

Checklists for Biodiversity



Checklist for documents submitted for EIA of proposals that have the potential to significantly impact on Sea and Land factors¹

This checklist should be used by proponents and their environmental consultants both during the proponent's initial project planning and environmental scoping process, and specifically in the final checking of documents they intend to submit to the Environmental Protection Authority (EPA) for environmental impact assessment (EIA). This checklist will be reviewed and revised periodically to refer to contemporary EPA guidance documents as they are released.

The purpose of this checklist is to provide the basis for proponents and their consultants to conduct initial in-house screening of the quality of their EIA documents (QAQC). The intent is to more clearly define a minimum standard that is expected to be met for some of the more common and fundamental elements of EIA documentation submitted to the EPA under Land and Sea themes.

Meeting this minimum standard should, in turn, facilitate timely and efficient consideration of documents by the EPA. It is complementary to, but does not replace, the approved Scoping document.

The checklist has been set out in four parts. Part 1 addresses general elements of document quality. Parts 2 and 3 deal with key EIA requirements specific to marine and terrestrial fauna, habitat and environmental quality impacts. Part 4 sets out the requirements for proponent certification of the checklist.

To confirm that each element has been addressed, proponents are asked to place a tick in the boxes provided. Where an element of the checklist is not relevant to the proposal, checking the box with "N/A" will be adequate.

A copy of this checklist certified by an appropriate proponent representative as complete and accurate must be lodged with EIA documentation submitted to the EPA. Completed checklists will be reviewed by the EPA when documents are lodged. **Incomplete or inaccurate checklists will be returned for proponents to address outstanding matters before the EPA will commence its review of EIA documents.**

It should be noted that the EPA's acceptance of a complete and accurate checklist simply indicates that basic requirements in terms of document quality and general comprehensiveness have been met. **The EPA's acceptance of the checklist does not imply adequacy of technical work or appropriateness of 'policy' application / interpretation.** These matters are reviewed in more detail later in the EIA process.

¹ See EAG 8 Environmental Assessment Guideline for Environmental Principles, Factors and Objectives (EPA 2015) for description of Sea and Land factors and objectives.

THE CHECKLIST

PART 1 – GENERAL QUALITY OF DOCUMENTS

Ensure that the following standard elements are present in all documentation (including appendices):

A clear and concise title that outlines basic information about the proposal and purpose of the document.

Date and document revision number.

Information identifying the document's author and publishing entity.

All issues identified in a scoping guideline or scoping document have been addressed and covered in the report (note: there should also be a stand-alone document that explicitly considers each element of the scoping document and how/where it is addressed).

Complete and correct tables of contents, maps, tables and figures.

Suitably-sized scale maps placing the proposal into both a regional and local context.

Figures, plates, maps, technical drawings or similar including scale bar, legend, informative caption, labels identifying important or relevant locations/features referred to in the document text.

Proposed footprint and development envelope are shown on scale maps and associated spatial data is provided in an appropriate format and coordinate system/projection (GDA94/MGA Zone or GDA94). For EPA notes on spatial data please refer to Appendix 1 of Environmental Assessment Guideline No. 1 Defining the Key Characteristics of a Proposal.

All survey site locations and derived data products (e.g. benthic habitat maps, vegetation maps) have been provided in appropriate electronic spatial data format.

All survey data from biological surveys have been provided in electronic database form (Access/Excel) with coordinate system/projection specified (GDA94/MGA Zone or GDA94).

A list of references that have been cross-checked to ensure that all references in the Reference list are cited in the text (and vice versa).

All information based on 'expert' opinion/judgement are explicitly attributed, by name and qualification, to a person/s or organisation.

Where relevant, appendices are attached to the main EIA document that describe the details of technical work undertaken to underpin the content of the main document, and explicitly attributed by name to the author/s and (if applicable) their organisation.

Description(s) of the proposal are internally consistent throughout all documentation and allow potential environmental impacts to be placed in local and regional contexts, including cumulative impacts of existing and approved developments.

Please identify relevant sections of the report in the box below.

chapter 5

Descriptions of the local and regional environmental features most likely to be directly or indirectly affected by the proposal.

Please identify relevant sections of the report in the box below.

chapter 9

PART 2 – MARINE ENVIRONMENTAL ISSUES

For proposals where benthic communities and habitats is a relevant factor, and where it is likely to impact on tropical arid zone mangroves in the Pilbara, the EIA document describes how potential impacts have been addressed in the context of [Guidance Statement No.1: Guidance Statement for Protection of Tropical Arid Zone Mangroves Along the Pilbara Coastline \(April 2001\)](#).

If applicable, please identify relevant sections of the report in the box below.

Not applicable

For proposals likely to impact on benthic primary producer habitat, including tropical arid zone mangroves in the Pilbara, the EIA document describes how potential impacts have been addressed in the context of [Environmental Assessment Guideline No.3 Protection of Benthic Primary Producer Habitats in Western Australia's Marine Environment \(December 2009\)](#), including:

- details of the measures taken to address the Overarching Environmental Protection Principles;
- scale benthic habitat maps showing the current extent and distribution of benthic habitats and the areas of habitat predicted to be lost if the proposal proceeds;
- descriptions of technical work (e.g. benthic habitat surveys) carried out to underpin the benthic habitat map (e.g. a technical appendix); and
- clearly set out calculations of cumulative loss.

If applicable, please identify relevant sections of the report in the box below.

Not applicable

For proposals likely to impact on benthic primary producer habitat in Port Hedland, the Local Assessment Unit for application of EAG 3 is consistent with [Environmental Protection Bulletin No. 14: Guidance for the assessment of benthic primary producer habitat loss in and around Port Hedland](#).

For proposals that involve marine dredging activities, potential impacts have been addressed in the context of the [Environmental Assessment Guideline No.7 for Marine Dredging Proposals \(September 2011\)](#) to ensure that the predicted extent, severity and duration of impacts to benthic habitats are presented in a clear and consistent manner. The most likely best case and most likely worse case scenarios should be presented and discussed

If applicable, please identify relevant sections of the report in the box below.

Not applicable

For proposals that involve any type of waste discharge or disposal in State coastal waters, potential impacts have been addressed in the context of:

- [Environmental Assessment Guideline No.15 for Protecting the Quality of Western Australia's Marine Environment \(EAG 15\)](#); as well as
- [Environmental Quality Criteria Reference Document for Cockburn Sound \(EPA, 2015\)](#), [Perth's Coastal Waters: Environmental Values and Objectives \(EPA, 2000\)](#), or [Pilbara Coastal Water Quality Project Consultation Outcomes document \(DoE, 2006\)](#) for the relevant regions; and
- relevant guidance provided in the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ, 2000).

If applicable, please identify relevant sections of the report in the box below.

Not applicable

For proposals with potential to impact on an existing or proposed marine conservation reserve, potential impacts have been addressed in the context of the guidance provided in the relevant indicative or final Management Plan for the reserve on the advice of DPaW or another designated management agency.

If applicable, please identify relevant sections of the report in the box below.

not applicable

For proposals with light emissions likely to impact marine turtles, the potential impacts have been addressed in the context of [Environmental Assessment Guideline No. 5 Environmental Assessment Guideline for Protecting Marine Turtles from Light Impacts \(November 2010\)](#) to ensure appropriate avoidance and management approaches are in place.

If applicable, please identify relevant sections of the report in the box below.

not applicable

If numerical modelling has been carried out to inform the prediction of environmental impacts, each report associated with this modelling, including the key assumptions, is provided as a technical appendix.

If applicable, please identify the relevant appendices in the box below.

not applicable

PART 3 – TERRESTRIAL BIODIVERSITY ISSUES

For proposals likely to impact on native flora and vegetation, the EIA document describes how potential direct and indirect impacts have been addressed in the context of [EPA Guidance Statement No. 51 - Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia](#) (June 2004) and [Technical Guide – Flora and Vegetation Surveys for Environmental Impact Assessment](#) EPA and DPaW (2015) including:

- determining the level of flora and vegetation survey, including a survey area encompassing direct and indirect impacts, utilising suitable survey methodology and listing survey limitations;
- maps illustrating the survey area in both a local and regional context, location of quadrats, vegetation unit mapping, location of significant species or vegetation, vegetation condition and predicted extent of impact on the vegetation;
- a comprehensive list of flora species (using the nomenclature of the WA Herbarium) which are known or reasonably expected to occur in the area and a quantitative assessment of direct and indirect impacts to threatened, priority or other significant flora and/or threatened, priority or other significant vegetation (as defined in Technical Guide);
- an evaluation of the impact of the proposal on flora and vegetation, including analysis of the local, regional and cumulative impacts of the project; and
- quadrat data provided as excel spreadsheet in raw form, in addition to hardcopy reports.

If applicable, please identify relevant sections of the report in the box below.

chapter 9

For proposals likely to impact on vertebrate fauna or fauna habitat, the EIA document describes how potential impacts have been addressed in the context of [EPA Guidance Statement No. 56, Terrestrial Fauna Surveys for Environmental Impact Assessment](#) (June 2004) and [Technical Guide – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment](#) EPA and DEC (2010), including:

- determining the level of fauna survey consistent with that expected ;
- describing the survey methodologies, including timing, duration and survey effort used to sample each of the fauna groups sampled, any survey limitations and the nomenclature used (WA Museum/Birdlife Australia);
- maps illustrating the survey area in both a regional and local context; fauna habitats within and outside the development envelope; description of predicted extent of impact on the habitat; location of survey sites and conservation significant fauna in relation to the proposal; and
- a comprehensive list and assessment of vertebrate fauna known or reasonably expected to occur in the area, including Specially Protected, Priority and other significant fauna (as defined in Guidance Statement No. 56), and an evaluation of the impact of the proposal on the species and key habitat/s.

If applicable, please identify relevant sections of the report in the box below.

Chapter 9

For proposals with the potential to impact on short range endemic (SRE) invertebrate fauna or SRE habitat, the EIA document describes how potential impacts have been addressed in the context of [EPA Guidance Statement No. 20, Sampling of Short Range Invertebrate Fauna for Environmental Impact Assessment in Western Australia](#) (May 2009), including:

- assessment for restricted habitat types that have potential to support SRE fauna, including advice from the WA Museum, DPaW and OEPA;
- maps illustrating the survey area in both a regional and local context, and identifying potential SRE habitats within and outside the development envelope and extent of predicted impact on the habitat;
- a description of the survey methodologies, including timing and survey effort used to sample each of the fauna groups and any survey limitations;
- the results and interpretation of any molecular analysis used; and
- a survey report with assessment of SRE fauna found or reasonably expected to occur in the area, their conservation status, their known occurrence/habitats locally and their wider status if known, and an evaluation of the risk of the proposal to long-term survival of the species and community.

If applicable, please identify relevant sections of the report in the box below.

not applicable

For proposals with the potential to impact on subterranean (stygo/fauna and trogl/fauna) fauna, the EIA document describes how potential impacts have been addressed in the context of [EPA Environmental Assessment Guideline 12 Consideration of subterranean fauna in EIA in WA](#) and [Guidance Statement No. 54a, Sampling Methods and Survey Considerations for Subterranean Fauna in Western Australia](#) (Draft, August 2007), including:

- an assessment of the likely presence of habitat that could support subterranean fauna, including advice from the WA Museum and OEPA;
- maps identifying survey sites and illustrating the known or predicted extent of habitats in relation to the proposal; a description of the geology/habitat supporting subterranean fauna within and outside the development envelope; extent of predicted impacts on the subterranean fauna and habitat;

- a description of the survey methodologies (see Guidance Statement No. 54a), including reference to site selection, sampling techniques, survey effort, specimen collection and molecular analysis used undertaken as part of the survey, and any survey limitations; and
- a list of subterranean fauna recorded and their distribution or reasonably expected to occur in the area, including their conservation status, their known occurrence/habitats locally and their wider status if known, and an evaluation of the risk of the proposal to long-term survival of the species and community.

If applicable, please identify relevant sections of the report in the box below.

not applicable

PART 4 – PROPONENT’S CERTIFICATION OF COMPLETENESS AND ACCURACY OF RESPONSES

Name

RICHARD PHILLIPS

Position

ENVIRONMENT & APPROVALS MANAGER

Signature



Date

12, 08, 2016