



Our ref:DOC24/388648

Your ref: SSD-70279722

Ms Julia Green
Senior Environmental Assessment Officer
Department of Planning, Housing and Infrastructure
Email: julia.a.green@dpie.nsw.gov.au

Dear Ms Green

Mount Piper to Wallerawang transmission line upgrade project – Request for SEARs

I refer to your email dated 7 May 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, Housing and Infrastructure Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the Mount Piper to Wallerawang transmission line upgrade (SSD-70279722).

In preparing this advice, we have consulted with the National Parks and Wildlife Service (NPWS) and this is a joint response of the NPWS and BCS divisions of NSW DCCEEW. A separate response from NPWS will not be provided.

We have considered your request and provide recommended 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

In addition, the EIS needs to appropriately address the potential impacts on lands reserved or acquired under the *National Parks and Wildlife Act 1974* (NPW Act) and be prepared in consultation with NPWS. NPWS notes they have been consulted by Transgrid in identifying the preferred alignment, as outlined in the Scoping Report. We remind Transgrid that all survey work on lands managed by NPWS requires authorisation by NPWS.

If you have any questions about this advice, please do not hesitate to contact Liz Mazzer, Senior Conservation Planning Officer, via liz.mazzer@environment.nsw.gov.au or (02) 6883 5325

Yours sincerely,

Calvin Houlison
Senior Team Leader Planning North West
Biodiversity, Conservation and Science Group

21 May 2024

Attachment A - Environmental Assessment Requirements
Attachment B - Guidance Material

Standard Environmental Assessment Requirements

BCS	Biodiversity, Conservation and Science Group of the NSW Department of Climate Change, Energy, the Environment and Water
The Department	NSW Department of Planning, Housing and Infrastructure
NPWS	National Parks and Wildlife Service

Ancillary development components

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.

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 may 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 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 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](#).

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 *Biodiversity Conservation Act 2016*. 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 BCS 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).

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 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% 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 requirements

National Parks and Wildlife Service matters

The EIS must:

- Be prepared in consultation with the National Parks and Wildlife Service (NPWS).

Outline what consultation has occurred with NPWS and whether notification to the Minister administering the *National Parks and Wildlife Act 1974* (NPW Act), as ‘landowner’ of Gardens of Stone State Conservation Area, will occur as per section 181 of the Environmental Planning and Assessment Regulation 2021
- Justify, with reference to the NPW Act, how the development is permissible through being consistent with:
 - i. the objects of the NPW Act and
 - ii. the management principles for state conservation areas
- Outline alternative options that have been explored that would avoid any encroachment/occupation of Gardens of Stone State Conservation Area (the ‘park’) and justify why this encroachment/occupation must occur as part of the development.
- Clearly identify:
 - i. the area of park to be temporarily occupied or utilised as part of the development, including any routes of access through the park or areas required for the storage of vehicles, plant, equipment or materials,
 - ii. the area of park to be permanently occupied or utilised as part of the development, including access for future operations.
- Include an assessment of the nature, extent and duration of any potential direct or indirect impacts on the park, addressing all matters outlined in [Developments adjacent to National Parks and Wildlife Service lands: guidelines for consent and planning authorities \(DPIE-NPWS 2020\)](#).
- Identify measures proposed to prevent, control, abate, minimise and manage any potential direct and indirect impacts on the park, including an evaluation of the effectiveness and reliability of the proposed measures.
- quantify any residual impacts to the park.

It is noted the study area extends into Gardens of Stone State Conservation Area. Any survey effort within the park is subject to NPWS authorisation. Contact regarding requests for permission to conduct surveys in the park should be directed to NPWS Kanangra Area at npws.kanangra@environment.nsw.gov.au.

Application of partial loss when calculating biodiversity offsets

Partial loss can be applied if there are some biodiversity values that will continue to be present in the impacted area over the life of the development. For example, a transmission line may remove trees and shrubs, but retain the understory.

Partial loss can occur from direct, indirect, prescribed, or uncertain impacts that do not result in the total loss of biodiversity values (it does not include temporary impacts which must be assessed as direct impacts under the BAM).

A partial loss assessment of direct and indirect impacts allows for credit obligations to be calculated with a predicted future vegetation integrity (VI) score greater than zero in the BAM calculator.

If there is any uncertainty, full loss should be calculated.

Before applying partial loss, the proposed methodology and justification must be discussed with the Biodiversity and Conservation Division NW Planning team and the consent authority.

Contact the BCS North West Planning team at rog.nw@environment.nsw.gov.au.

Guidance Material

Title	Web address
<u>Relevant Legislation</u>	
<i>Biodiversity Conservation Act 2016</i>	https://www.legislation.nsw.gov.au/view/html/inforce/current/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/current/act-1979-203
<i>Fisheries Management Act 1994</i>	https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1994-038
<i>National Parks and Wildlife Act 1974</i>	https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1974-080
<i>Protection of the Environment Operations Act 1997</i>	https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1997-156
<i>Water Management Act 2000</i>	https://www.legislation.nsw.gov.au/view/html/inforce/current/act-2000-092
<i>Wilderness Act 1987</i>	https://www.legislation.nsw.gov.au/view/html/inforce/current/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/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 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 sulfate soils	

Title	Web address
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