

Our ref:DOC25/125659

Your ref: SSD-80027992

Michael Dimitrakopoulos
Student Planning Officer
Department of Planning, Housing and Infrastructure
Michael.dimitrakopoulos@dpie.nsw.gov.au

Dear Michael,

Sunny Corner Wind Farm (SSD-80027992) – Request for SEARs

I refer to your email dated 14 February 2025 seeking the Conservation Programs, Heritage and Regulation Group (CPHR), formerly known as the Biodiversity, Conservation and Science Group (BCS) of the NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) seeking input into the Department of Planning, Housing and Infrastructure Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the Sunny Corner Wind Farm (SSD 80027992).

CPHR, in consultation with the National Parks and Wildlife Service (NPWS), has considered your request and provides SEARs for the proposed development in **Attachments A and B**. In preparing the EIS, the proponent should refer to the relevant guidance material listed in **Attachment C**.

CPHR and NPWS recommend the EIS appropriately address the following:

1. Biodiversity and offsetting
2. Water and soils
3. Flooding
4. Impacts to land reserved under Part 4 of the *National Parks and Wildlife Act 1974* (NPW Act)

We note the project proposes to construct and operate approximately 80 wind turbine generators (WTGs), a battery energy storage system (BESS), and associated electrical infrastructure and ancillary facilities. The proposed WTG array, as currently presented, is located within Sunny Corner State Forest along elevated ridgelines of predominantly softwood pine plantation, adjacent to heavily wooded areas of native vegetation which are likely to provide high value habitat for a variety of threatened and protected flora and fauna.

The project study area is directly bounded by, or in close proximity, to:

- Sunny Corner State Forest
- Winburndale Nature Reserve
- Eusdale Nature Reserve
- Turon State Forest
- Turon National Park

More broadly, the proposed development boundary is in proximity to:

- Gardens of Stone State Conservation Area and National Park
- Ben Bullen State Forest
- Marrangaroo National Park

- Greater Blue Mountains World Heritage Area

This network of national parks, nature reserves and state forest form key landscape corridors, which would likely be utilised by a variety of fauna species travelling between foraging resources and refuge habitat. We have serious concerns about the potential indirect and prescribed impacts on threatened species utilising these landscape corridors.

Additionally, there is the cumulative impact of locating multiple wind farm developments within connecting landscapes. The proposed Ben Bullen Wind farm is located approximately 10km north of the current proposed project area.

We consider that critical steps should be taken during the EIS to further refine the project, including:

- Identifying and maximising avoidance of potential bird and bat movement corridors across the landscape through turbine micro-siting and deletion; and
- defining appropriate setbacks for wind turbines from significant areas of native vegetation to minimise potential bird and bat strike.

CPHR has significant concerns about the potential impacts to threatened birds and microbats across the proposed project area. As such, we recommend that the proponent conduct bird and bat utilisation surveys (BBUS) for a minimum of 24 months, including the collection of at-height bat activity data. We encourage the proponent to consult with CPHR during the assessment process to ensure that the BBUS are suitably robust and comprehensive, to adequately identify the potential impacts of the project. The location of wind (meteorological) monitoring masts must be spatially identified to NPWS to ensure safety of their aviation activities.

The EIS should provide a detailed risk assessment for each WTG, supported by BBUS data and evidence from other wind farm developments. The EIS should present a list of mitigation actions for WTGs with an increased risk of impacting biodiversity, such as avifauna detection technology and smart curtailment to reduce bird and bat strike during operation of proposed WTGs.

Given the project directly adjoins Winburndale Nature Reserve and significant areas of native hardwood plantation within Sunny Corner State Forest, CPHR also recommends that additional fauna surveys be conducted in any national parks or native hardwood estate within 500 metres of a proposed turbine (blade-tip).

The scoping report identifies two Serious and Irreversible Impact (SII) listed Threatened Ecological Communities (TECs) and one SII threatened floral species (*Eucalyptus robertsonii*) that are known, or predicted to occur, in the locality. In addition, several threatened microbat species have been documented in the locality, including a SII entity, the large bent-winged bat. We recommend the proponent engage early with CPHR on all SII entities that are likely to be impacted. If SII is considered likely, additional and appropriate measures may be required, in accordance with section 7.16 of the *Biodiversity Conservation Act 2016* (BC Act).

NPWS have concerns regarding the impact of the development on their land as a neighbouring landholder. NPWS currently require access to the Forestry Corporation NSW (FCNSW) road and trail infrastructure within Sunny Corner State Forest to access a significant number of connecting NPWS trails within Winburndale Nature Reserve.

The EIS should provide a risk assessment and detail any potential restrictions imposed to land management operations undertaken by NPWS within Winburndale Nature Reserve as a result of the proposed windfarm project. Particular focus should be given to the bushfire emergency response.

Access to land reserved under the NPW Act by the proponent to conduct any survey, or environmental investigation to inform the overall preparation of the EIS must seek prior consent from the relevant NPWS Manager, with initial contact to be made via npws.centralwest@environment.nsw.gov.au.

Finally, CPHR remain available to undertake a site visit upon request from NSW Planning and/or the proponent, to gain an on-ground perspective and further discuss likely assessment issues prior to lodgement of the EIS.

If you have any questions about this advice, please do not hesitate to contact Rebecca Hobbs, Conservation Planning Officer, via Rebecca.hobbs@environment.nsw.gov.au or (02) 4224 4135

Yours sincerely,

A handwritten signature in black ink that reads "Kate Tierney". The signature is written in a cursive, flowing style.

Kate Tierney
Senior Team Leader Planning North West - Acting
Conservation Programs, Heritage & Regulation Group

27 February 2025

Attachment A - Environmental Assessment Requirements

Attachment B – Project specific SEARs

Attachment C - Guidance Material

Standard Environmental Assessment Requirements

AEP	Annual Exceedance Probability
BAM	Biodiversity Assessment Method 2020
BBAMP	Bird and Bat Adaptive Management Plan
BBUS	Bird and Bat Utilisation Surveys
BC Act	<i>Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
BESS	Battery Energy Storage System
BMP	Biodiversity Management Plan
CEEC	Critically Endangered Ecological Communities
CPHR	Conservation Programs, Heritage & Regulation Group formally known as the Biodiversity, Conservation and Science Group (BCS) of the NSW Department of Climate Change, Energy, the Environment and Water
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
FCNSW	Forestry Corporation NSW
FIRA	Flood Impact and Risk Assessment
LLS Act	Local Land Services Act 2013
NPW Act	<i>National Parks and Wildlife Act 1974</i>
NPWS	National Parks and Wildlife Service
NSW DCCEEW	NSW Department of Climate Change, Energy, the Environment and Water
NVR map	draft Native Vegetation Regulatory map
SAIL	Serious and Irreversible Impact
SEARs	Secretary's Environmental Assessment Requirements
TEC	Threatened Ecological Communities

Native vegetation regulatory map – land categorisation

Clearing of native vegetation on land that meets the definition of Category 1 - Exempt Land (as defined under the *Local Land Services Act 2013* (LLS Act)) does not require assessment or offsetting under the BC Act, however the following must still be considered:

- **Prescribed impacts** as outlined in chapter 6 of the Biodiversity Assessment Method 2020 (BAM). E.g. there are threatened fauna species whose habitat may include land which meets Category 1- Exempt criteria. Fauna survey on Category 1 land may be necessary to meet the requirements of the BAM.
- Potential impacts to **Matters of National Environmental Significance** under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on Category 1 – exempt land must also be considered.

Section 60F of the LLS Act provides the transitional arrangements that are in place until a comprehensive NVR Map is published. During the 'transitional period' assessors can make a

reasonable approximation of land categorisation for unpublished layers, in consultation with the landholder.

Where a reasonable approximation is required, it is recommended that:

- assessors first identify whether land meets criteria for Category 2 - Regulated Land, prior to Category 1 - Exempt Land.
 - In some circumstances, land may meet multiple map criteria i.e. criteria for Category 2 - Regulated Land, AND Category 1 - Exempt Land
 - In most circumstances' Category 2 - Regulated Land criteria will determine the categorisation of the land, rather than Category 1 - Exempt Land criteria.

A statewide draft Native Vegetation Regulatory (NVR) map is publicly available for proposals that affect rural land as defined under Part 5A of the LLS Act. This map as it relates to the development site must be referred to during preparation of the Biodiversity Development Assessment Report (BDAR) and prior to the BDAR being submitted to the consent authority. The draft map is available here: [Geocortex Viewer for HTML5 \(nsw.gov.au\)](#).

Where Category 2 – Regulated land is mapped as present on a development site, this will be identified on the draft map and is land where the BAM must be applied. However, there are some Category 2 criteria for which state-wide comprehensive mapping is not currently incorporated within the draft NVR map.

Please note that the draft NVR map is transitional and does not have regulatory effect for Category 1 mapped land. Where the draft map indicates that Category 1 – Exempt Land is present on a development site, early engagement with CPHR is encouraged.

State-wide comprehensive mapping of all CEECs and critically endangered species of plants is not currently published on the draft NVR map. CEECs and critically endangered species of plants are designated as category 2- sensitive regulated land (clause 108(2)(b), LLS Regulation). The presence of CEECs and/or critically endangered plants must be considered for site-scale refinement, regardless of published map products.

To confirm at the site scale whether the criteria for Category 1 – Exempt Land is met:

- Site-based floristic assessment is required to verify the presence or absence of CEECs, critically endangered plants and threatened grasslands
- Review of any *Environmental Planning and Assessment Act 1979* (EP&A Act) development consents or approvals applicable to the land is required to demonstrate whether the land has an existing obligation to be set aside for nature conservation; revegetation of native vegetation; or as a native vegetation offset.

Prior to the BDAR being submitted to the consent authority, the accredited assessor may submit a proposed land categorisation method to the CPHR North West Planning team at rog.nw@environment.nsw.gov.au for review.

For more information, see [Determining native vegetation land categorisation for application in the Biodiversity Offsets Scheme](#).

Biodiversity

1. Biodiversity impacts related to the project are to be assessed in accordance with [section 7.9 of the BC Act](#) the [BAM](#) and documented in a [BDAR](#), unless:
 - a) a BDAR waiver is granted, or
 - b) the site is on biodiversity certified land.
2. The BDAR must apply the avoid, minimise, and offset framework; including assessing all direct, indirect, uncertain and prescribed impacts in accordance with the [BAM](#).
3. The BDAR must be submitted with all spatial data associated with the survey and assessment as per Appendix K of the BAM.

4. 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 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.

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 BC Act.
6. The EIS must contain a summary of the commitments set out in the BDAR to avoid, minimise and mitigate the biodiversity impacts of development that are to be implemented, post approval, by their inclusion in a Biodiversity Management Plan (BMP). The preparation of a BMP to fulfil the avoid and minimise requirements of the BDAR must be included as a condition of consent/approval, unless otherwise agreed with CPHR. The BMP must include detailed measures to minimise impacts on biodiversity, monitoring and reporting requirements, proposed adaptive management measures, performance criteria recommended to meet states outcomes, remedial actions to be undertaken of actions fail to achieve stated outcomes, and any additional actions relevant to the management of biodiversity.

NOTE – A BDAR template and guidance document has been created to assist accredited assessors to prepare a BDAR. It has been developed in accordance with best practice, the minimum information requirements, and to support BDAR reviewers. The BDAR Template can be found [here](#) and the Guidance for the BDAR Template can be found [here](#).

Residual Prescribed Impacts within the BAM 2020

Prescribed impacts can be difficult to quantify as they may result in discrete impacts, spatially undefined impacts, ecological regime shifts and/or impact cascades over time. Consequently, avoiding or minimising such impacts is critical and will likely be a key consideration for the consent authority in determining conditions of approval for relevant proposals.

If avoidance and mitigation measures are not applicable or will not result in the complete reduction of prescribed impacts occurring, the assessor and proponent will need to consider options to compensate for unavoidable residual prescribed impacts.

The BAM-C does not calculate biodiversity credits to offset a prescribed impact. However, the consent authority has the discretion to increase the number of biodiversity credits to be retired (or other conservation measures to be undertaken), under a planning approval.

The assessment and calculation of a predicted offset obligation for any prescribed impacts must be presented prior to project determination and any impact occurring, in accordance with Section 7.14 of the BC Act. The purpose of this requirement is to ensure:

- commitments to proposed mitigation measures for residual prescribed impacts are described and can be captured in the projects consent conditions; and
- the total offset obligation can be embedded in the project approval

It is recommended that the proponent and assessor consult with CPHR during the assessment process on prescribed impact assessment and calculation, when required.

Cumulative Impacts

Cumulative impacts should be assessed through application of the [Cumulative Impact Assessment for State Significant Projects guidance](#) (DPE, Oct 2022).

Controlled Actions

Controlled Actions under the EPBC Act

If the proposed development is likely to be a 'Controlled Action' under the EPBC Act, the accredited assessor should contact the CPHR North West Planning team at rog.nw@environment.nsw.gov.au prior to submission of the EIS. The CPHR North West Planning team can provide guidance on the minimum information requirements for the EIS for any entities that have been or are likely to be deemed a 'Controlled Action'.

Water and soils

7. The EIS must map the following features relevant to water and soils including:
 - a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map)
 - b. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method)
 - c. Wetlands as described in s4.2 of the BAM
 - d. Groundwater
 - e. Groundwater dependent ecosystems
 - f. Proposed intake and discharge locations.
8. The EIS must describe background conditions for any water resource likely to be affected by the project, including:
 - a. Existing surface and groundwater
 - b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations
 - c. Water Quality Objectives ([as endorsed by the NSW Government](#)) including groundwater as appropriate that represent the community's uses and values for the receiving waters
 - d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the [ANZECC \(2000\) Guidelines for Fresh and Marine Water Quality](#) and/or local objectives, criteria or targets endorsed by the NSW Government
 - e. [Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions](#).
9. The EIS must assess the impacts of the project on water quality, including:
 - a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the project protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction;
 - b. Identification of proposed monitoring of water quality.
10. The EIS must assess the impact of the project on hydrology, including:
 - a. Water balance including quantity, quality and source
 - b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas
 - c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems

- d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches)
- e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water
- f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options
- g. Identification of proposed monitoring of hydrological attributes.

Flooding

11. The EIS shall include a flood impact and risk assessment (FIRA). As a minimum the FIRA must:

- a. Consider the relevant provisions of the NSW Flood Risk Management Manual (2023) and associated guides, and existing council and government studies, information and requirements.
- b. Identify and describe existing flood behaviour on the site and its surrounding areas for the full range of events, including 5% Annual Exceedance Probability (AEP), 1% AEP, PMF and 0.5% AEP or 0.2% AEP and provide an assessment of the compatibility of the development and its users with flood behaviour. This may require flood modelling where existing flood information is not available.
- c. Determine and describe changes in post development flood behaviour, impacts of flooding on existing community and on the development and its future community for full range of events, 5% AEP, 1% AEP, PMF and 0.5% AEP or 0.2% AEP. This will typically require flood modelling.
- d. Consider impacts of climate change due to both sea level rise and increase in rainfall intensities considering relevant Council and government advice. The 0.5% AEP or 0.2% AEP events can be used to provide an understanding of the scale of change of flood behaviour relative to the 1% AEP event.
- e. Propose and assess the effectiveness of management measures required to minimise the impacts and risks of flooding to the development and its users and existing community.

Note:

- The scope of a FIRA must be consistent with the [Flood Risk Management Guideline LU01](#).
 - The FIRA will need to be tailored to suit the project being considered, whilst maintaining consistency with the FIRA guide.
- 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.

Project Specific Environmental Assessment Requirements for Sunny Corner Wind Farm (SSD-80027992)

Biodiversity

Ancillary development components

12. The assessment should include all components of the proposal, including any ancillary activities such as road/track widening to enable transport of infrastructure components, connecting pipelines and transmission lines etc.

Prescribed Impacts

13. In accordance with Clause 6.1 of the BC Act, the following prescribed impacts are to be assessed:

- the impacts of development on the following habitat of threatened species or ecological communities:
 - karst, caves, crevices, cliffs and other geological features of significance.
 - rocks.
 - human made structures.
 - non-native vegetation.
- the impacts of development on the connectivity of different areas of habitat of threatened species that facilitates the movement of those species across their range.
- the impacts of development on movement of threatened species that maintains their lifecycle.
- the impacts of development on water quality, water bodies and hydrological processes that sustain threatened species and threatened ecological communities.
- the impacts of wind turbine strike on protected animals (see **Specific Requirements for Wind Farm Projects** below).
- the impact of vehicle strikes on threatened species of animals or on animals that are part of a threatened ecological community.

14. Offsets for prescribed impacts are to be considered if avoidance and mitigation measures are not applicable or will not result in the complete reduction of prescribed impacts occurring. The assessment and calculation of a predicted offset obligation in accordance with section 7.14 of the BC Act and section 10.1 of the BAM should be presented in the BDAR.

Cumulative Impacts

15. Cumulative impacts should be assessed through application of the [Cumulative Impact Assessment for State Significant Projects guidance](#) (DPE, Oct 2022).

Specific Requirements for Wind Farm Projects

16. The assessment is to include a bird and bat strike risk analysis for the location of each proposed wind turbine. The risk assessment should consider the proximity of proposed turbine locations to species habitat. This risk assessment should be iteratively adjusted in response to any development site changes, including micro-siting of turbines to avoid and minimise biodiversity impacts.

17. The BDAR must provide an assessment of the impacts of the development on birds and bats, including blade strike, low air pressure zones at the blade tips (barotrauma), alteration to movement patterns, and cumulative impacts of other wind farms in the vicinity.
18. The assessment must include bird and bat utilisation surveys in accordance with section 6.1.5 of the BAM. We recommend that these surveys be conducted over four seasons per year, for two years. Copies of all raw data sheets for flora and fauna studies are to be included in the EIS or provided to CPHR.
19. Fauna survey should be conducted in any native vegetation within 500m of the proposed development corridor. Fauna survey must quantify the presence, location and utilisation of specialist breeding and nesting habitat for protected species at risk from wind turbine strike on the development site and in adjacent habitat, in accordance with section 6.1.5 and 8.3 of the BAM 2020. All hollow-bearing trees within 500m of the proposed development corridor are to be quantified. CPHR should be consulted regarding the application of BAM where land access issues on adjoining land occur.
20. Provide evidence-based justification for the proposed method for calculating partial loss in areas of native vegetation surrounding proposed turbines and the proposed transmission line, in accordance with Section 4.1.2 of the BAM Operational Manual Stage 2.
21. Mitigation measures proposed to manage impacts, including impacts which are uncertain, must be documented in accordance with section 8.4 of the BAM. This will inform the preparation of a BBAMP for the development.
22. Meteorological masts should be fitted with acoustic recorders to capture bat activity within the rotor swept area. Data should be collected for each season for a period of 2 years and the analysis of the acoustic data should consider site-specific weather conditions.
23. Due to the nature of the development the project must document commitments to address the residual prescribed impacts on threatened species or Threatened Ecological Communities which may occur during the construction and operational phases of the project. Significant residual prescribed impacts may require the retirement of additional biodiversity credits to offset these impacts in accordance with Section 10.1 of the BAM 2020.

National Parks and Wildlife Estate

24. The EIS must identify and assess:
 - a. In the case of a project that adjoins land reserved under Part 4 of the NPW Act, ensure no encroachment of assets or ancillary infrastructure occurs, and the project is restricted to the development site and adequately buffered from the reserve.
 - b. In the case of a project that adjoins, is in the immediate vicinity of, or upstream of land reserved under the NPW Act, ensure the matters outlined in the [Developments adjacent to National Parks and Wildlife Service lands - Guidelines for consent and planning authorities](#) (DPIE 2020) are adequately considered and include:
 - i. recognition of the natural, cultural and social values attached to that land
 - ii. 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
 - 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.

- 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. Acknowledgement that noise levels above 40dB(A) has the potential to impact on wildlife occupying NPWS estate. Areas of park are to be treated as a 'sensitive receiver' for the purposes of noise level management. If exceedance occurs, impacts on biodiversity values will need to be assessed in more detail.
- 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, hazard reduction and search and rescue purposes. Justify compliance with Civil Aviation Safety Authority (CASA) regulations. Consult with NPWS when assessing this.
- f. 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 that is reserved under Part 4 of the NPW Act. Include a detailed summary of entities responsible for the coordination and execution of emergency fire management activities.
- g. Identification of any interference to the functionality and operation of telecommunication systems used by NPWS and establishment of a working relationship with NPWS to effectively resolve any communication issues with RF links or mobile radio through the life of the project.
- h. Measures proposed to maintain unrestricted vehicular access to Winburndale Nature Reserve by NPWS using road infrastructure within Sunny Corner State Forest throughout the life of the project.
- i. Residual impacts and their significance subject to the protection and conservation of land that is reserved under Part 4 of the NPW Act.

Guidance Material

Title	Web address
<u>Relevant Legislation</u>	
<i>Biodiversity Conservation Act 2016</i>	https://www.legislation.nsw.gov.au/view/html/inforce/curr/act-2016-063
<i>Environment Protection and Biodiversity Conservation Act 1999</i>	https://www.legislation.gov.au/Details/C2014C00140/Download
<i>Environmental Planning and Assessment Act 1979</i>	https://www.legislation.nsw.gov.au/view/html/inforce/curr/act-1979-203
<i>Fisheries Management Act 1994</i>	https://www.legislation.nsw.gov.au/view/html/inforce/curr/act-1994-038
<i>National Parks and Wildlife Act 1974</i>	https://www.legislation.nsw.gov.au/view/html/inforce/curr/act-1974-080
<i>Protection of the Environment Operations Act 1997</i>	https://www.legislation.nsw.gov.au/view/html/inforce/curr/act-1997-156
<i>Water Management Act 2000</i>	https://www.legislation.nsw.gov.au/view/html/inforce/curr/act-2000-092
<i>Wilderness Act 1987</i>	https://www.legislation.nsw.gov.au/view/html/inforce/curr/act-1987-196
<u>Biodiversity</u>	
Biodiversity Assessment Method (OEH, 2020)	https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-2020
Changes to the Biodiversity Assessment Method from 2017 to 2020	https://www.environment.nsw.gov.au/research-and-publications/publications-search/changes-to-the-biodiversity-assessment-method-from-2017-to-2020
Biodiversity Development Assessment Report Template	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/biodiversity-development-assessment-report-template-220210.docx?la=en&hash=1A4829C7ACA5A51ECE414A767C27361893706CEC
Guidance for the Biodiversity Development Assessment Report Template	https://www.environment.nsw.gov.au/research-and-publications/publications-search/guidance-for-the-biodiversity-development-assessment-report-template
BAM 2020 Operational Manual Stage 1	https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-manual-2020-operational-manual-stage-1
BAM 2020 Operational Manual Stage 2	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/biodiversity-assessment-method-operational-manual-stage-2-230164.pdf
BAM 2020 Operational Manual Stage 3	https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-operational-manual-stage-3

Title	Web address
BAM Calculator User Guide	https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-user-guide
Serious and irreversible impacts of development on biodiversity	https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/biodiversity-offsets-scheme/serious-and-irreversible-impacts
Practice Note - Guidance for assessors and decision makers in applying modified benchmarks to assessments of vegetation integrity: Biodiversity Assessment Method	https://www.environment.nsw.gov.au/research-and-publications/publications-search/guidance-assessors-decision-makers-applying-modified-benchmarks-to-assessments-vegetation-integrity
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/guidance-decision-makers-determine-serious-irreversible-impact-190511.pdf
Accreditation Scheme for Application of the Biodiversity Assessment Method Order 2017	https://www.legislation.nsw.gov.au/view/pdf/asmade/sl-2017-471
Ancillary rules: Biodiversity conservation actions	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	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/ancillary-rules-reasonable-steps-like-for-like-biodiversity-credits-170498.pdf
Ancillary rules: Impacts on threatened species and ecological communities excluded from application of variation rules	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/ancillary-rules-impacts-on-threatened-entities-excluded-from-variation-170497.pdf?la=en&hash=C38840BFF49F012433532DF72E3D90C741E4DAC1
The Department's Threatened Species Website	https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species
NSW BioNet (Atlas of NSW Wildlife)	https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/nsw-bionet
Surveying Threatened Plants and their Habitats - NSW Survey Guide For The Biodiversity Assessment Method (DPIE 2020).	https://www.environment.nsw.gov.au/research-and-publications/publications-search/surveying-threatened-plants-and-their-habitats-survey-guide-for-the-biodiversity-assessment-method
Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - November 2004	https://www.environment.nsw.gov.au/surveys/BiodiversitySurveyGuidelinesDraft.htm
Threatened species survey and assessment guidelines: field survey methods for fauna – amphibians	https://www.environment.nsw.gov.au/research-and-publications/publications-search/threatened-species-field-survey-methods-for-fauna-amphibians

Title	Web address
NSW Survey Guide for Threatened Frogs	https://www.environment.nsw.gov.au/research-and-publications/publications-search/nsw-survey-guide-for-threatened-frogs
Surveying 'species credit' threatened bats and their habitats – NSW survey guide for the Biodiversity Assessment Method	https://www.environment.nsw.gov.au/research-and-publications/publications-search/species-credit-threatened-bats-nsw-survey-guide-for-biodiversity-assessment-method
Bat calls of NSW - region-based guide to the echolocation calls of Microchiropteran bats	https://www.environment.nsw.gov.au/surveys/Batcalls.htm
Community Biodiversity Survey Manual	https://www.environment.nsw.gov.au/surveys/CommunityBiodiversitySurveyManual.htm
BioNet Vegetation Classification - NSW Plant Community Type (PCT) database	www.environment.nsw.gov.au/research/Vegetationinformationssystem.htm
The Departments Data Portal (access to online spatial data)	http://data.environment.nsw.gov.au/
Determining native vegetation land categorisation for application in the Biodiversity Offsets Scheme	https://www.environment.nsw.gov.au/research-and-publications/publications-search/determining-native-vegetation-land-categorisation-for-application-in-the-biodiversity-offsets-scheme
Fisheries NSW policies and guidelines	https://www.dpi.nsw.gov.au/fishing/habitat/publications/pubs/fish-habitat-conservation
List of national parks	https://www.nationalparks.nsw.gov.au/conservation-and-heritage/national-parks
Revocation, recategorisation and road adjustment policy (OEH, 2012)	https://www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/park-policies/revocation-recategorisation-and-road-adjustment
Guidelines for consent and planning authorities for Developments adjacent to National Parks and Wildlife Service Land (NPWS, 2020)	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Development-guidelines/developments-adjacent-npws-lands-200362.pdf
NSW Native Vegetation Extent 5m Raster v1.2	NSW Native Vegetation Extent 5m Raster v1.2 https://datasets.seed.nsw.gov.au/dataset/nsw-native-vegetation-extent-5m-raster-v1-0
State-wide Landcover and Tree Survey (SLATS) clearing for NSW – used to identify detectable clearing events since January 1990	Dataset SEED (nsw.gov.au) https://datasets.seed.nsw.gov.au/dataset?q=slats
Published information on the Native Vegetation Regulatory Map, including Category 2-Sensitive Regulated, Category 2-Vulnerable Regulated, and Excluded Land	Transitional Native Vegetation Regulatory map NSW Environment and Heritage https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/native-vegetation-regulatory-map/transitional-native-vegetation-regulatory-map

<u>Water and Soils</u>	
Acid sulphate soils	
Acid Sulfate Soils Planning Maps via Data.NSW	https://datasets.seed.nsw.gov.au/dataset/acid-sulfate-soils-risk0196c
Acid Sulfate Soils Manual (Stone et al. 1998)	https://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Flooding	
Flood Risk Management Manual	https://www.environment.nsw.gov.au/topics/water/floodplains/floodplain-manual
Floodplain Risk Management Guidelines	http://www.environment.nsw.gov.au/topics/water/coasts-and-floodplains/floodplains/floodplain-guidelines
NSW Climate Impact Profile	http://climatechange.environment.nsw.gov.au/
Climate Change Impacts and Risk Management	https://www.environment.gov.au/climate-change/adaptation/publications/climate-change-impact-risk-management
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC & ARMCANZ (2000) Water Quality Guidelines	https://www.waterquality.gov.au/anz-guidelines/resources/previous-guidelines/anzecc-armcanz-2000
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf