Our ref:DOC24/140449
Your ref: SSD-67667971

Ellena Tsanidis
Environmental Assessment Officer
Department of Planning, Housing and Infrastructure
E-mail: ellena.tsanidis@planning.nsw.gov.au

Dear Ellena,

Aquila Wind Farm – Request for Secretary's Environmental Assessment Requirements

I refer to your email dated 15 February 2024 seeking the Biodiversity, Conservation and Science Group (BCS) of the NSW Department of Climate Change, Energy, the Environment and Water (NSW DCEEW) input into the Department of Planning and Environment Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the Aquila Wind Farm (SSD 67667971).

The Biodiversity, Conservation and Science Group (BCS), 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.**

We recommend the EIS appropriately address the following:

1. Biodiversity and offsetting
2. Water and soils
3. Flooding

The scoping report has identified that there is approximately 136.7ha of White Box Yellow Box Blakely's Red Gum Woodland within the proposed development corridor. This community is a Serious and Irreversible Impact (SAII) entity and is listed as a critically endangered ecological community (CEEC) under the NSW *Biodiversity Conservation Act 2016* (BC Act).

In addition, large numbers of SAII entity microbats have been recorded within 10km of the proposed development. Given the potential impacts to SAII entity microbats, we strongly recommend that the proponent commence collecting at-height bat activity data as soon as practical.

We encourage the proponent to consult with BCS during the assessment process to ensure that the bird and bat utilisation (BBUS) surveys are suitably robust and comprehensive, to adequately identify the potential impacts of the project. A period of two years for BBUS surveys is identified as best practice.

We recommend the proponent engage early with us on all SAII entities that are likely to be impacted. There may also be the need for additional and appropriate measures to be developed in accordance with section 7.16 of the BC Act if a SAII is likely.

Finally, we 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 Environmental Impact Statement.

If you have any questions about this advice, please do not hesitate to contact Candice Larkin, Senior Conservation Planning Officer, via candice.larkin@environment.nsw.gov.au or (02) 8217 2065.

Yours sincerely,

CALVIN HOULISON
Senior Team Leader Planning North West
Biodiversity, Conservation and Science Group

26 February 2024

Attachment A – Standard Environmental Assessment Requirements

Attachment B – Project-specific Environmental Assessment Requirements

Attachment B - Guidance Material

Standard Environmental Assessment Requirements for Aquila Wind Farm (SSD 67667971)

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 Biodiversity Conservation Act 2016, however the following must still be considered:

- **Prescribed impacts** as outlined in chapter 6 of the Biodiversity Assessment Method (2020). 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 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.

For State Significant Development (SSD)/State Significant Infrastructure (SSI) proposals that affect rural land as defined under Part 5A of the Local Land Services Act 2013, a draft Native Vegetation Regulatory Map is available upon request. This map as it relates to the development site must be requested from BCS during preparation of the Biodiversity Development Assessment Report (BDAR) and prior to the BDAR being submitted to the consent authority. Requests should be made via the Data Broker – *data.broker@environment.nsw.gov.au*.

Where Category 2 – Regulated land is mapped as present on a development site, this will be identified on the draft map supplied by the Data Broker 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 map.

Where the draft map indicates that Category 1 – Exempt Land is present on a development site, early engagement with BCS is encouraged. 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 critically endangered ecological communities (CEECs), critically endangered plants and threatened grasslands
- Review of any Environmental Planning and Assessment Act 1979 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 should submit a proposed land categorisation method to the BCS 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 proposed [development/project] are to be assessed in accordance with *Section 7.9 of the Biodiversity Conservation Act 2016* the *Biodiversity Assessment Method 2020* and documented in a *Biodiversity Development Assessment Report (BDAR)*. Biodiversity Development Assessment Report (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 *Biodiversity Assessment Method 2020*.
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 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 conduct ecological rehabilitation (if a mining project);
    f. 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 *Biodiversity Conservation Act 2016*.
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 BCS. 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*.

Controlled Actions under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
If the proposed development is likely to be a 'Controlled Action' under the EPBC Act, the accredited assessor should contact the BCS North West Planning team at *rog.nw@environment.nsw.gov.au* prior to submission of the EIS. The BCS 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 Biodiversity Assessment Method; 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 development 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 development on water quality, including: a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development 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 development 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% 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 is intended to be consistent with the Draft DCCEEW FIRA Guide, which is being finalised currently.

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 Aquila Wind Farm (SSD 67667971)

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, he 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 (including from subsidence or upsidence resulting from underground mining or other development) – refer to Addendum to NSW Biodiversity Offsets Policy for Major Projects: Upland swamps impacted by longwall mining subsidence (OEH, 2016),
    - the impacts of wind turbine strikes on protected animals (see **Specific Requirements for Wind Farm Projects** below).
    - the impacts 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 Biodiversity Conservation Act 2016 and section 10.1 of the BAM should be presented in the BDAR.
15. Cumulative impacts should be assessed through application of the *Cumulative Impact Assessment for State Significant Projects guidance* (DPE, Oct 2022) and should consider the barrier effects of other windfarms in close proximity.

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 assessment must include bird and bat utilisation surveys in accordance with section 6.1.5 of the BAM. We recommend that these surveys should be conducted over four seasons per year for two years.
18. Fauna survey should be conducted in native vegetation adjacent to the 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 8.2 of the BAM 2020. BCS should be consulted regarding the application of BAM where land access issues on adjoining land occur.
19. 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 Biodiversity Assessment Manual Stage 2.
20. 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 Bird and Bat Adaptive Management Plan (BBAMP) for the development.
21. Meteorological masts should be fitted with acoustic recorders to capture bat activity within the rotor swept area. Data should be collected for each season and the analysis of the acoustic data should consider site-specific weather conditions.

National Parks and Wildlife Service Matters

22. The EIS must:

a. Avoid all impacts to land reserved and acquired under the National Parks and Wildlife Act 1974, ensuring no impacts (direct. Indirect and cumulative) occur to the environmental values of the land proximate to the project.

b. Recognise cumulative impacts as they relate to the natural and cultural values for which the land proximate was reserved or acquired under National Parks and Wildlife Act 1974. Consider connectivity, dependent migratory and threatened species assemblages, and any other key ecological functions the land provides, with regard to the extent of, and escalating nature of cumulative impacts in the landscape.

c. Address any arising risks or restrictions imposed on emergency or land management operations undertaken by the National Parks and Wildlife Service as a result of the project, especially:

    I. in the use of low flight aircraft for land management and bush firefighting emergency response as they occur in adverse conditions. Justify compliance with Australian Government Civil Aviation Safety Authority regulations

    II. interference to the functionality and operation of telecommunications systems used by National Parks and Wildlife Service, as a result of the project

d. Direct all consultation requests or communications to National Parks and Wildlife Service, Central West Area via npws.centralwest@environment.nsw.gov.au.

Guidance Material

Title	Web address
Relevant Legislation	
Biodiversity Conservation Act 2016	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-2016-063*
Environment Protection and Biodiversity Conservation Act 1999	*https://www.legislation.gov.au/Details/C2014C00140/Download*
Environmental Planning and Assessment Act 1979	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1979-203*
Fisheries Management Act 1994	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1994-038*
National Parks and Wildlife Act 1974	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1974-080*
Protection of the Environment Operations Act 1997	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1997-156*
Water Management Act 2000	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-2000-092*
Wilderness Act 1987	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1987-196*
Biodiversity	
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/Vegetationinformationsystem.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* – - *available here*
State-wide Landcover and Tree Survey (SLATS) clearing for NSW – used to identify detectable clearing events since January 1990	*available here*
Published information on the Native Vegetation Regulatory Map, including Category 2-Sensitive Regulated, Category 2-Vulnerable Regulated, and Excluded Land	
Water and Soils	

Title	Web address
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*