

Your ref: SSD-53293710 Our Ref: DOC23/30885-11

Julia Green Senior Environmental Assessment Officer NSW Planning Department of Planning and Environment

Via email: julia.a.green@dpie.nsw.gov.au

Dear Ms Green

Subject: Request for Secretary's Environmental Assessment Requirements – Mallee Wind Farm (SSD 53293710)

Thank you for your email dated 17 January 2023 seeking input from the Biodiversity and Conservation Division (BCD) and the NSW National Parks and Wildlife Service (NPWS) into the Department of Planning and Environment Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for Mallee Wind Farm (SSD 53293710). BCD and NPWS acknowledge that the proposed project under Part 4.1 of the *NSW Environmental Planning and Assessment Act 1979* is providing for the proposed construction, operation and decommissioning of a 150-turbine wind farm within the South-West Renewable Energy Zone (South-West REZ).

BCD and NPWS have reviewed the supplied documents for SSD 53293710 on the Major Projects Portal at https://www.planningportal.nsw.gov.au/major-projects/projects/mallee-wind-farm.

We provide 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
- 3. Mallee Čliffs National Park

The EIS should fully describe the proposal and the existing environment, including threatened species habitat not associated with vegetation communities, such as paddock trees. Regional-scale Plant Community Type (PCT) mapping may not be accurate at a site scale so should not be relied upon for the assessment.

The description of the development should include the location and extent of all proposed works that may impact on flooding, biodiversity and the adjacent Mallee Cliffs National Park. The scale and intensity of the proposed development should dictate the level of investigation and all conclusions are to be supported by adequate data. The assessment must address any ancillary infrastructure associated with the project such as grid connection, roads, water and power supplies and Rural Fire Service requirements for asset protection and be included in the EIS as part of the project area. Strategies for adaptive management and associated monitoring for the project will need to conform to current NSW and Australian standards and guidelines for windfarm developments.

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. 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).

The *Biodiversity Conservation Act 2016* (BC Act) — sections 6.2(d) and 6.4(1) — sets out the requirement to apply the 'avoid, minimise, offset' hierarchy for development approvals. The proposal must demonstrate that impacts to threatened biodiversity have in the first instance, been avoided. Currently the proposal shows some turbines and ancillary infrastructure such as access tracks within native vegetation, which does not demonstrate the BAM requirement to initially avoid biodiversity impacts.

The Scoping Report has identified numerous threatened species and threatened ecological communities known or likely to occur within the project site. The threatened species listed in section 3.5 and Table 3.2 include numerous birds that have been found to be particularly susceptible to collision with wind turbines, including raptors such as the Little Eagle. A full assessment of the risk to bird and bat species and how such risk may be mitigated must be completed to inform the preparation of a Bird and Bat Adaptive Management Plan for the development.

BCD notes that multiple PCTs identified in the scoping report may be Threatened Ecological Communities (TECs) under the BC Act and/or the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The TECs include but are not limited to the Plains Mallee Box Woodlands of the Murray Darling Depression, Mallee Bird Community of the Murray Darling Depression, *Acacia loderi* shrublands and *Acacia melvillei* shrublands. The assessment of each should use the scientific committee determinations to assess the occurrence of each TEC.

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.

Where targeted surveys in associated PCTs have not been completed for candidate species due to access constraints (e.g. prolonged flooding), species must be assumed present until targeted survey effort can be completed prior to project approval and preferably before EIS exhibition. However, relying on the assumed presence approach does not enable the avoid and minimise requirement for those species/locations to be considered in the EIS.

Given the location of the proposal is within the South-West REZ, 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.

If the EIS and associated BDAR are not consistent with the BAM and further survey is required, this would need to be completed prior to approval of the project.

The required spatial data that reconciles maps and the ecosystem and species credit liability should be submitted concurrently with the BDAR. This data will need to be provided directly to BCD in appropriate format, while other digital data (e.g. jpegs) can be uploaded into the Biodiversity Offset and Agreement Management System.

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 project site is located approximately 16 km north-east of Buronga on land elevated above the Murray River floodplain. Numerous lower order ephemeral creek channels cross the project site through gently undulating topography that likely activate during local intense rainfall events. Given this, it is important that the hydrology of the site be investigated to aid in the site design and the placement of infrastructure to minimise flood risks.

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

Mallee Cliffs National Park

The proposal adjoins Mallee Cliffs National Park which is land reserved under Part 4 of the *National Parks and Wildlife Act 1974* (NP&W Act). NPWS appreciates the opportunity to provide input into the SEARs. NPWS requests that the requirements listed in Attachment A (12) be included in the SEARs to ensure the future preparation of an EIS explicitly considers land reserved under the NP&W Act.

Prior to accessing land reserved under the NP&W Act to conduct any survey or environmental investigation, the proponent must seek prior consent from the NPWS Manager, Lower Darling Area via npws.lowerdarling@environment.nsw.gov.au. NPWS and the Australian Wildlife Conservancy are delivering rewilding projects in Mallee Cliffs National Park under a partnership. It is recommended that both organisations are added to the project's stakeholder lists, detailed in the Scoping Report for the proposal (Table 5.1, pp. 45-47).

If you have any questions about this advice, please contact Simon Maffei, Senior Project Officer Planning, South West Branch, Biodiversity and Conservation Division via rog.southwest@environment.nsw.gov.au or on 6983 4923.

Yours sincerely

07/02/2023

Adam Vey Director South West Branch, Biodiversity and Conservation Division Environment and Heritage Group

Enclosures:

ATTACHMENT A – Recommended Secretary's Environmental Assessment Requirements for Mallee Wind Farm (SSD-53293710) ATTACHMENT B – Guidance material

ATTACHMENT A – Recommended Secretary's Environmental Assessment Requirements for Mallee Wind Farm (SSD 53293710)

Sources of guidance material for terms in <u>blue</u> are included 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				
	(section 6.12), Biodiversity Conservation Regulation 2017 (section 6.8) 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 inc					
	assessing all direct, indirect, uncertain and prescribed impacts in accordance with the BAM.				
3.	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 reasons 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 section 6.10				
	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.		information.		
i) Justify prediction of likelihood		Justify prediction of likelihood and nature of impact, with reference to relevant literature		
and other published sources of information.		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.		
Flo	odina			
7.	The FIS must man the following features relevant to flooding as described in the Floodalain			
Development Manual including:				
	a. F	ood prone land.		
	b. F	ood planning area, the area below the flood planning level.		
	с. Н	vdraulic categorisation (floodways and flood storage areas).		
	d. F	ood hazard.		
8.	The El	S must describe flood assessment and modelling undertaken in determining the design		
0.	flood levels for events, including a minimum of the 5% Appual Exceedance Probability (AED), 1%			
	AFP fl	pod 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:		the following scenarios:		
	a. C	urrent flood behaviour for a range of design events as identified in 7 above. This includes		
	th	e 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	Model	ing in the EIS must consider and document:		
	a. E	xisting council flood studies in the area and examine consistency to the flood behaviour		
	d	pcumented in these studies.		
	b. T	ne impact on existing flood behaviour for a full range of flood events including up to the		
	pi	obable 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 Floodplain Development Manual.
- 11. The EIS must assess the impacts of 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.
 - Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the State Emergency Service (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 or 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.

National Parks and Wildlife Estate

12. The EIS must identify and assess:

- a. In the case of a project that adjoins land reserved under Part 4 of the National Parks and Wildlife Act 1974, ensure no encroachment of assets or ancillary infrastructure occurs, and the project is restricted to the development site and adequately buffered from the reserve.
- In the case of a project that adjoins, is in the immediate vicinity of, or upstream of land reserved under the *National Parks and Wildlife Act 1974*, ensure the matters outlined in the Developments adjacent to National Parks and Wildlife Service lands: Guidelines for consent and planning authorities are adequately considered and include:
 - recognition of the natural, cultural, social and educational values attached to that land.
 The Mallee Cliffs National Park Plan of Management should be considered in the assessment of these values

- recognition of the impacts, including direct, indirect and cumulative impacts as they relate to the environmental values of that land, its location, and greater landscape connectivity within the South-West REZ
- iii. extent of the direct, indirect and cumulative impacts on that land
- iv. duration of the direct, indirect and cumulative impacts on the interface, the greater environmental values and the reserves connectivity in the landscape to other reserved land
- consideration of any impacts from the development on that part of Mallee Cliffs National Park identified as an Asset of Intergenerational Significance (Asset AIS_E0_221) under Part 12A of the NPW Act. Current values prompting the declaration of the land as an AIS are Numbat, Greater Stick-nest Rat and Bilby.
- c. Measures proposed to prevent, control, abate, minimise and manage the direct and indirect impacts including an evaluation of the proposed measures effectiveness and reliability over the life of the project.
- d. Residual impacts and their significance subject to the protection and conservation of Mallee Cliffs National Park.
- e. Risks and increased restrictions imposed to land management operations undertaken by NPWS as a result of the proposed windfarm project, especially in the use of low flight aircraft for aerial pest baiting, weed spraying, firefighting and hazard reduction purposes. Justify compliance with Australian Government Civil Aviation Safety Authority regulations. Consult with NPWS when assessing this.
- f. Impacts and environmental risks to the values and resilience of Mallee Cliffs National Park.
- g. Bushfire protection requirements attached to the proposed windfarm project ensuring they are restricted to the development site, and all ignition threats relating to the project are identified and planned for within the confines of the development site. No fire management is to affect, burden or threaten land reserved as Mallee Cliffs National Park, including any impact on NPWS fire management operations. The Mallee Cliffs National Park Fire Management Strategy should be considered in this assessment.
- h. Risk of interference to the functionality and operation of the emergency telecommunications system used by NPWS on Mallee Cliffs National Park as a result of the proposed windfarm project. Consult with NPWS when assessing this.

ATTACHMENT B – Guidance material

Title	Web address			
Relevant Legislation				
Biodiversity Conservation Act 2016	https://legislation.nsw.gov.au/view/html/inforce/current/act-2016-063			
Environment Protection and Biodiversity Conservation Act 1999	https://www.legislation.gov.au/Details/C2016C00777			
Environmental Planning and Assessment Act 1979	https://legislation.nsw.gov.au/view/html/inforce/current/act-1979-203			
National Parks and Wildlife Act 1974	https://legislation.nsw.gov.au/view/html/inforce/current/act-1974-080			
Wilderness Act 1987	https://legislation.nsw.gov.au/view/html/inforce/current/act-1987- 196			
Biodiversity				
Biodiversity Assessment Method 2020 (DPIE 2020)	https://www.environment.nsw.gov.au/research-and- publications/publications-search/biodiversity-assessment-method- 2020			
BAM 2020 Operational Manual – Stage 1 (DPE 2022)	https://www.environment.nsw.gov.au/research-and- publications/publications-search/biodiversity-assessment-manual- 2020-operational-manual-stage-1			
BAM Operational Manual Stage 2 (DPIE 2019)	https://www.environment.nsw.gov.au/research-and- publications/publications-search/biodiversity-assessment-method- operational-manual-stage-2			
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 (OEH 2017)	https://www.environment.nsw.gov.au/-/media/OEH/Corporate- Site/Documents/Animals-and-plants/Biodiversity/ancillary-rules- biodiversity-conservation-actions-170496.pdf			
Ancillary rules: Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules (OEH 2017)	https://www.environment.nsw.gov.au/research-and- publications/publications-search/ancillary-rules-reasonable-steps- to-seek-like-for-like-biodiversity-credits			
DPE Threatened species profiles	www.environment.nsw.gov.au/threatenedspeciesapp/			

Title	Web address			
BioNet Atlas and BioNet Vegetation Classification (see NSW Plant Community Type classification link for database login page	www.environment.nsw.gov.au/wildlifeatlas/about.htm			
NSW SEED Data Portal (access to online spatial data)	https://www.seed.nsw.gov.au/			
Developments adjacent to National Parks and Wildlife Service lands: Guidelines for consent and planning authorities (DPIE 2020)	www.environment.nsw.gov.au/research-and- publications/publications-search/developments-adjacent-to- national-parks-and-wildlife-service-lands			
Fisheries policies and guidelines (DPI)	www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,- guidelines-and-manuals/fish-habitat-conservation			
Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE 2022)	www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/Policy- and-legislation/SSPT-Guidelines/GD1259-RAF-Assessing- Cumulative-Impacts-Guide-final.pdf			
Water				
Flooding				
Floodplain Development Manual (NSW Government 2005)	www.environment.nsw.gov.au/-/media/OEH/Corporate- Site/Documents/Water/Floodplains/floodplain-development- manual.pdf			
Australian Rainfall and Runoff: A Guide to Flood Estimation (Geoscience Australia)	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			
<u>NPWS</u>				
Assets of Intergenerational Significance	https://www.environment.nsw.gov.au/topics/parks-reserves-and- protected-areas/park-management/assets-of-intergenerational- significance			
Developments adjacent to National Parks and Wildlife Service lands - Guidelines for consent and planning authorities (DPIE 2020)	https://www.environment.nsw.gov.au/research-and- publications/publications-search/developments-adjacent-to- national-parks-and-wildlife-service-lands			
Mallee Cliffs National Park Fire Management Strategy (OEH 2013)	https://www.environment.nsw.gov.au/research-and- publications/publications-search/mallee-cliffs-national-park-fire- management-strategy			
Mallee Cliffs National Park Plan of Management (OEH 2018)	https://www.environment.nsw.gov.au/research-and- publications/publications-search/mallee-cliffs-national-park-plan- of-management			