



Department of Planning and Environment

Tatsiana Bandaruk
Department of Planning and Environment
4 Parramatta Square
PARRAMATTA NSW 2150

Our Ref: DOC22-486265
Senders Ref: SSD-40138508

Via Major Projects Portal: PAE-44847761

28 June 2022

Dear Ms Bandaruk

Subject: Request for Secretary's Environmental Assessment Requirements – Baldon Wind Farm (SSD 40138508)

Thank you for your email dated 14 June 2022 seeking input from the Biodiversity and Conservation Division (BCD) into the Department of Planning and Environment Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the Baldon Wind Farm (SSD 40138508).

BCD has reviewed the documentation and provides SEARs for the proposed development in **Attachment A**. Guidance material is listed in **Attachment B**.

BCD recommends that the EIS appropriately address the following:

1. Biodiversity
2. Flooding

The EIS should fully describe the proposal, the existing environment, including threatened species habitat not associated with vegetation communities such as paddock trees, and impacts of the development including the location and extent of all proposed works that may impact on flooding and biodiversity. The scale and intensity of the proposed development should dictate the level of investigation. It is important that all conclusions are supported by adequate data. The assessment must include all ancillary infrastructure associated with the project such as roads, water and power supplies, and Rural Fire Service requirements for asset protection. Strategies for adaptive management and associated monitoring for the project will need to conform to the most current NSW and Australian standards and guidelines for windfarm developments. Note that regional-scale Plant Community Type (PCT) mapping may not be accurate at a site scale so should not be relied upon for the assessment.

Biodiversity

The anticipated impact will need to be determined as part of the EIS using the Biodiversity Assessment Method 2020 (BAM) and documented in a Biodiversity Development Assessment Report (BDAR). Survey methods must be consistent with BAM requirements, unless otherwise agreed with BCD.

The Scoping Report indicates the likelihood of a number of threatened ecological communities (TEC) and species under the BC Act and EPBC Act. In addition to those mentioned, the likelihood of the EPBC TEC, *Natural Grasslands of the Murray Valley Plains*, will need to be considered.

We note that Table 7-2 in the Scoping Report does not provide a comprehensive list of all the threatened entities that are known or likely to occur in the subject site. Threatened plants omitted from Table 7-2 include but are not limited to *Brachyscome muelleroides* and *Pilularia novaehollandiae*. There needs to be a full assessment of the bird and bat species susceptible to collision, notably raptors which have been shown to be at high risk of collision. Table 7-2 does not

include the vulnerable Black Falcon which occurs across the Hay Plain and has been shown to be a high-risk species for collision.

While National Parks and Conservation Areas have been identified as potentially sensitive areas in the wider region, their locations aren't accurately described, and the list isn't complete. Additionally, Gayini (formerly Nimmie-Caira) has not been considered. Gayini is to the North/North West of the project site on the Lowbidgee Floodplain and is an important breeding site for waterbirds.

The proponent must set out how impacts to biodiversity will be avoided and minimised. The proposal shows turbines are to be constructed in native grasslands, which fails to demonstrate the requirement in the BAM to initially avoid biodiversity impact. Native grasslands may also provide habitat for the endangered Plains-wanderer which is a Serious and Irreversible Impact (SAII) species. The EIS needs to consider alternative selection of turbine locations to avoid clearance of native vegetation or otherwise fully justify the siting of the turbines and associated ancillary facilities.

Due to the nature of the development the project must document commitments to mitigation measures proposed to manage impacts, including impacts which are uncertain, in accordance with Section 8.4 of the BAM 2020. This will inform the preparation of a Bird and Bat Adaptive Management Plan for the development. BCD is currently requiring a minimum of 12 months of bird and bat survey covering the four seasons to ensure that an assessment of risk can cover residents and migrants.

Minimum requirements for the biodiversity assessment are listed in Appendix K of the BAM. The Accredited Assessor preparing the BDAR is advised to follow the BDAR template (DPE 2022). When the BDAR is submitted, we request that the BAM accredited assessor provides the required spatial data that reflects the maps and the ecosystem and species credit liability directly to BCD. We do not require jpeg files. While other digital data can be uploaded into the Biodiversity Offset and Agreement Management System (BOAMS), there is currently no function to upload zip or spatial files.

Given the location of the proposal in relation to the South West Renewable Energy Zone, the cumulative impact of electricity generation in the surrounding region should be assessed through application of the Cumulative Impact Assessment Guidelines for State Significant Projects.

The EIS should identify any relevant Matters of National Environmental Significance, and whether the proposal has been referred to the Australian Government or already determined to be a controlled action under the EPBC Act.

Flooding

The EIS should specifically address the attached requirements for flooding and conduct flood modelling for the purposes of appropriately locating infrastructure and for assessing impacts, including on waterway crossings for site access.

If you have any questions about this advice, please contact Michael Todd, Senior Conservation Planning Officer via rog.southwest@environment.nsw.gov.au or 03 5021 8915.

Yours sincerely



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South West Branch
Biodiversity and Conservation Division
Department of Planning and Environment

ATTACHMENT A – Recommended Environmental Assessment Requirements for Baldon Wind Farm (SSD 40138508)
ATTACHMENT B – Guidance material

Attachment A – Recommended Environmental Assessment Requirements for Baldon Wind Farm (SSD 40138508)

Sources of guidance material for terms in [blue](#) are in Attachment B

Biodiversity
1. Biodiversity impacts related to the proposed development are to be assessed in accordance with Section 7.9 of the Biodiversity Conservation Act 2016 using the Biodiversity Assessment Method (BAM) 2020 and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and the BAM, unless DPE determines that the proposed development is not likely to have any significant impact on biodiversity values.
2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect, uncertain and prescribed impacts in accordance with the BAM.
3. The BDAR must include details of the measures proposed to address the offset obligation as follows; a. The total number and classes of biodiversity credits required to be retired for the development/project; b. The number and classes of like-for-like biodiversity credits proposed to be retired; c. The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules; d. Any proposal to fund a biodiversity conservation action; e. Any proposal to make a payment to the Biodiversity Conservation Fund. If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.
4. The BDAR must be submitted with all digital spatial data associated with the survey and assessment as per Appendix K of the BAM.
5. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the Biodiversity Conservation Act 2016.
6. The EIS must assess the impact of wind turbine strikes on protected animals including; a) Predict the likelihood of impact on aerial species resident in, or likely to fly over, the project area, including but not limited to bat/bird strike and barotrauma. b) Predict the rate of impact per turbine per year for species likely to be affected. c) Justify predictions of likelihood of impact and rates of impact with reference to relevant literature and other published sources of information. d) Predict the consequences of impacts for the persistence of bioregional populations, with reference to relevant literature and other published sources of information. e) Predict and map the likely zone of disturbance around wind turbines for aerial species resident in, or likely to fly over, the project area, with reference to relevant literature and other published sources of information.

f) Map significant landscape and habitat features within the zone of disturbance for species likely to be affected, including but not limited to hollow bearing trees, nest trees, microbat habitat and important habitat for migratory species. g) Predict the likelihood and describe the nature of indirect impacts on aerial species resident in, or likely to fly over, the project area including but not limited to barriers to migratory pathways and breeding, feeding and resting resources. h) For migratory species, predict the impact of avoidance behaviour relative to migration distances and the availability of suitable habitat for breeding, feeding and resting over the migration route, with reference to relevant literature and other sources of published information. i) Justify prediction of likelihood and nature of impact, with reference to relevant literature and other published sources of information. j) Predict the cumulative impact of the project together with existing wind farms with respect to movement patterns and the use of adjacent habitat and provide justification for these predictions.
Flooding
7. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including: a. Flood prone land. b. Flood planning area, the area below the flood planning level. c. Hydraulic categorisation (floodways and flood storage areas). d. Flood hazard.
8. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP flood levels and the probable maximum flood, or an equivalent extreme event.
9. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios: a. Current flood behaviour for a range of design events as identified in 7 above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
10. Modelling in the EIS must consider and document: a. Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies. b. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood. c. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories. d. Relevant provisions of the NSW Floodplain Development Manual 2005.
11. The EIS must assess the impacts on the proposed development on flood behaviour, including:

- a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
- b. Consistency with Council Floodplain Risk Management Plans.
- c. Consistency with any Rural Floodplain Management Plans.
- d. Compatibility with the flood hazard of the land.
- e. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
- f. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
- g. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.
- h. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council.
- i. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council.
- j. Emergency management, evacuation and access, and contingency measures for the development considering the full range of flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES.
- k. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

Attachment B – Guidance material

Title	Web address
<u>Relevant Legislation</u>	
<i>Biodiversity Conservation Act 2016</i>	www.legislation.nsw.gov.au/#/view/act/2016/63/full
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
<i>Environmental Planning and Assessment Act 1979</i>	www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
<u>Biodiversity</u>	
Biodiversity Assessment Method 2020 (DPIE 2020)	https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-2020
BDAR Template (DPE 2022)	https://www.environment.nsw.gov.au/research-and-publications/publications-search/guidance-for-the-biodiversity-development-assessment-report-template
BAM Assessor Resources (including links to Survey Guidelines, Registers and Databases)	https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/accredited-assessors/assessor-resources
BAM Assessor FAQ	https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/accredited-assessors/assessor-questions-and-answers
Biodiversity Values Map	www.lmbc.nsw.gov.au/Maps/index.html?viewer=BVMap
Guidance to assist a decision maker to determine a serious and irreversible impact (DPIE 2019)	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/guidance-decision-makers-determine-serious-irreversible-impact-190511.pdf
Ancillary rules: biodiversity conservation actions	www.environment.nsw.gov.au/resources/bcact/ancillary-rules-biodiversity-actions-170496.pdf
Ancillary rules: reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules	www.environment.nsw.gov.au/resources/bcact/ancillary-rules-reasonable-steps-170498.pdf
DPIE Threatened Species Profiles	www.environment.nsw.gov.au/threatenedspeciesapp/
BioNet Atlas	www.environment.nsw.gov.au/wildlifeatlas/about.htm
BioNet Vegetation Classification – see NSW Plant Community Type (PCT) classification link for PCT database login page.	http://www.environment.nsw.gov.au/research/Visclassification.htm
NSW SEED Data Portal (access to online spatial data)	https://www.seed.nsw.gov.au/
Fisheries NSW policies and guidelines	www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation

Title	Web address
Cumulative Impact Assessment Guidelines for Significant Projects	www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/Policy-and-legislation/SSPT-Guidelines/GD1259-RAF-Assessing-Cumulative-Impacts-Guide-final.pdf
<u>Water</u>	
Flooding	
Floodplain development manual	www.environment.nsw.gov.au/floodplains/manual.htm
Australian Rainfall and Runoff: A Guide to Flood Estimation	http://arr.ga.gov.au/
NSW Climate Impact Profile	climatechange.environment.nsw.gov.au/
Climate Change Impacts and Risk Management	www.environment.gov.au/climate-change/adaptation/publications/climate-change-impact-risk-management