Department of Planning and Environment

Our ref:DOC22/899754
Your ref: SSD-35160796

Kurtis Wathen
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Planning and Assessment Group
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Dear Kurtis

Apsley Battery Energy Storage System – EIS Exhibition

Thank you for your e-mail dated 15 September 2022 to the Biodiversity, Conservation and Science Directorate (BCS) of the Department of Planning and Environment (DPE) inviting comments on the Environmental Impact Statement (EIS) for the Apsley Battery Energy Storage System.

BCS has reviewed the Biodiversity Development Assessment Report (BDAR) for the project.

BCS's biodiversity recommendations are provided in **Attachment A** and detailed comments are provided in **Attachment B**.

If you require any further information regarding this matter, please do not hesitate to contact Kate Tierney, Senior Conservation Planning Officer, via kate.tierney@environment.nsw.gov.au or (02) 4904 2782.

Yours sincerely

Michelle Howarth
A/Senior Team Leader Planning North West
Biodiversity, Conservation and Science Directorate

13 October 2022

Attachment A – BCS's Recommendations

Attachment B – BCS's Detailed Comments

BCS's recommendations

Apsley Battery Energy Storage System – Environmental Impact Statement

BAM	Biodiversity Assessment Method
BAM-C	Biodiversity Assessment Method Calculator
BC Act	*Biodiversity Conservation Act 2016*
BC Regulation	Biodiversity Conservation Regulation 2017
BDAR	Biodiversity Development Assessment Report
EPBC Act	*Environmental Protection and Biodiversity Conservation Act 1999*
MNES	Matters of National Environmental Significance
PCT	Plant Community Type
SAII	Serious and Irreversible Impacts
TEC	Threatened Ecological Community
TBDC	Threatened Biodiversity Data Collection
VI score	Vegetation Integrity Score

Recommendations

1.1. Revise vegetation extent mapping to include all areas of native vegetation within mapping.

1.2. Revise percentage of native vegetation cover class to be consistent with the mapping. A subsequent revision of the candidate threatened species list generated for the project may occur.

2.1. Confirm the impact area for the connection of 132kV transmission lines from the BESS and the existing powerline to the east.

2.2. Spatially show the connection area within all relevant Figures in the BDAR.

2.3. In the face of impact uncertainty, calculate a maximum credit obligation for the worst-case scenario.

2.4. Quantify and assess the impacts on biodiversity for this additional impact area. Avoidance and minimisation of impacts must be demonstrated.

3.1. All areas of the subject land that do not contain native vegetation must be clearly identified on the Site Map in accordance with section 4.1.2 of the BAM.

4.1. Map the vegetation at the subject site using data from plot-based vegetation survey.

4.2. The map typography should be improved to clearly show the vegetation zones (including any TECs) on the subject land.

5.1. Revise the exclusion of ecosystem credit species with adequate justification.

6.1. Revise the process for excluding, or determining absence of, the candidate flora species credit species.

7.1. Consider the presence of all EPBC Act listed threatened entities at the Subject Land. All land (including Category 1 exempt land) must be considered in this assessment.

7.2. Confirm that no EPBC Act listed threatened entities occur at the subject land. Alternatively, if EPBC Act listed threatened entities do occur at the Subject Site, submit a referral to the Department of Climate Change, Energy, the Environment and Water.

8.1. Revise the identification of entities at risk of SAII to conform with BAM 2020.

Attachment B

BCS's detailed comments

Apsley Battery Energy Storage System – Environmental Impact Statement

1. The mapping of the native vegetation extent requires revision

Section 4.1 of Biodiversity Assessment Method (BAM) 2020 states:

"The assessor must map the extent of native vegetation cover on the subject land…"

The assessor must prepare a Location Map showing the boundary area of the subject land, and the assessment area, which includes the subject land and a 1500 m buffer surrounding the outside edge of the boundary of the subject land (BAM 2020 Section 3.1.2). Assessors must identify the extent of woody and non-woody native vegetation within the assessment area (BAM 2020 Section 3.2). The native vegetation extent on the subject land includes all areas of native vegetation, which extends to native ground cover and tree canopy cover (BAM 2020 Section 4.1). All parts of the subject land that do not contain native vegetation must be clearly shown on the Site Map. Justification as to why these areas do not support any native vegetation must be provided in the BAR (BAM 2020 Section 4.1.2).

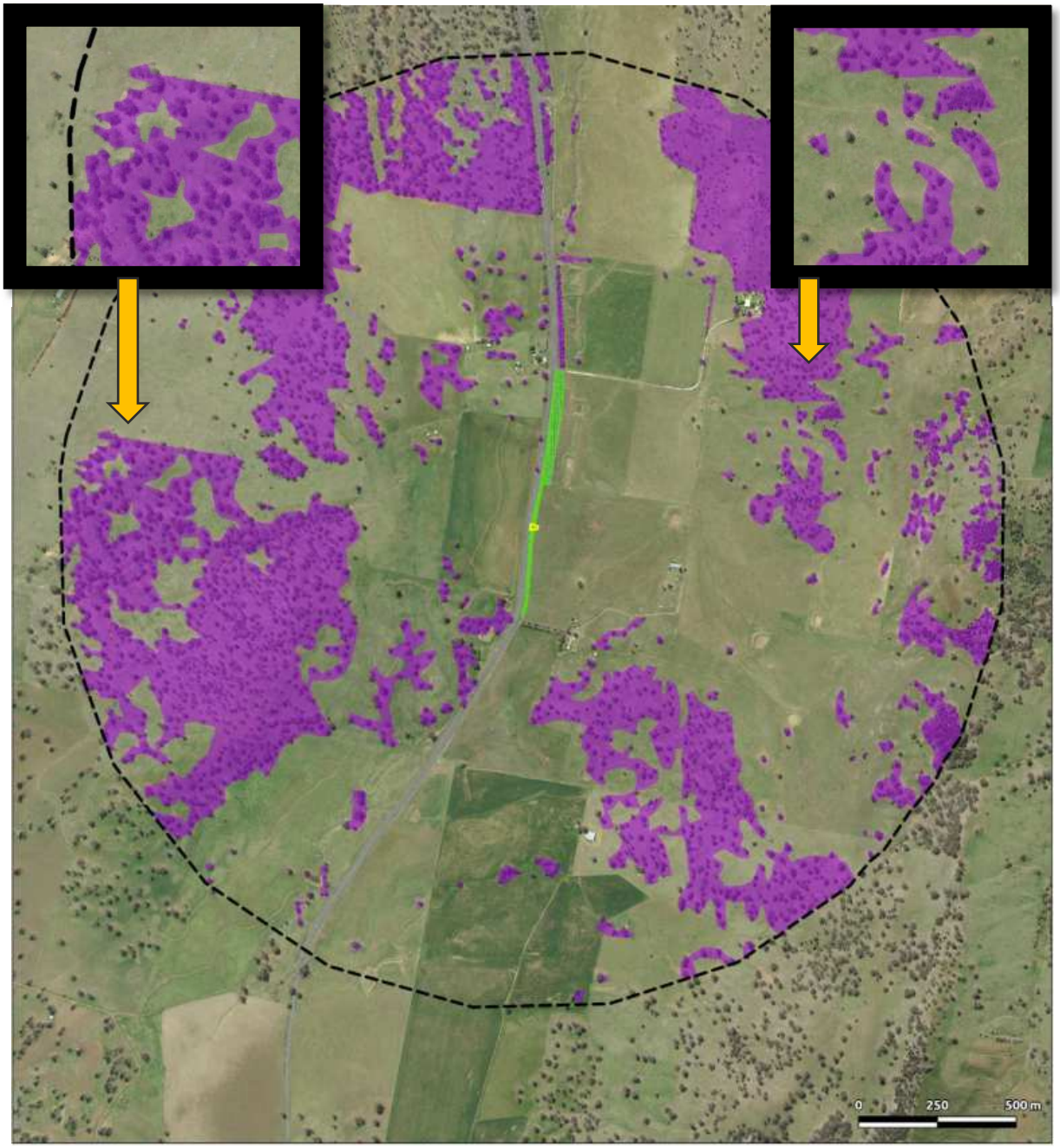
The percentage of native vegetation cover in the assessment area is then assigned to a class (0-10%, 10-30%, 30-70%, 70-100%). The class assigned is important because it is used to assess habitat suitability for threatened species (BAM 2020 Section 3.2).

Figure 2 – Native Vegetation Cover and Patch in the Biodiversity Development Assessment Report (BDAR) shows the Native Vegetation within 1500m of Subject Land.

BCS notes that the native vegetation cover within the 1500m landscape buffer predominantly maps areas of dense woody vegetation as native vegetation (See Figure 1 below). The mapping also excludes some woody vegetation without explanation (See insert in top right-hand corner in Figure 1 below).

The assessor should undertake finer scale vegetation extent mapping and include all native vegetation (including scattered paddock trees), in accordance with the requirements set out within Section 3.2 of BAM 2020. Justification can be used to exclude areas that do not support any native vegetation.

The percentage of native vegetation cover in the assessment area may need to be revised. If areas of native vegetation extent are changed within the BDAR, this must also be made consistent within the Biodiversity Assessment Method Calculator (BAM-C).



Recommendations

1.1. Revise vegetation extent mapping to include all areas of native vegetation within mapping.

1.2. Revise percentage of native vegetation cover class to be consistent with the mapping. A subsequent revision of the candidate threatened species list generated for the project may occur.

2. Clearly articulate the area of impact for the proposed development

Section 2 of the BAM 2020 states:

For proposals other than an application for a biodiversity stewardship agreement, the introduction to the BAR must:

a. Clearly identify the boundary of the subject land that shows the operational footprint and the

b. construction footprint for any additional clearing associated with temporary/ancillary construction facilities and infrastructure…"

Section 3.3 of the Environmental Impact Statement (EIS) lists the primary components associated with the installation of the BESS. This list includes:

"Underground or overhead 132kV transmission line to connect the BESS to the existing powerline to the east;"

Section 2.2 of the BDAR states:

"There is a farm dam to the east of the proposed BESS…"

Table 4 – Prescribed Impacts on the proposed BESS site states:

"There is one farm dam in the north east corner of the proposed BESS site"

Figure 1 – Location and Site Layout in the BDAR shows the site, development area and the disturbed area. The location of the Electricity Easement, Electricity Transmission Line and farm dam are also shown in the east of the site. The disturbance area does not connect to either the Electricity Easement or the Electricity Transmission Line.

The development footprint of the 132kV transmission line connection between the BESS and the existing powerline in the east must be shown including any additional clearing associated with this ancillary development. The impact may be different depending upon if the connection is underground or overhead. In the absence of confirmation about the connection method to be selected, a worst-case scenario impact should be assessed.

Recommendations

2.1. Confirm the impact area for the connection of 132kV transmission lines from the BESS and the existing powerline to the east.

2.2. Spatially show the connection area within all relevant Figures in the BDAR.

2.3. Where there is impact uncertainty, calculate a maximum credit obligation for the worst-case scenario.

2.4. Quantify and assess the impacts on biodiversity for this additional impact area. Avoidance and minimisation of impacts must be demonstrated.

3. Clearly identify all parts of the subject land that do not contain native vegetation on the Site Map.

Areas that are not native vegetation do not need to be assessed (unless the land is proposed for a biodiversity stewardship sites or the area is assessed as habitat for threatened species). Section 4.1.2.2 of the BAM states that all parts of the subject land that do not contain native vegetation must be clearly shown on the Site Map.

Section 1 of the BDAR states:

Premise Australia Pty Ltd (Premise) ecologists have undertaken a site inspection and identified the majority of the subject land to be consistent with Category 1 – exempt land under Section 60H of the Local Land Services Act 2013 (LLS Act). This report provides justification for the Category 1 land for review and endorsement by the Biodiversity, Conservation and Science Directorate of the Department of Planning, Industry and Environment. Category 1 land does not require assessment under the Biodiversity Assessment Method as the land can lawfully be cleared under the LLS Act. Any part of the subject land that is not classified as Category 1 land will be the subject of a BDAR.

Section 3.1 of the BDAR details the field survey:

Two BAM quadrats were undertaken on 1 November 2021 to provide floristic and structural data, as well as to calculate the Vegetation Integrity (VI) Score. Rapid Assessment Spot Samples were also undertaken in adjacent areas to describe the floristic diversity in the surrounding landscape (Figure 4). BAM quadrat WELG1 was located on Category 1 Land and is not considered further in this BDAR. BAM quadrat WELG2 was located along the Mitchell Highway at the access point to the proposed BESS. Due to the linear nature of the vegetation, a 40 m x 10 m quadrat was undertaken for safety and practical application of the BAM. WELG2 is the representative plot for the Subject Land.

Figure 1 – Location and Site Layout shows the BDAR digital aerial photography with several identified features including the site, the development area and the disturbed area. BCS notes that Figure 1 does not identify any area on the subject land or elsewhere as 'not native vegetation'.

Recommendations

3.1. All areas of the subject land that do not contain native vegetation must be clearly identified on the Site Map in accordance with section 4.1.2 of the BAM.

4. Vegetation zones (including Threatened Ecological Communities) on the subject land must be clearly identified and mapped.

Section 4.2 of the BAM states that the assessor must identify and map the distribution of Plant Community Type (PCTs), or the most likely PCTs, and all Threatened Ecological Community (TECs) on the subject land. The identification must be in accordance will the NSW PCT classification as described in the BioNet Vegetation Classification. The assessor must perform a plot-based vegetation survey to identify the most likely PCTs of the subject land. PCT identification must be identified using the data collected and relevant sources referenced in the BAM.

Section 4.2.3 of the BAM states that the assessor must not identify native vegetation as a derived PCT in the BioNet Vegetation Classification. Assessors must identify the original PCT from which the derived PCT has developed, e.g., for the derived PCT, shrubby mid-storey in an open woodland, the original PCT is open woodland.

Section 3.1 of the BDAR states:

On the balance of the analysis above, it was concluded that derived grassland of PCT 266 is the most suitable PCT for the Subject Land.

Section 4.2.2 of the BAM states that the assessor must identify any TECs that are associated with a PCT, or the likely PCTs.

Section 4.5 of the BDAR states:

The Subject Land meets the broad definition of Box Gum Grassy Woodland under the BC Act.

Figure 3 - State Vegetation Type Mapping in the BDAR shows only the State Vegetation Type Mapping. The most suitable PCT 266 does not appear to be shown on the Subject Land. The scale of Figure 3 does not make it possible to clearly discern the PCT for the access point area. Figure 3 shows some derived PCTs. No Threatened Ecological Communities (TECs) are shown on Figure 3. The source of this mapping is referenced as the State of NSW, Department of Customer Service, Spatial Services 2021 and the State of NSW, Department of Planning and Environment 2021.

Recommendations

4.1. Map the vegetation at the subject site using data from plot-based vegetation survey.

4.2. The map typography should be improved to clearly show the vegetation zones (including any TECs) on the subject land.

5. The exclusion of ecosystem credit species requires revision

Section 4.4 of the BDAR states:

"Twenty-seven ecosystem species were retained in the BAM-C as they do not have specific habitat constraints. It is very unlikely that any of these species occur on the Subject Land due to the lack of trees or shrubs for shelter, rocks or logs for refuge, and the constant disturbance of passing Highway traffic."

Section 7.2 of the BDAR states:

"Three plants, one insect, twenty-six birds and five mammals were identified by BAM-C as potentially occurring on the Subject Land. These species have not been recorded on the Subject Land and are not considered likely to occur based on the poor condition of the available habitat."

The following fauna species have been listed as 'Included in BAM-C' in Table 3 – Predicted Threatened Species:

- Dusky Woodswallow
- Gang-gang Cockatoo
- Speckled Warbler
- Spotted Harrier
- Brown Treecreeper (eastern subspecies)
- Varied Sittella
- Black Falcon
- Purple-crowned Lorikeet
- Little Lorikeet
- Little Eagle
- White-throated Needletail
- Square-tailed Kite
- Hooded Robin (south-eastern form)
- Turquoise Parrot
- Barking Owl
- Scarlet Robin
- Flame Robin
- Superb Parrot
- Grey-crowned Babbler (eastern subspecies)
- Diamond Firetail
- Spotted-tailed Quoll
- Yellow-bellied Sheathtail-bat

All ecosystem credit species have been removed from further assessment in the BDAR. The removal of all ecosystem species is not consistent with the assessment requirements set out in Steps 2 and 3 of Section 5 of the BAM. A species can only be removed from the list if the species:

A) Has habitat constraints listed in the Threatened Biodiversity Data Collection (TBDC) and none of these constraints are present on the site. Documentation in the BDAR should reflect the TBDC information and evidence that the features are not present (field data); or

B) where habitat constraints are not listed in the TBDC and the assessor proposes to remove the species based on absence of habitat constraints or known microhabitats that the species requires to persist, the assessor must provide adequate justification in the BDAR,

this must be based on evidence such as published literature. As a minimum, the justification must include;

i. the specific habitat constraint(s) or microhabitat missing from the vegetation zone; and

ii. a description of the field technique used to assess the presence of the constraint or microhabitat (e.g., the survey effort and technique used to assess hollow-bearing trees) and any other data or information used to make the decision; or

C) has geographic limitations listed in the species' NSW profile and the site is outside of the defined geographic area (note listed geographic limitations may be specific to IBRA sub regions); or

D) is vagrant to the area. Vagrancy is taken as the record being well outside the species range or natural distribution. The suspect record will need to be reviewed against the species known distribution and the assessor will need to confirm with species experts that it is likely to be a vagrant. If agreed by experts the assessor should contact BCS to have the record quarantined from BioNet Atlas and re-labelled as vagrant. The BDAR will need to contain supporting information such as who was contacted, when, their credentials and the resultant response from BCS.

Adequate justification must be provided by the assessor to exclude species. In the absence of adequate justification, species must not be excluded.

Recommendations

5.1. Revise the exclusion of ecosystem credit species with adequate justification.

6. The exclusion of candidate species credit species based on degraded habitat requires evidence.

The BDAR excluded the following candidate species credit species based on degraded habitat:

- *Euphrasia arguta*
- *Grevillea wilkinsonii* (Tumut Grevillea)
- *Prasophyllum sp. Wybong* (Prasophyllum sp. Wybong)

Assessors can only exclude candidate species credit species based on degradation of habitat features with supporting evidence. A candidate species credit species that does not have suitable habitat as per the BAM Subsection 5.2.3(2.a) does not require further assessment.

Section 4.4.3 of the BAM 2020 Operational Manual – Stage 1 states:

"Describing a vegetation zone as degraded or low/poor condition is not adequate justification to remove a candidate species credit species from the generated list."

Assessors must use evidence to support the absence or degradation of habitat features including microhabitats required by the species (supported by evidence such as published literature) and details of the habitat constraints listed in the TBDC for the species (where relevant). This evidence could include reference to the attribute scores for the Vegetation Integrity Score (VI score) assessment to illustrate if these conform to the habitat constraint or microhabitats on the site, photographic evidence, maps, etc.

Alternatively, species credit species presence can be determined via a survey, expert report or presence can be assumed without survey. Clear justification documenting the reasoning in the BAR is required for survey of species credit species outside of the time period specified in the TBDC.

Recommendations

6.1. Revise the process for excluding, or determining absence of, the candidate flora species credit species.

7. Consider the presence of any Matters of National Environmental Significance (MNES) at the subject site

Section 4.2 of BAM 2020 states:

The assessor must identify and map the distribution of PCTs, or the most likely PCTs, and all TECs on the subject land. The identification must be in accordance with the NSW PCT classification as described in the BioNet Vegetation Classification. The identification of TECs must be consistent with the Threatened Species Scientific Committee Final Determination for the TEC.

Section 3.1 of the BDAR states:

BAM quadrat WELG1 was located on Category 1 Land and is not considered further in this BDAR.

Appendix B - Biodiversity Conservation Division Letter of Endorsement in the BDAR states:

"It should be noted that an assessment of biodiversity values within the site must also consider threatened entities identified under other legislation where relevant. As an example, potential impacts to Matters of National Environmental Significance (MNES) under the Environment Protection and Biodiversity Conservation Act 1999 *on Category 1 – exempt land must be considered."*

The BDAR acknowledges that the most suitable PCT for the subject site, PCT 266 is associated with the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland Critically Endangered Ecological Community, listed on both the *Biodiversity Conservation Act 2016* (BC Act) and *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) Acts. The assessor states that the Subject Land meets the broad definition of Box Gum Grassy Woodland under the BC Act. Section 4.5 of the BDAR states that:

The Definition of Box Gum Grassy Woodland under the EPBC Act requires the site to have a predominantly native understorey, be at least 0.1 ha or greater in size, and include at least one 'important' species listed on the determination (DEH, 2006). The Subject land is 0.03 ha, is dominated by exotic species and does not contain any 'important' species, therefore does not meet the definition of Box Gum Grassy Woodland under the EPBC Act.

Where an action will impact on Commonwealth listed entity that is not listed under NSW law, the Commonwealth will set the assessment requirements and consent conditions for that entity. The Commonwealth is the decision-maker for all actions that significantly impact on MNES under the EPBC Act. If the proposal may impact upon a MNES, a referral must be submitted to the Commowealth's Department of Climate Change, Energy, the Environment and Water to determine whether the proposal action will significantly impact the matter. If so, the action will be determined a controlled action and will require approval by the Australian Government.

The assessor has not considered if the Category 1 land, with respect to if this area meets the criteria for an EPBC Act-listed TEC. If the vegetation in the Category 1 land meets the condition threshold for an EPBC Act listing it must be referred to the Commonwealth for consideration.

Recommendations

7.1. Consider the presence of all EPBC Act listed threatened entities at the Subject Land. All land (including Category 1 exempt land) must be considered in this assessment.

7.2. Confirm that no EPBC Act listed threatened entities occur at the subject land. Alternatively, if EPBC Act listed threatened entities do occur at the Subject Site, submit a referral to the Department of Climate Change, Energy, the Environment and Water.

8. Consideration of Serious and Irreversible Impacts (SAII) is reserved for species identified at risk at the subject site

Section 4.6 of the BDAR states:

"Seven species identified as potentially occurring by BAM-C are considered at risk of SAII (Table 3). Three plants; Euphrasia arguta, Prasophyllum sp. Wybong, Tumut Grevillea (Grevillea wilkinsonii); one insect, Golden Sun Moth (Synemon plana); two birds, Regent Honeyeater (Anthochaera phrygia), Swift Parrot (Lathamus disolor) and one mammal, Large Bent-winged Bat (Miniopterus orianae oceanensis)."

Section 9.1 of BAM 2020 states:

"The determination of a serious and irreversible impact on biodiversity values is to be made by the decision-maker in accordance with the principles set out in the BC Regulation."

The assessor is required to identify every threatened entity at risk of an SAII that would be impacted by the proposal.

BAM-C does not determine species presence for species credit species. Species presence must be determined by the assessor. For most species at development sites, the assessor can conduct a survey or obtain an expert report to determine presence or assume presence without survey. No further assessment is required for a species if the survey or expert report confirms that it is not present, or is unlikely to be present, on the subject land.

Euphrasia arguta, Prasophyllum sp. Wybong and Tumut Grevillea (*Grevillea wilkinsonii*) are identified as species credit species in the BDAR.

None of the species are identified at the subject site, following survey to determine species presence. Therefore, the assessor does not need to identity these entities as being at risk of SAII.

Recommendations

8.1. Revise the identification of entities at risk of SAII to conform with BAM 2020.