have a significant impact in its own right. However, an offset should be required for them when combined with the residual impacts of the original proposal for consistency and to deal with the combined impact.

To manage the impacts of the approved change to the proposal, the EPA considered it appropriate to ensure the combined residual impacts of the original proposal and the approved changes to the proposal were offset using the framework of the existing offset conditions. The EPA recommended conditions 13-1(6) and 13-3(2)(a) be amended to reflect the full extent of the residual impacts of the amended proposal to CCW.

Assessment of the requested amendments to conditions

The EPA considered that the *Environmental factor guideline – Inland waters* (EPA 2018) is the current environmental policy and guidance relevant to its assessment of the proposal for this factor.

The EPA considers the information provided in relation to inland waters for the original assessment remains current for this inquiry.

The approved change to the proposal has resulted in a decrease in the extent of clearing of CCW by 0.27 ha. During its assessment, the EPA considered there was a residual impact from the clearing of CCW, which required a three-to-one offset ratio.

The EPA considers it appropriate to ensure the residual impact of the proposal are accurately offset using the framework of the existing offset conditions. The EPA has therefore recommended conditions 13-1 and 13-3 are amended to reflect the extent of the residual impacts of the now amended proposal to CCW.

Having regard to the changed proposal and other relevant information, the EPA has recommended that conditions 13-1 and 13-3 (Offsets) are deleted and replaced with new conditions as set out in section 5 and Appendix A.

5 Conclusions and recommendations

Change to conditions 13-1(1) and 13-3(3)(a)

The proponent has requested the extent of the significant residual impacts to the Low lying *Banksia attenuata* woodlands or shrublands (FCT 21c) PEC be amended to reflect the extent of clearing. The EPA considers it is appropriate to amend the extent of the residual impact for which an offset is required to 2.6 ha to reflect the extent of impact to that portion considered representative of the Banksia woodlands of the Swan Coastal Plain TEC. *The amendment aligns with the Commonwealth conditions of approval for EPBC2018/8188 with respect to the Banksia woodlands of the Swan Coastal Plain TEC.*

Change to conditions 13-1(2) and 13-3(3)(b)

The proponent has requested the extent of the significant residual impacts to Carnaby's cockatoo foraging habitat be amended to reflect the extent of clearing. The EPA considers it is appropriate to amend the extent of the residual impact for which an offset is required to 23.7 ha.

Change to conditions 13-1(3) and 13-3(3)(c)

The proponent has requested the extent of the significant residual impacts to forest red-tailed black cockatoo and Baudin's cockatoo foraging habitat be amended to reflect the extent of clearing. The EPA considers it is appropriate to amend the extent of the residual impact for which an offset is required to 17.1 ha.

Change to conditions 13-1(4) and 13-3(2)(b)

The proponent has requested the extent of the significant residual impacts to black cockatoo potential breeding trees be amended to reflect the extent of clearing. The EPA considers it is appropriate to amend the extent of the residual impact for which an offset is required to 51 trees. In applying a three-to-one offset ratio, at least 153 Carnaby's and forest red-tailed black cockatoo breeding trees or potential breeding trees are required to counterbalance the residual impact.

Change to conditions 13-1(5) and 13-3(3)(d)

The proponent has requested the extent of the significant residual impacts to *Caladenia huegelii* habitat be amended to reflect the extent of clearing. The EPA considers it is appropriate to amend the extent of the residual impact for which an offset is required to 3.9 ha.

Change to condition 13-1(6)

The proponent has requested the extent of the significant residual impacts to CCW be amended to reflect the extent of clearing. The EPA considers it is appropriate to amend the extent of the residual impact for which an offset is required to 3.13 ha.

Change to condition 13-1(7)

The proponent has requested the extent of the significant residual impacts to BF388 be amended to reflect the extent of clearing. The EPA considers it is appropriate to amend the extent of the residual impact for which an offset is required to 3.0 ha.

Change to condition 13-3(2)(a)

The proponent has requested the offset required to counterbalance the significant residual impacts to CCW be amended to reflect the extent of clearing. The EPA considers it is appropriate to amend the extent of the offsets required, applying the framework of the existing offset conditions. In applying a three-to-one offset ratio, at least 9.4 ha of wetlands, which meet the criteria of CCW, are required to counterbalance the residual impact.

Change to condition 13-3(2)(c)

The proponent has requested the offset required to counterbalance the significant residual impact to BF388 be amended to reflect the full extent of clearing. The EPA considers it appropriate to amend the extent of the offsets required, applying the framework of the existing offset conditions. In applying a two-to-one offset ratio, at least 6.0 ha of vegetation communities and/or complexes with a vegetation condition that is commensurate with the Bush Forever sites being impacted is required to counterbalance the residual impact.

Conclusions

In relation to the environmental factors, and considering the information provided by the proponent and relevant EPA policies and guidelines, the EPA concludes that:

- there are no further changes to the conditions needed to deal with the issues associated with the proponent's request to change the conditions
- other than the approved change to the proposal, there is no significant new or additional information that changes the conclusions reached by the EPA under any of the relevant environmental factors since the proposal was assessed by the EPA in Report 1646 (August 2019) or Report 1695 (December 2020)
- no new significant environmental factors have arisen since the EPA's original assessment of the proposal
- impacts to the key environmental factors are considered able to be managed to meet the EPA objectives for the key environmental factors, based on the implementation of the requirements of the original conditions retained in MS 1114 as amended by MS 1160, and the imposition of the attached recommended condition changes (Appendix A).

Recommendations

Having inquired into this matter, the EPA submits the following recommendations to the Minister for Environment under s. 46 of the *Environmental Protection Act 1986*:

1. The environmental requirements of the original conditions of Ministerial statement 1114, as amended by Ministerial statement 1160, be retained for the

proposal, subject to the condition amendments below to ensure offsets are provided for the significant residual impact of the original proposal when combined with the approved section 45C change issued in October 2021.

2. It is appropriate to delete implementation conditions 13-1 and 13-3 (Offsets) and replace them with new implementation conditions. After complying with s. 46(8) of the *Environmental Protection Act 1986*, the Minister may issue a statement of decision to change conditions 13-1 and 13-3 (Offsets) of Ministerial statement 1114, as amended by Ministerial statement 1160, in the manner provided for in the attached recommended statement (Appendix A).

Appendix A: Recommended conditions

STATEMENT TO AMEND THE IMPLEMENTATION CONDITIONS APPLYING TO A PROPOSAL

(Section 46 of the *Environmental Protection Act 1986*)

THORNLIE-COCKBURN LINK

Proposal: Construction and operation of 14.5 km of new dual railway track between Thornlie Station and Cockburn Central Station and duplication of 3 km of the existing single railway track between Beckenham Junction and Thornlie Station with two new stations at Ranford and Nicholson Roads and modification of the existing Thornlie and Cockburn Central Stations. The proposal includes relocation of the existing freight railway track within the development envelope.

Proponent: Public Transport Authority of Western Australia
Australian Company Number 61 850 109 576

Proponent address: Public Transport Centre, West Parade
PERTH WA 6000

Report of the Environmental Protection Authority: 1731

Preceding Statement/s relating to this proposal: 1114 and 1160

Pursuant to section 45 of the *Environmental Protection Act 1986*, as applied by section 46(8), it has been agreed that the implementation conditions set out in Ministerial statement No. 1114 as amended by Ministerial statement 1160, be amended as specified in this Statement.

Condition 13 is changed.

Condition 13-1 of Ministerial statement 1114 as amended by Ministerial statement 1160 is deleted and replaced with:

13-1 The proponent shall undertake offsets with the objective of counterbalancing the significant residual impact on the environmental values of:

- (1) 2.6 ha of Low lying *Banksia attenuata* woodlands or shrublands ('floristic community type 21c') **Priority 3(i) Ecological Community**;
- (2) 23.7 ha of Carnaby's black cockatoo (*Calyptorhynchus latirostris*) foraging habitat;
- (3) 17.1 ha of forest red-tailed (*Calyptorhynchus banksii naso*) and Baudin's (*Calyptorhynchus baudinii*) black cockatoos foraging habitat;

- (4) 51 potential Carnaby's and forest red-tailed black cockatoo potential breeding trees;
- (5) 3.9 ha of ***Caladenia huegelii* habitat**;
- (6) 3.13 ha of Conservation Category Wetlands; and
- (7) 3.0 ha of Bush Forever site 388.

Condition 13-3 of Ministerial statement 1114 as amended by Ministerial statement 1160 is deleted and replaced with:

13-3 The Offset Strategy required by condition 13-2 shall:

- (1) identify an area or areas to be protected, managed and/or restored for conservation or enhancement of the environmental values identified in condition 13-1;
- (2) identify the area(s) of land to be protected, managed and/or restored that must contain:
 - (a) at least 9.4 ha of wetlands which meet the criteria of Conservation Category Wetlands at the time of acquisition, or after rehabilitation;
 - (b) at least 153 Carnaby's and forest red-tailed black cockatoo breeding trees or potential breeding trees; and
 - (c) 6.0 ha of vegetation communities and/or complexes with a vegetation condition that is commensurate with the Bush Forever sites being impacted;
- (3) include a completed WA Offsets Template, as described in the WA Environmental Offsets Guidelines 2014, and the *Environment Protection and Biodiversity Conservation Act 1999* Environmental Offsets Policy Assessment Guide (October 2012), or any approved updates of these guidelines, quantifying how the proposed offset counterbalances the significant residual impact to the following:
 - (a) 2.6 ha of Low lying *Banksia attenuata* woodlands or shrublands ('floristic community type 21c') Priority 3(i) Ecological Community;
 - (b) 23.7 ha of Carnaby's black cockatoo (*Calyptorhynchus latirostris*) foraging habitat;
 - (c) 17.1 ha of forest red-tailed (*Calyptorhynchus banksii naso*) and Baudin's (*Calyptorhynchus baudinii*) black cockatoos foraging habitat; and
 - (d) 3.9 ha of ***Caladenia huegelii* habitat**;

- (4) identify the environmental values of the offset area(s);
- (5) demonstrate through consideration of the principles of the WA Environmental Offsets Policy how the proposed offset counterbalances the significant residual impacts identified in condition 13-1; and
- (6) define the role of the proponent and/or any relevant management authority or other third party involved in delivering the offset.

Table 1: Abbreviations and definitions

Acronym or Abbreviation	Definition or Term
<i>Caladenia huegelii</i> habitat	All known, suitable and supporting habitat important to the survival of <i>Caladenia huegelii</i> as defined within the Grand spider orchid (<i>Caladenia huegelii</i>) recovery plan (Department of Environment and Conservation 2009)
ha	Hectare
Priority 3(i) Ecological Community (referred to in condition 13-1(1))	The extent of the Low lying <i>Banksia attenuata</i> woodlands or shrublands ('floristic community type 21c') Priority 3(i) Ecological Community encompassed in the Commonwealth listed Threatened Ecological Community Banksia Woodlands of the Swan Coastal Plain

Appendix B: Decision-making authorities

The decision-making authorities in the table below have been identified for the purposes of s. 45 as applied by s. 46(8) of the *Environmental Protection Act 1986*.

Decision-Making Authority	Legislation (and approval)
1. Minister for Aboriginal Affairs	<i>Aboriginal Heritage Act 1972</i> - s. 18 consent to impact a registered Aboriginal heritage site
2. Minister for Environment	<i>Biodiversity Conservation Act 2016</i> - s. 40 authority to take or disturb threatened species <i>Swan and Canning Rivers Management Act 2006</i> - s. 80 development within the development control area <i>Contaminated Sites Act 2003</i> - s. 58 disturbance of contaminated sites
3. Minister for Planning	<i>Planning and Development Act 2005</i> - scheme amendments
4. Minister for Transport	<i>Land Administration Act 1997</i> - s. 183 authority to enter land and do anything that is authorised to be done under the rail enabling legislation
5. Minister for Water	<i>Rights in Water and Irrigation Act 1914</i> - s.17 permit to interfere with beds and banks - s. 5C licence to take - s. 26D licence to construct or alter a well - dewatering licence
6. CEO, Department of Biodiversity, Conservation and Attractions	<i>Biodiversity Conservation Act 2016</i> - authority to take flora and fauna (other than threatened species)
7. CEO, Department of Water and Environmental Regulation	<i>Environmental Protection Act 1986</i> - Part V works approval and licence - Part V clearing permit - Approval of noise management plans for construction activities outside prescribed hours
8. Chief Dangerous Goods Officer, Department of Mines, Industry Regulation and Safety	<i>Dangerous Goods Safety Act 2004</i> - storage and handling of dangerous goods
9. Chief Health Officer, Department of Health – Public Health Division	<i>Health Act 1911</i> Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulation 1974 - treatment of sewage intended to serve a building that is not a single dwelling or any other building that produces more than 540 litres of sewage per day

10. Chair, Western Australian Planning Commission	<i>Planning and Development Act 2005</i> - development applications for station precincts
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Note: In this instance, agreement is only required with DMA 1, 2, 3, 4, and 5 since these DMAs are Ministers.

References

EPA 2016a, *Environmental factor guideline – Flora and vegetation*, Environmental Protection Authority, Perth, WA.

EPA 2016b, *Environmental factor guideline – Terrestrial fauna*, Environmental Protection Authority, Perth, WA.

EPA 2018, *Environmental factor guideline – Inland waters*, Environmental Protection Authority, Perth, WA.

EPA 2021a, *Environmental Impact Assessment (Part IV Division 1 and 2) Procedures Manual*, Environmental Protection Authority, Perth, WA.

EPA 2021b, *Statement of environmental principles, factors, objectives and aims of EIA* Environmental Protection Authority, Perth, WA.

Government of Western Australia 2011, *WA Environmental Offsets Policy*, Government of Western Australia, Perth, WA.

State of Western Australia 2021, *Western Australian Government Gazette*, No. 180, 22 October 2021.