

Terms of reference for an environmental impact statement

Three Rivers Irrigation Project

October 2015

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Contents

Part A. About these terms of reference	2
1. Statutory basis	2
2. Accredited process for controlled actions under Commonwealth legislation	2
3. EIS guidelines	2
4. More information	2
Part B. Content of the EIS	3
5. General approach	3
6. Mandatory requirements of an EIS	3
7. Further requirements of an EIS	4
8. Executive summary	5
9. Introduction	5
Project proponent	5
The environmental impact assessment process	5
Project approvals process	5
10. Project description	6
Proposed development	6
Site description	6
Climate	7
Proposed construction and operations	7
11. Assessment of critical matters	8
Water resources	9
Water quality	11
Flora and fauna	12
Land use and soils	13
12. Assessment of routine matters	14
Hazards, health and safety	14
Air	16
Noise and vibration	16
Social and economic	17
Biosecurity	19
Waste management	19
Cultural heritage	20
Infrastructure	20
Transport	21
Content of the EIS for matters of national environmental significance	21
Conclusion	26
13. Appendices to the EIS	27
Acronyms and abbreviations	28
Appendix 1. Policies and guidelines	29

Part A. About these terms of reference

1. Statutory basis

- 1.1. The Coordinator-General has declared the Three Rivers Irrigation Project to be a 'coordinated project for which an environmental impact statement (EIS) is required' under section 26(1)(a) of the *State Development and Public Works Organisation Act 1971* (SDPWO Act). This declaration initiates the statutory environmental impact assessment procedure of Part 4 of the SDPWO Act, which requires a proponent to prepare an EIS for the project.
- 1.2. The declared Three Rivers Irrigation Project is defined in the Initial Advice Statement (IAS) dated June 2015.
- 1.3. These terms of reference (TOR) set out the matters the proponent must address in an EIS for the project and must be approved by the Coordinator-General under section 30 of the SDPWO Act.

2. Accredited process for controlled actions under Commonwealth legislation

- 2.1. On 17 July 2015, the Commonwealth Minister for the Environment determined the Three Rivers Irrigation Project is a 'controlled action' under the EPBC Act, due to the potential impacts on matters of national environmental significance (MNES) (reference number EPBC 2015/7506).
- 2.2. The EIS process has been accredited under the Bilateral Agreement for the assessment of the project under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act), therefore the EIS must state the controlling provisions for the project and describe the particular aspects of the environment that led to the controlled action decision.
- 2.3. The assessment of the controlling provisions, mitigation measures and any offsets for residual impacts must be described and illustrated in a stand-alone report in the EIS that fully addresses the matters relevant to the controlling provisions. Requirements for MNES are set out on pages 21–27 of these TOR.

3. EIS guidelines

- 3.1. These TOR should be read in conjunction with *Preparing an environmental impact statement: Guideline for proponents*, which explains the following:
 - participants in the EIS process
 - consultation requirements
 - EIS format and copy requirements.
- 3.2. In addition, subject-specific guidelines are referenced throughout these TOR; refer to Appendix 1 for a list of these policies and guidelines.

4. More information

- 4.1. For information about the project or the EIS process conducted under the SDPWO Act, visit www.statedevelopment.qld.gov.au/cg

Part B. Content of the EIS

5. General approach

- 5.1. For the purposes of the EIS process, 'environment' is defined in Schedule 2 of the SDPWO Act and includes social and economic matters.
- 5.2. The EIS should give priority to the critical matters associated with the project (specified in section 11 of these TOR).
- 5.3. The detail at which the EIS deals with matters relevant to the project should be proportional to the scale of the impacts on environmental values. When determining the scale of an impact, consider its intensity, duration, cumulative effect, irreversibility, the risk of environmental harm, management strategies and offsets provisions. The level of detail should also be targeted at the subsequent approvals (as detailed in Table 9 and Appendix A of the project's IAS) sought as a direct result of the EIS so that the Coordinator-General's assessment and conditions can address these if necessary.

6. Mandatory requirements of an EIS

- 6.1. The EIS must identify and describe the environmental values that must be protected. Environmental values are specified in the *Environmental Protection Act 1994* (EP Act)¹, the Environmental Protection Regulation 2008 (EP Regulation), environmental protection policies (EPPs) and relevant guidelines.²
- 6.2. The assessment of impacts on environmental values should cover both the short and long term and state whether any relevant impacts are likely to be irreversible.
- 6.3. Provide baseline information relevant to the environmental values and risks of the project, including seasonal variations. Provide details about the quality of the information, in particular: the source of the information; how recent the information is; how the reliability of the information was tested; and any uncertainties or gaps in the information.
- 6.4. Provide detailed strategies on all critical matters for the protection, or enhancement of all relevant environmental values in terms of outcomes and possible conditions that can be measured and audited. In general, the preferred hierarchy for managing likely impacts is: (a) to avoid; (b) to minimise/mitigate; and (c) if necessary and possible, to offset.
- 6.5. Impact minimisation measures should include ongoing monitoring and proposals for adaptive management, as relevant, based on monitoring. The proposed measures should give confidence that, based on current technologies, the impacts can be effectively avoided or minimised to an acceptable level.
- 6.6. Each matter assessed in the EIS (as described in sections 11, 12 and 0 of these TOR) should include a concise summary of the potential impacts of the project and the measures proposed by the proponent to avoid, minimise, mitigate and/or offset those impacts.

¹ Part 3, Division 2, Subdivision 1, section 9

² For example, the *Queensland Water Quality Guidelines* and the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (refer to Appendix 1 for details).

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- 6.7. Present feasible alternatives of the project's configuration (including individual elements) that may improve environmental outcomes. Discuss the consequences of not proceeding with the project or individual elements of the project.
 - 6.8. Assess the extent to which the construction and operation of the project meets all policy, statutory and regulatory requirements of Commonwealth, State and Local governments. Demonstrate that the project and its predicted outcomes are consistent with all legislation, government plans, strategies, policies and guidelines that apply up to and until the time that the final EIS is accepted by the Coordinator-General. Subsequently, the Coordinator-General's assessment and conditions will address all government policies and regulatory frameworks applicable at that time.
 - 6.9. An appropriate public consultation program is essential to the impact assessment process. The proponent should consult with Commonwealth, State and Local government agencies, and potentially affected local communities and stakeholders.
 - 6.10. The EIS should describe the consultation that has taken place and how the responses from the community and agencies have been incorporated into the design and outcomes of the project.
 - 6.11. Include, as an appendix, a public consultation report detailing how the public consultation plan was implemented, and the results.

7. Further requirements of an EIS

- 7.1. The assessment and supporting information should be sufficient for the assessing and administering authorities to decide whether an approval should be granted. Sufficient information should be included to enable approval conditions to be decided.
- 7.2. To the extent that information is available, the assessment should predict the cumulative impact³ of the project on environmental, economic and social values over time, including direct, indirect and consequential impacts. The EIS should also outline ways in which the cumulative impact assessment and management could subsequently be progressed further on a collective basis. This will inform the decision on the EIS and the setting of conditions.
- 7.3. Include a consolidated description of all the proponent's commitments to implement management measures (including monitoring programs). Should the project proceed, these should be able to be carried over into the approval conditions as relevant.
- 7.4. Provide all geographical coordinates throughout the EIS in latitude and longitude against the Geocentric Datum of Australia 1994 (GDA94).
- 7.5. An EIS should also describe the expected benefits and opportunities associated with the project.

³ Cumulative impact is defined as 'combined impacts from all relevant sources (developments and other activities in the area)'.

8. Executive summary

- 8.1. The executive summary should describe the project, the potential impacts and proposed environmental management options in a concise and readable form. It should use plain English, avoid jargon, be written as a stand-alone document and be structured to follow the EIS. It should be easy to reproduce and distribute on request to those who may not wish to read or purchase the whole EIS.

9. Introduction

- 9.1. Clearly explain the function of the EIS, why it has been prepared and what it sets out to achieve. Include an overview of the structure of the document.

Project proponent

- 9.2. Describe the following:
- (a) the designated proponent's full name, postal address and ABN, if relevant (including details of any joint venture partners)
 - (b) the nature and extent of business activities
 - (c) proponent's relevant project experience
 - (d) proponent's environmental record, including a list of any breach of relevant environmental laws during the previous ten years
 - (e) proponent's environmental, health, safety and community policies.

The environmental impact assessment process

- 9.3. The EIS must provide an outline of the environmental impact assessment process, including the role of the EIS in the Coordinator-General and Commonwealth Minister for the Environment's decision-making process. The information in this section is required to ensure readers are informed of the process to be followed and are aware of any opportunities for input and participation.
- 9.4. The EIS must inform the reader how and when properly made public submissions on the EIS will be addressed and taken into account in the decision-making process.

Project approvals process

- 9.5. Describe the approvals required to enable the project to be constructed and operated. Explain how the environmental impact assessment process (and the EIS itself) informs the issue of the leases/licences/permits/consents required by the proponent before construction can commence. Provide a flowchart indicating the key approvals and opportunities for public comment.

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- 9.6. The State Development Assessment Provisions (SDAP) prescribed in the Sustainable Planning Regulation 2009 set out the matters of interest to the State for development assessment where the chief executive of the *Sustainable Planning Act 2009* (SPA) is the assessment manager for development applications. If the proponent intends to satisfy the information requirements of future development assessment decisions under SDAP for any component of the project during this coordinated project EIS process, the material provided in accordance with sections 10–12 of these TOR should be sufficient to permit those assessments to be completed for that project component. Further information on SDAP requirements can be accessed from www.statedevelopment.qld.gov.au/development-applications/sdap

10. Project description

Proposed development

- 10.1. The EIS must describe and illustrate at least the following specific information about the proposed project, consistent with the project declaration as defined in the project's IAS dated June 2015:
- (a) project title
 - (b) project description, including all project components and activities that are to be assessed as part of the EIS process
 - (c) project objectives
 - (d) expected capital expenditure
 - (e) rationale for the project
 - (f) regional and local context of the project's footprint and impact area (with maps at suitable scales)
 - (g) relationship to other major projects and/or developments (of which the proponent should reasonably be aware)
 - (h) workforce numbers for all project phases
 - (i) where personnel would be accommodated
 - (j) proposed construction staging and likely schedule of works.

Site description

- 10.2. Provide real property descriptions of the project land and adjacent properties; any easements; underlying tenures; and identification number of any lease for the project land that is subject to the application. Key transport, state-controlled roads, rail, air, port/sea and other infrastructure or services in the region and to the site should be described and mapped. Describe and map existing infrastructure on the site.

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- 10.3. Describe and illustrate the topography of the project site and surrounding area, and highlight any significant features shown on the maps. Include and name rivers and creeks. Maps should include a scale, and have contours at suitable increments relevant to the scale, location, potential impacts and type of project, shown with respect to Australian Height Datum (AHD) and drafted to GDA94. Maps should incorporate the *Queensland waterways for waterway barrier works* spatial data layer.
 - 10.4. Describe and map specific information about the proposed project including the precise location of the proposed development in relation to any designated and protected areas and waterbodies.
 - 10.5. Map the location and boundaries of the project footprint including development necessarily occurring as a consequence of approval of the project. Show all key aspects including excavations, stockpiles, areas of fill, services infrastructure, plant locations, water storages, buildings, bridges and culverts.
 - 10.6. Map and describe the location of any proposed buffers surrounding the working areas; and lands identified for conservation, either through retention in their current natural state or to be rehabilitated.
 - 10.7. Where relevant, describe and map in plan and cross-sections the geology and landforms, including catchments, of the project area. Show geological structures, such as aquifers, faults and economic resources (such as agricultural products) that could have an influence on, or be influenced by, the project's activities.
 - 10.8. Where relevant, describe, map and illustrate soil types and profiles of the project area at a scale relevant to the proposed project. Identify soils (including topsoils) that would require particular management due to wetness, erosivity, depth, acidity, salinity, sodicity or other features.
 - 10.9. Provide all spatial data presented in the EIS in appropriate electronic form such as shape files.
 - 10.10. Plans and drawings provided must be detailed enough to enable the Coordinator-General and advisory agencies to adequately assess the EIS.

Climate

- 10.11. Describe the site's climate patterns that are relevant to the environmental assessment, including rainfall and evaporation rates. Climate information should be presented in a statistical form including long-term averages, median and extreme values, and any predicted changes associated with climate change, as necessary.

Proposed construction and operations

- 10.12. Describe the following information about the proposal, and provide mapping and concept/layout plans where applicable:
 - (a) all pre-construction activities (e.g. vegetation clearing, site access, interference with watercourses and floodplain areas, including wetlands)
 - (b) existing infrastructure and easements on the potentially affected land
 - (c) the proposed construction methods, associated equipment and techniques

- (d) all energy requirements, including electricity, natural gas, and/or solid and liquid fuel
- (e) location, design and capacity of all required infrastructure (including water supply, storage and related infrastructure; flood levees; telecommunications; power generation and transmission infrastructure; roads; sewerage)
- (f) any infrastructure alternatives, justified in terms of ecologically sustainable development (including energy and water conservation)
- (g) hours of operation for proposed construction works
- (h) the sequencing and staging of activities
- (i) the capacity of high-impact plant and equipment, their chemical and physical processes, and chemicals or hazardous materials to be used
- (j) the known locations of new or altered works and structures and infrastructure necessary to enable the construction and operation of the development
- (k) any activity that is a prescribed ERA
- (l) location of quarry operations the project may source materials from
- (m) the range of land uses and site layout
- (n) built form and design information
- (o) operations plan (e.g. land management practices, hours of operation, cropping methods and crop performance assumptions)
- (p) the commissioning process and the rehabilitation of affected areas after construction
- (q) management structure of final development
- (r) location of any blasting activities
- (s) location and scale of parking requirements
- (t) seasonal considerations (e.g. flooding or drought) that may require changes to construction and operations.

11. Assessment of critical matters

- 11.1. This section sets out the scope of critical matters that should be given detailed treatment in the EIS. A critical matter is an aspect of the proposal that is reasonably expected to have one or more of the following characteristics:
- (a) a high or medium probability of causing serious or material environmental harm or a high probability of causing an environmental nuisance⁴
 - (b) considered contentious in the public domain, for example, has been the subject of extensive media coverage and/or there is a public perception that an activity has the potential to cause serious or material environmental harm or an environmental nuisance (regardless of the likelihood of occurrence).
- 11.2. The final scope of critical matters will be determined by the Coordinator-General when finalising the TOR. In the course of preparing the EIS, information may become available that warrants a change of scope.

⁴ 'Material environmental harm', 'serious environmental harm' and 'environmental nuisance' are defined in Part 3, sections 15, 16 and 17 of the *Environmental Protection Act 1994*.

Water resources

Objectives

The construction and operation of the project should aim to meet the following objectives:

- (a) equitable, sustainable and efficient use of water resources
- (b) environmental flows, water quality, in-stream habitat diversity, and naturally occurring inputs from riparian zones support the long-term maintenance of the ecology of aquatic biotic communities
- (c) the condition and natural functions of water bodies including marine waters, lakes, springs, waterholes and watercourses are maintained—including the stability of beds and banks of watercourses
- (d) volumes and quality of groundwater are maintained
- (e) current lawful users of water (such as entitlement holders and stock and domestic users) and other beneficial uses of water (such as fisheries, spring flows and groundwater-dependent ecosystems) are not adversely impacted by the development.

Information requirements

- 11.3. The Coordinator-General requires a rigorous and robust assessment verifying the environmental sustainability of the project's proposed water resources.

The Coordinator-General may obtain advice or services, from technical experts in water resource matters, that the Coordinator-General considers necessary to decide that the assessment is adequate. At all stages of the EIS the Office of the Coordinator-General will also work very closely with the Department of Natural Resources and Mines to draw on their expertise.

Should an individual technical expert or expert review panel be required, the Coordinator-General will work with the proponent in determining the requirements as early as possible during the EIS, including the scope and timing of the advice or services to be provided. The Coordinator-General will provide formal advice to the proponent if such a review is necessary.
- 11.4. Describe proposed locations and sources of water supply. Estimated rates and timing of supply from each source (average, median and maximum rates) must be given and proposed water conservation and management measures must be described.
- 11.5. Provide details of any proposed impoundment, extraction, diversion, discharge, injection, use or potential loss of surface water or groundwater and any potential impacts that may occur.
- 11.6. Identify any allocation, approvals and licences that would be needed under the *Water Act 2000*. Discuss the project's consistency with the Water Resource (Gulf) Plan 2007 and the Gulf Resources Operations Plan, as amended, including how the project will meet and maintain the plan's environmental flow requirements.
- 11.7. Provide information on the proposed water usage by the project, including details about:
 - (a) the ultimate supply required to meet the demands of the development, including crop types and associated water demands, and timing of demands

- (b) potable water demand for the project, including the temporary demands during the construction period, including any town water supply to meet such requirements
 - (c) the quality, quantity and proposed treatment of all water supplied to the site during the construction and operational phases based on minimum yield scenarios for water reuse and any bore water volumes
 - (d) water reliability/security requirements
 - (e) a water balance analysis
 - (f) a plan outlining the consequences and actions to be taken in the event that access to required water sources and volumes is unavailable
- 11.8. Provide details for all infrastructure utilised in the collection, management, storage and treatment of water, including the design, operation and effectiveness of any proposed fishway or other fish transfer mechanisms.
- 11.9. Discuss how contaminated water is to be disposed of, any decommissioning requirements and timing of temporary water supply/treatment infrastructure.
- 11.10. Provide details of the instream and off-stream storages associated with the proposal including full supply levels, storage capacity, maximum depth, area of inundation and length of river bed (and tributaries) inundated.
- 11.11. Include maps at a suitable scale showing the layout and location of any diversions, inundation areas, channels and other water-related infrastructure.
- 11.12. Develop hydrological models as necessary to describe the inputs, movements, exchanges and outputs of all significant quantities of water and contaminants in the resources of surface water and groundwater that may be affected by the project. The models should address the range of climatic conditions and seasonality experienced and predicted at the site, including predicted climate change, and adequately assess the potential impacts of the project on water resources at full operation. The models should include a site water balance and accompanying contaminant load mass balance. This should enable a description of the project's impacts at the local scale and in a regional context, and associated management and mitigation measures, including proposed:
- (a) changes in flow regimes from structures and water take
 - (b) alterations to riparian vegetation and bank and channel morphology
 - (c) direct and indirect impacts arising from the development.
- Where modelling has been necessary to inform the assessment, the modelling report should include:
- (a) an outline the model conceptualisation of aquifers, including key assumptions
 - (b) an accurate representation of each of the aquifers in the area, the storage and flow characteristics of those aquifers, linkages between aquifers (if any) and the existing recharge and discharge mechanisms of the aquifers and the changes that are predicted to occur once development begins
 - (c) recommendations and a program for review and update of the groundwater model as data and information becomes available.

- 11.13. Identify any potential effects on environmental flows and existing water users, and impacts by the project on meeting town water supplies and demands from future projects in the catchment, and strategies to manage and mitigate these effects.
- 11.14. Describe proposed monitoring and reporting arrangements for surface water and groundwater to detect any water-related issues associated with the operation of the proposal.

Water quality

Objective

Development is planned, designed, constructed and operated to protect environmental values of Queensland waters and supports the achievement of water quality objectives.

Information requirements

- 11.15. Describe the hydrology within the study area and the areas impacted by the project downstream in terms of water levels, discharges and freshwater flows. Describe the interaction of freshwater flows with different aquatic habitats.
- 11.16. Describe the chemical and physical characteristics of surface waters and groundwater within the area that may be affected by the project. Include a description of water quality variability associated with climatic and seasonal factors, variability of freshwater flows and extreme events.
- 11.17. Identify the quantity, quality and location of all potential discharges of water and contaminants by the project, whether as point sources (such as controlled discharges) or diffuse sources.
- 11.18. Describe the proposed management of existing and/or constructed waterbodies on the project site to maintain water quality.
- 11.19. Assess the potential impacts of the project on the quality and quantity of receiving waters, including marine waters, and identified environmental values, taking into consideration the assimilative capacity of the receiving environment and the practices and procedures that would be used to avoid or minimise impacts.
- 11.20. Explain practices and procedures that will avoid or minimise impacts of changed flow velocities from any watercourse works or water intake or discharge.
- 11.21. Describe how water quality objectives will be achieved, monitored and audited, and how corrective actions would be managed. Describe avoidance, minimisation and mitigation strategies and contingency plans for:
 - (a) discharges of contaminants and and/or build-up of sediment during construction and operation
 - (b) stormwater run-off from cropping areas and the project's other facilities and associated infrastructure during construction and operation
 - (c) flooding of relevant river systems, the effects of tropical cyclones and other extreme events
 - (d) management of acid sulfate soils (see also paragraph 11.33)
 - (e) erosion and localised salinity.

Flora and fauna

Objective

Matters of environmental significance are valued and appropriately safeguarded to support healthy and resilient ecosystems and ensure the sustainable, long-term conservation of biodiversity and the social, economic, cultural and environmental benefits it provides.

Information requirements

- 11.22. Show on maps the context of the project site in relation to surrounding and downstream terrestrial and aquatic vegetation, and ecological communities. Recorded fauna and flora of the site, immediate surrounds and the receiving aquatic environment should be shown on maps with references to where they were located.
- 11.23. Describe how the field survey methodologies and efforts undertaken to detect threatened flora and fauna are in accordance with state and Commonwealth survey guidelines.
- 11.24. Describe the likely impacts on the biodiversity, natural environmental values, ecological characteristics, listed threatened species and ecological communities, and migratory species of potentially affected areas arising from the construction and operation of the project. Take into account any proposed avoidance and/or mitigation measures. The assessment should include, but not be limited to, the following key elements:
 - (a) matters of state environmental significance and national environmental significance
 - (b) aquatic and terrestrial ecosystems (including marine and groundwater-dependent ecosystems) and their interaction, including with ground and surface water hydrology and quality, controlled discharges and stormwater run-off
 - (c) biological diversity including listed flora and fauna species, regional ecosystems and habitats
 - (d) the existing integrity of ecological processes and connectivity between rivers, riparian vegetation, floodplains, estuaries, waterholes, wetlands and other water bodies, including habitats of threatened, near-threatened or special least-concern species
 - (e) cumulative impacts on the spatial and temporal diversity of habitats and refuges across floodplains, waterholes and wetland areas
 - (f) potential changes to in-stream ecology and aquatic habitats due to the harvesting of overland flow, runoff and discharges (controlled and uncontrolled) of nutrients, pesticides and other contaminants
 - (g) the integrity of landscapes and places, including wilderness and similar natural places
 - (h) actions of the project that require an authority under the *Nature Conservation Act 1992* and *Water Act 2000* (for example, riverine protection permits) and/or would be assessable development for the purposes of the *Vegetation Management Act 1999*, the *Fisheries Act 1994*, the EP Act, the *Environmental Offsets Act 2014* or the *Coastal Protection and Management Act 1995*

- (i) acute or chronic, low-level exposure to contaminants or the bio-accumulation of contaminants
 - (j) impacts on native fauna, including species distribution and lifecycle requirements due to proximity to the site and site impacts (e.g. dust, fertilizers, herbicides, waterway barriers, levees, vegetation clearing, lighting, noise, waste)
 - (k) impact on fisheries resources in affected waterways and the Gulf of Carpentaria.
- 11.25. Propose practicable measures for protecting or enhancing natural values, and assess how the nominated quantitative indicators and standards may be achieved for nature conservation management. In particular, address measures to protect or preserve any threatened or near-threatened species and sensitive habitats.
- 11.26. Describe strategies for protecting wetlands of importance; and discuss any obligations imposed by state or Commonwealth legislation or policy, or international treaty obligations (that is, Japan–Australia Migratory Birds Agreement [JAMBA], China–Australia Migratory Birds Agreement (CAMBA) and Republic Of Korea–Australia Migratory Birds Agreement (ROKAMBA)).
- 11.27. Assess the need for buffer zones and the retention, rehabilitation or planting of movement corridors, and propose measures that would avoid the need for waterway barriers, or propose measures to mitigate the impacts of their construction and operation.
- 11.28. Describe how the achievement of the objectives would be monitored and audited, and how corrective actions would be managed.
- 11.29. Where Queensland legislation or policy requires an offset for a significant residual impact on a matter of state environmental significance, an offset proposal shall be presented in a form consistent with relevant legislation and policy.

Land use and soils

Objectives

Development should be designed and operated to:

- (a) improve environmental outcomes
- (b) contribute to community wellbeing
- (c) attract employment and investment
- (d) contribute to social, economic and environmental sustainability.

Information requirements

- 11.30. Explain how the proposal is consistent with or varies from the following plans and policies:
- (a) State Planning Policy (SPP)
 - (b) Gulf Regional Development Plan 2000
 - (c) Carpentaria Shire Planning Scheme and Croydon Shire Planning Scheme

- 11.31. Discuss the compatibility of the project with the surrounding area and region, taking into consideration the proposed measures that would be used to avoid or minimise impacts. The discussion should include:
- (a) existing and proposed land uses, in and around the project area
 - (b) any tenures overlying and adjacent to the project site, and any to be applied for as part of this project
 - (c) locational factors influencing the choice of site.
- 11.32. Describe and illustrate the visual impact of the construction and operation of the project. Include major views, view sheds, outlooks, and features contributing to the amenity of the area, including assessment from private residences.
- 11.33. Identify potential and actual areas of acid sulfate soils. Where potential areas are identified, further investigations (including field surveys) should be undertaken in accordance with the SPP and accepted industry guidelines.
- 11.34. Discuss soil suitability for the proposed irrigation and crop types with reference to the *Guidelines for applying to clear for high-value or irrigated high-value agriculture* and *Guidelines for meeting the land suitability and economic viability requirements for high-value and irrigated high-value agriculture applications*. Identify potential impacts on soils, including waterlogging, salinity, sodicity and erosion risks from irrigation or clearing, and outline proposed management and mitigation measures.
- 11.35. Identify existing and potential native title rights and interests possibly impacted by the project and the potential for managing those impacts by an Indigenous Land Use Agreement or other measure.

12. Assessment of routine matters

- 12.1. The following subsections list the routine matters for coordinated projects, with (where applicable) a reference to the relevant objectives. In some cases, not all the matters may be relevant, while in others the list may not be exhaustive.
- 12.2. For each routine matter identified below, the level of detail should be proportional to the risk or magnitude of impacts. As a minimum, the proponent should supply sufficient information that confirms the risks/impacts are not significant.

Hazards, health and safety

Objectives

- (a) The risk of, and the adverse impacts from, natural hazards are avoided, minimised or mitigated to protect people and property and enhance the community's resilience to natural hazards.
- (b) Developments are to be appropriately located, designed and constructed to minimise health and safety risks to communities and individuals and adverse effects on the environment.

Information requirements

General

- 12.3. Describe the potential risks to people, property and the environment that may be associated with the project in the form of a preliminary risk assessment for all components of the project and in accordance with relevant standards. The assessment should include:
- (a) potential hazards, accidents, spillages, fire and abnormal events that may occur during all stages of the project, including estimated probabilities of occurrence
 - (b) identifying all hazardous substances to be used, stored, processed or produced and the rate of usage
 - (c) potential wildlife hazards, natural events (for example, cyclone, storm tide inundation, flooding, bushfire, landslide, erosion) and implications related to climate change
 - (d) how the project may potentially affect hazards away from the project site (for example, changing flooding characteristics).
- 12.4. Provide information on the safeguards that would reduce the likelihood and severity of hazards, consequences and risks to persons and property, within and adjacent to the project area(s). Identify the residual risk following application of mitigation measures. Present an assessment of the overall acceptability of the impacts of the project in light of the residual uncertainties and risk profile.
- 12.5. Outline measures required to ensure that the proposed project avoids the release of hazardous materials as a result of a natural hazard event.
- 12.6. Provide an outline of the proposed integrated emergency management planning procedures (including evacuation plans, if required) for the range of situations identified in the risk assessment developed in this section.
- 12.7. Outline any consultation undertaken with the relevant emergency management authorities, including the Local Disaster Management Group.

Flooding

- 12.8. Describe flood risk for a range of annual exceedance probabilities (including Probable Maximum Flood) for the site, and assess how the project may change flooding characteristics. Take into consideration potential sea-level rise scenarios. Include a discussion of historical events.
- 12.9. The assessment should consider all infrastructure associated with the project including levees, water extraction and storage infrastructure, roads and linear infrastructure and all proposed measures to avoid or minimise risks to life, property, community (including damage to other properties) and the environment during flood events.

Air

Objective

Development is planned, designed, constructed and operated to protect the environmental values of air.

Information requirements

- 12.10. Fully describe the characteristics of any contaminants or materials that may be released as a result of the proposal. Emissions (point source and fugitive) during construction, commissioning, operations and upset conditions should be described.
- 12.11. Predict the impacts of the releases on environmental values of the receiving environment using recognised quality assured methods. The description of impacts should take into consideration the assimilative capacity of the receiving environment and the practices and procedures that would be used to avoid or minimise impacts. The impact prediction must:
 - (a) address residual impacts on the environmental values (including appropriate indicators and air quality objectives) of the air receiving environment, with reference to sensitive receptors⁵. This should include all relevant values potentially impacted by the activity, under the EP Act, EP Regulation and Environmental Protection (Air) Policy 2008 (EPP (Air))
 - (b) address the cumulative impact of the release with other known releases of contaminants, materials or wastes associated with existing development and possible future development (as described by approved plans and existing project approvals)
 - (c) quantify the human health risk and amenity impacts associated with emissions from the project for all contaminants whether or not they are covered by the National Environmental Protection (Ambient Air Quality) Measure or the EPP (Air).
- 12.12. Describe the proposed mitigation measures and how the proposed activity will be consistent with best practice environmental management. Where a government plan is relevant to the activity or site where the activity is proposed, describe the activity's consistency with that plan.
- 12.13. Describe how the achievement of the objectives would be monitored, audited and reported, and how corrective actions would be managed.

Noise and vibration

Objective

Development is planned, designed, constructed and operated to protect the environmental values of the acoustic environment.

⁵ For example, the locations of existing residences, places of work, schools, etc., agricultural or ecologically significant areas/species that could be impacted. (do not delete this footnote)

Information requirements

- 12.14. Fully describe the characteristics of the noise and vibration sources (including point and fugitive sources, and general emissions) that would be emitted during construction, commissioning, upset conditions, and operation.
- 12.15. Predict the impacts of the noise emissions of the project on the environmental values of the receiving environment, with reference to sensitive receptors, using recognised quality assured methods. Discuss separately the key project components likely to present an impact on noise and vibration for the construction and operation phases of the project.
- 12.16. Taking into account the practices and procedures that would be used to avoid or minimise impacts, the impact prediction must address the:
 - (a) activity's consistency with the objectives
 - (b) cumulative impact of the noise with other known emissions of noise associated with existing development and possible future development (as described by approved plans)
 - (c) potential impacts of any low-frequency (<200 Hz) noise emissions.
- 12.17. Describe how the proposed activity, and in particular, the key project components described above, would be managed to be consistent with best practice environmental management for the activity. Where a government plan is relevant to the activity, or the site where the activity is proposed, describe the activity's consistency with that plan.
- 12.18. Describe how the achievement of the objectives would be monitored and audited, and how corrective actions would be managed.

Social and economic

Objectives

The EIS should demonstrate the project will:

- (a) avoid or mitigate adverse social and economic impacts arising from the project
- (b) capitalise on opportunities potentially available for capable local industries and communities
- (c) contribute to the net economic benefit of the region and the State.

Information requirements

- 12.19. In accordance with the Coordinator-General's *Social impact assessment guideline*, describe the likely social impacts (positive and negative) on affected communities, taking into account proposed mitigation measures.
- 12.20. Develop workforce arrangements for the project considering the Coordinator-General's workforce management principles, where relevant to the project, as listed below:
 - (a) anyone must be able to apply for a job, regardless of where they live
 - (b) provided they can meet the requirements of the job, people must have choice where they live and be able to apply for jobs related to the project

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- (c) the percentage of fly in, fly out workers must be less than 100 per cent
 - (d) a thorough audit of existing housing capacity must be undertaken before the project starts. To support those who wish to live locally, the proponent will ensure availability of accommodation that is fit for purpose and will make optimal use of existing housing capacity
 - (e) the proponent must thoroughly assess workforce requirements and plan to accommodate the likely number of workers who may live locally
 - (f) social impacts associated with the local workforce, in relation to local housing, services and infrastructure must be identified and mitigated in consultation with relevant local and state government service providers
 - (g) the proponent's social impact mitigation measures should support regional towns in pursuing opportunities to ensure communities are strong and sustainable and they are attractive places to live and work.
- 12.21. The workforce management principles will be reviewed after the Queensland Government has considered the recommendations of the Queensland Parliamentary Committee's *Fly in, fly out and other long distance commuting work practices in regional Queensland*; and the Queensland Government's panel on Fly in, Fly Out Review. Describe the local and regional economies likely to be impacted by the project and identify the relevant stakeholders.
- 12.22. Proponents should use a robust standard methodology to quantify the direct and indirect economic impacts on local, regional and state economies arising from each stage of the project, and estimate the changes in key indicators including:
- (a) gross regional product (GRP)
 - (b) gross state product (GSP)
 - (c) employment outcomes
 - (d) value added to the economy by the project by sector or industry.
- 12.23. The economic impact analysis should consider but is not limited to potential impacts the project may have on:
- (a) The creation of new jobs and labour demand, including the ability for labour to be drawn from the existing local workforce, and the potential effects this may have on local businesses.
 - (b) transport and infrastructure networks along with other essential services and facilities
 - (c) relevant local and regional prices including wages, housing market costs, project input costs and household goods and services
 - (d) local business and supply chain opportunities.
- 12.24. Identify the economic benefits and costs arising from the all stages of the project. Potential benefits and costs along with any relevant positive or negative externalities should be valued where reasonable, otherwise they should be described using quantitative and qualitative information.

Biosecurity

Objectives

The construction and operation of the project should aim to ensure:

- (a) the introduction and the spread of weeds, diseases and pests is minimised
- (b) existing weeds and pests are controlled.

Information requirements

- 12.25. Identify the presence of existing weeds, diseases and pests on the project site and adjacent areas. Propose measures to control and limit the introduction or spread of pests, diseases and weeds on the project site and adjacent areas. This includes declared plants under the *Plant Protection Act 1989* and the Land Protection (Pest and Stock Route Management) Regulation 2003, weeds of national significance, and designated pests under the *Public Health Act 2005*. The measures should demonstrate:
- (a) how weeds, diseases and pests that may be harmful to threatened species, ecological communities or agriculture will be managed
 - (b) that the proposed measures to manage weeds, diseases and pests will not be harmful to threatened species or ecological communities
 - (c) alignment with local government weed, disease and pest management plans and measures.

Waste management

Objective

Any waste transported, generated, or received as part of carrying out the activity is managed in a way that protects all environmental values.

Information requirements

- 12.26. Provide information about all expected significant waste streams (including estimated quantities) from the proposed project activities during the construction and operational phases of the project.
- 12.27. Define and describe the principles, objectives and practicable measures for protecting or enhancing environmental values from impacts by wastes. Take into account best practice waste management strategies and the *Waste Reduction and Recycling Act 2011*, Waste Reduction and Recycling Regulation 2011, the Queensland Waste Avoidance and Resource Productivity Strategy (2014–2024) and the Environmental Protection (Water) Policy 2009.
- 12.28. Assess the proposed management measures against the preferred waste management hierarchy, namely: avoid waste generation; cleaner production; recycle; reuse; reprocess and reclaim; waste to energy; treatment; disposal. Also, discuss storage and disposal locations for all waste.

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- 12.29. Describe how nominated quantitative standards and indicators may be achieved for waste management, and how the achievement of the objectives would be monitored, audited and managed.
 - 12.30. Describe proposed natural resource-use efficiency (such as energy and water), integrated processing design, and any co-generation of power and by-product reuse as shown in a material/energy flow analysis.
 - 12.31. Describe any known or potential sources of contaminated land. Describe how any proposed land use may result in land becoming contaminated and how the activity would be managed to avoid contamination occurring.

Cultural heritage

Objective

The construction and operation of the project should aim to ensure that the nature and scale of the project does not compromise the cultural heritage significance of a heritage place or heritage area.

Information requirements

- 12.32. Unless section 86 of the *Aboriginal Cultural Heritage Act 2003* (ACH Act) applies, the proponent must develop a Cultural Heritage Management Plan in accordance with the requirements of Part 7 of the ACH Act.
- 12.33. For non-Indigenous historical heritage, undertake a study of, and describe, the known and potential historical cultural and landscape heritage values of the area potentially affected by the project. Any such study should be conducted by an appropriately qualified cultural heritage practitioner. Provide strategies to mitigate and manage any negative impacts on non-Indigenous cultural heritage values and enhance any positive impacts.

Infrastructure

Objectives

The project should provide necessary infrastructure to service the development and that:

- (a) maintains or enhances services to existing users
- (b) ensures any required works are compatible with existing infrastructure
- (c) is designed and operated to be efficient and sustainable

Information requirements

- 12.34. Detail requirements for the provision of new infrastructure, or the upgrading and/or relocating of existing infrastructure to service the project.

- 12.35. Assess and identify any existing or proposed infrastructure that would be impacted by the development and describe any upgrades that may be required to cater for the development. Consider likely peak utilisation of energy supply, water and wastewater facilities, demand management strategies and when/if additional capacity is required. Describe how the development will impact local government water infrastructure, including any proposed connection points to local government networks.
- 12.36. Outline consultation undertaken with the relevant local government and service providers.

Transport

Objectives

The construction and operation of the project should aim to:

- (a) maintain the safety and efficiency of all affected transport modes for the project workforce and other transport system users
- (b) avoid or mitigate impacts on the condition of transport infrastructure
- (c) ensure any required works are compatible with existing infrastructure and future transport corridors.

Information requirements

- 12.37. The EIS should include a clear summary of the total transport task for the project, including workforce, inputs and outputs during the construction and operational phases.
- 12.38. Present the transport assessment in separate sections for each project-affected mode (road, rail, air and sea) as appropriate for each phase of the project.
- 12.39. Provide sufficient information to allow an independent assessment of how existing transport infrastructure will be affected by project transport at the local and regional level (for example, local roads and state-controlled roads).
- 12.40. Include details of the adopted assessment methodology for impacts on roads within the road impact assessment report in accordance with the *Guidelines for Assessment of Road Impacts of Development*.
- 12.41. Discuss and recommend how identified impacts will be mitigated. Mitigation strategies and are to be prepared in close consultation with relevant transport authorities (including Local Government).

Content of the EIS for matters of national environmental significance

Background and context

- 12.42. The Commonwealth Minister for the Environment has determined the project a controlled action as it may, or is likely to have, a significant impact upon the following controlling provisions under the EPBC Act:
 - (a) listed threatened species and communities (sections 18 and 18A)

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- (b) listed migratory species (sections 20 and 20A).
- 12.43. The EIS must be prepared pursuant to the bilateral agreement between the Commonwealth of Australia and the State of Queensland. This will enable the EIS to meet the impact assessment requirements under both Commonwealth and Queensland legislation. The project will require approval from the responsible Commonwealth minister under Part 9 of the EPBC Act before it can proceed.
- 12.44. Once the EIS has been prepared to the satisfaction of the Coordinator-General and MNES addressed to the satisfaction of the Australian Government Department of the Environment, the draft EIS will be made available for public comment.
- 12.45. The proponent may be required by the Coordinator-General or the Department of the Environment to provide additional material to address matters raised in submissions on the draft EIS.
- 12.46. At the conclusion of the environmental impact assessment process, the Coordinator-General will provide a copy of the report to the Commonwealth Minister for the Environment, in accordance with Part 13, section 36(2) of the State Development and Public Works Organisation Regulation 2010 (Qld) (SDPWO Regulation).
- 12.47. After receiving the evaluation report and sufficient information about the relevant impacts of the action, the Commonwealth Minister for the Environment has 30 business days to consider whether the impacts of the proposal are acceptable, and to decide whether or not to approve each controlling provision.
- 12.48. The Minister's decision is separate to the approval decisions made by Queensland state agencies and other agencies with jurisdiction on state matters.
- 12.49. Consideration should be given to any relevant policy statements available from **www.environment.gov.au**, including but not limited to:
- (a) *Matters of National Environmental Significance: Significant impact guidelines 1.1*
 - (b) *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy 2012.*
- 12.50. In accordance with Section 3.1 of Schedule 1 of the bilateral agreement, the EIS must:
- (a) assess all the relevant impacts that the action has, will or is likely to have, including direct, indirect, facilitated and cumulative impacts
 - (b) provide enough information about the action and its relevant impacts to allow the Commonwealth Minister for the Environment to make an informed decision whether or not to approve the action
 - (c) address the matters set out in Schedule 4 of the Environment Protection and Biodiversity Conservation Regulations 2000 (Cwlth) (EPBC Regulations).
- 12.51. For controlled actions assessed under the bilateral agreement the EIS must address the matters mentioned in Schedule 1 of the SDPWO Regulation.
- 12.52. The MNES section of the EIS should bring together assessments of impacts from other chapters and produce a stand-alone assessment in a format suited for assessment under the EPBC Act.

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- 12.53. The project should initially be assessed in its own right followed by an assessment of the cumulative impacts related to all known proposed developments in the region with respect to each controlling provision and all identified consequential actions. Where potential cumulative impacts are identified, a risk assessment of the impact must be conducted and documented. The risk assessment must include known potential future expansions or developments by the proponent and other proponents in the vicinity.
- 12.54. Predictions of the extent of threat (risk), impact and the benefits of any mitigation measures proposed, should be based on sound science and quantified where possible. Reference all sources of information relied upon and provide an estimate of the reliability of predictions. Also identify and evaluate any positive impacts.
- 12.55. The extent of any new field work, modelling or testing should be commensurate with risk and should be such that when used in conjunction with existing information, provides sufficient confidence in predictions that well-informed decisions can be made.
- 12.56. Project alternatives must be discussed in accordance with Schedule 4, section 2.01(g) of the EPBC Regulations, including:
- (a) if relevant, the alternative of taking no action
 - (b) a comparative description of the impacts of each alternative on the triggered MNES protected by controlling provisions of Part 3 of the EPBC Act for the action
 - (c) sufficient detail to make clear why any alternative or option is preferred to another.
- Short, medium and long-term advantages and disadvantages of the alternatives or options must be discussed.
- 12.57. The information provided must include details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:
- (a) the person proposing to take the action; and
 - (b) for an action for which a person has applied for a permit, the person making the application.
- If the person proposing to take the action is a corporation, details of the corporation's environmental policy and planning framework must also be included.
- 12.58. The economic and social impacts of the action, both positive and negative, must be analysed. Matters of interest may include:
- (a) details of any public consultation activities undertaken, and their outcomes;
 - (b) details of any consultation with Indigenous stakeholders;
 - (c) projected economic costs and benefits of the project, including the basis for their estimation through cost/benefit analysis or similar studies; and
 - (d) employment and other opportunities expected to be generated by the project (including construction and operational phases).
- Economic and social impacts should be considered at the local, regional and national levels. Details of the relevant cost and benefits of alternative options to the proposed action, as identified in Section 13.15 above, should also be included.

Identification of affected parties is required, including a statement mentioning any communities that may be affected and describing their views.

Description of the action

- 12.59. The EIS must provide background to the action and describe in detail all components of the action—for example (but not limited to) the construction, operational and (if relevant) decommissioning components of the action. This must include the precise location of all works to be undertaken (including associated off-site works and infrastructure), structures to be built or elements of the action that may have impacts on MNES.
- 12.60. The description of the action must also include details on how the works are to be undertaken (including stages of development and their timing) and design parameters for those aspects of the structures or elements of the action that may have relevant impacts.
- 12.61. The EIS must also provide details on the current status of the action as well as the consequences of not proceeding with the action.
- 12.62. The EIS must include how the action relates to any other actions (of which the proponent should reasonably be aware) that have been or are being taken, or that have been approved in the region affected by the action.
- 12.63. The EIS must include a detailed discussion of all measures proposed to avoid and mitigate the impacts of the project on MNES and, where there is a residual significant impact after avoidance mitigation, how the proponent proposes to offset the residual significant impact.
- 12.64. The following content requirements are based on these matters and considerations, with the addition of directions specific to the proposed action and the receiving environment.

Listed threatened species and communities

- 12.65. Describe the listed threatened species and ecological communities potentially impacted by the project (including EPBC Act status, distribution, life history and habitat).
- 12.66. Provide details of the scope, timing/effort (survey season/s) and methodology for studies or surveys used to provide information on the listed species/community/habitat at the site (and in areas which may be impacted by the proposed development). Include details of:
 - (a) the application of best practice survey guidelines
 - (b) how studies or surveys are consistent with (or a justification for divergence from) published Australian Government guidelines and policy statements.
- 12.67. Consider and assess the direct, indirect and consequential impacts to listed threatened species and ecological communities that are found to be or may potentially be present in areas that may be impacted by the project. Identify which component of the project is of relevance to each listed threatened species or ecological community or if the threat of impact relates to consequential actions, resulting from:

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- (a) a decrease in the size of a population or a long-term adverse effect on a species or an ecological community
 - (b) reduction in the area of occupancy of the species or extent of occurrence of the ecological community
 - (c) fragmentation of an existing population or ecological community
 - (d) disturbance or destruction of habitat critical to the survival of the species or ecological community
 - (e) disruption of the breeding cycle of a population
 - (f) modification, destruction, removal, isolation or reduction of the availability or quality of habitat to the extent that the species is likely to decline
 - (g) modification or destruction of abiotic (non-living) factors (such as water, nutrients or soil) necessary for the species or ecological community's survival
 - (h) the introduction of invasive species that are harmful to the species or ecological community becoming established
 - (i) interference with the recovery of the species or ecological community
 - (j) action that may be inconsistent with a recovery plan.
- 12.68. Where relevant, demonstrate how the approved conservation advice for listed threatened species and ecological communities has been taken into consideration.
- 12.69. Where relevant, demonstrate that the project will not be inconsistent with:
- (a) Australia's obligations under:
 - (i) the Biodiversity Convention, or
 - (ii) the Apia Convention, or
 - (iii) CITES, or
 - (b) a recovery plan or threat abatement plan.
- 12.70. Describe any mitigation measures proposed to reduce the direct, indirect and consequential impacts to listed threatened species and ecological communities and the anticipated benefit of proposed mitigation measures. Supporting evidence should be provided to demonstrate the appropriateness of mitigation measures proposed. Where the likely success of mitigation measures cannot be supported by evidence, identify contingencies in the event the mitigation is not successful.
- 12.71. Describe the residual impacts of the proposed development after all proposed avoidance and mitigation measures are taken into account. Where residual significant impacts to listed threatened species and ecological communities are determined likely, include proposed offsets consistent with the EPBC Act Environmental Offsets Policy 2012, including detailed justification of any proposed offsets using the Offsets Assessment Guide accompanying the Environmental Offsets Policy (available at: www.environment.gov.au/resource/epbc-act-environmental-offsets-policy).

Impact on a listed migratory species

- 12.72. Describe the listed migratory species potentially impacted by the project (including EPBC Act status, distribution, life history, habitat and the like).

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- 12.73. Provide details of the scope, timing/effort (survey season/s) and methodology for studies or surveys used to provide information on the listed species/community/habitat at the site (and in areas which may be impacted by the proposed development). Include details of:
- (a) the application of best practice survey guidelines
 - (b) how studies or surveys are consistent with (or a justification for divergence from) published Australian Government guidelines and policy statements.
- 12.74. Assess and describe the direct, indirect and consequential impacts to listed migratory species including those found or which may potentially be present in areas that may be impacted by the project. Identify which component of the project is of relevance to each species or if the threat of impact relates to consequential actions, resulting from:
- (a) the destruction, isolation or modification of habitat important to a migratory species
 - (b) the introduction of invasive species in an important habitat that would be harmful to a migratory species
 - (c) the disruption of the lifecycle (breeding, feeding, migration, or resting behaviour) of an ecologically important proportion of the population of a migratory species
- 12.75. Describe and discuss any mitigation measures proposed to reduce the direct, indirect and consequential, including downstream impacts on migratory species and the anticipated benefit of proposed mitigation measures.
- 12.76. Demonstrate that the project will not be inconsistent with:
- (a) the Bonn Convention
 - (b) CAMBA
 - (c) JAMBA
 - (d) ROKAMBA
- 12.77. Describe the residual impacts of the proposed development after all proposed avoidance and mitigation measures are taken into account. Where residual significant impacts to listed migratory species are determined likely, include proposed offsets consistent with the EPBC Act Environmental Offsets Policy 2012.

Conclusion

- 12.78. Include an overall conclusion as to the environmental acceptability of the proposal on each MNES, including:
- (a) a discussion on consideration of the requirements of the EPBC Act, including the objects of the EPBC Act, the principles of ecologically sustainable development and the precautionary principle
 - (b) reasons justifying undertaking the proposal in the manner proposed, including the acceptability of the avoidance and mitigation measures
 - (c) if relevant, a discussion of residual impacts and any offsets and compensatory measures proposed or required for residual significant impacts on MNES, and the relative degree of compensation and acceptability.

13. Appendices to the EIS

- 13.1. Appendices should provide the complete technical evidence used to develop assertions and findings in the main text of the EIS.
- 13.2. No significant issue or matter should be mentioned for the first time in an appendix—it must be addressed in the main text of the EIS.
- 13.3. Include a table listing the section of the EIS where each requirement of the TOR is addressed.
- 13.4. Include a glossary of terms and a list of acronyms and abbreviations.

Acronyms and abbreviations

The following acronyms and abbreviations have been used in this document.

Acronym/ abbreviation	Definition
ABN	Australian Business Number
ACH Act	<i>Aboriginal Cultural Heritage Act 2003</i>
AHD	Australian Height Datum
CAMBA	China–Australia Migratory Birds Agreement
Cwlth	Commonwealth
EIS	environmental impact statement
EP Act	<i>Environmental Protection Act 1994</i>
EP Regulation	Environmental Protection Regulation 2008
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cwlth)
EPBC Regulations	Environment Protection and Biodiversity Conservation Regulations 2000 (Cwlth)
EPP	Environmental Protection Policy (under the EP Act)
ERA	Environmentally Relevant Activity
GDA94	Geocentric Datum of Australia 1994
GRP	gross regional product
GSP	gross state product
JAMBA	Japan – Australia Migratory Birds Agreement
MNES	matters of national environmental significance (under the EPBC Act)
ROKAMBA	Republic of Korea-Australia Migratory Bird Agreement
SDAP	State Development Assessment Provisions prescribed in the Sustainable Planning Regulation 2009
SDPWO Act	<i>State Development and Public Works Organisation Act 1971</i>
SDPWO Regulation	State Development and Public Works Organisation Regulation 2010
SPA	<i>Sustainable Planning Act 2009</i>
SPP	State Planning Policy
TOR	terms of reference

Appendix 1. Policies and guidelines

Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand 2000, *The Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, Australian Water Association (Artarmon) and NZ Water and Wastes Association (Auckland), viewed 23 July 2015,

www.environment.gov.au/water/publications/quality/nwqms-guidelines-4-vol1.html

Commonwealth of Australia 2012, *Environment Protection and Biodiversity Conservation Act Environmental Offsets Policy 2012* Canberra, viewed 18 September 2015,

<http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy>

Commonwealth of Australia 2013, *Matters of National Environmental Significance: Significant impact guidelines*, Canberra, viewed 18 September 2015,

<http://www.environment.gov.au/epbc/publications/significant-impact-guidelines-11-matters-national-environmental-significance>

The Coordinator-General, 2013, *Preparing an environmental impact statement: Guideline for proponents*, Department of State Development, Infrastructure and Planning, Brisbane, viewed 23 July 2015, www.statedevelopment.qld.gov.au/fact-sheets-and-guidelines/coordinated-projects.html

The Coordinator-General 2013, *Social impact assessment guideline*, Department of State Development, Infrastructure and Planning, Brisbane, viewed 23 July 2015,

www.statedevelopment.qld.gov.au/resources/guideline/social-impact-assessment-guideline.pdf

Department of Environment and Heritage Protection 2014, *Queensland Waste Avoidance and Resource Production Strategy 2014* Brisbane, viewed 18 September 2015

<http://www.ehp.qld.gov.au/waste/qld-waste-strategy.html>

Department of Environment and Resource Management 2009, *Queensland Water Quality Guidelines, Version 3*, Department of Environment and Resource Management, Brisbane, viewed 23 July 2015,

www.ehp.qld.gov.au/water/guidelines

Department of Main Roads, *Guidelines for Assessment of Road Impacts of Development*, Department of Main Roads, Brisbane, 2006, viewed 23 July 2015, www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Guidelines-for-assessment-of-road-impacts-of-development.aspx

Department of Natural Resources and Mines 2015, *Guidelines for applying to clear for high-value or irrigated high-value agriculture* viewed 16 September 2015,

www.qld.gov.au/environment/land/vegetation/agriculture/

Department of Natural Resources and Mines 2015, *Guidelines for meeting the land suitability and economic viability requirements for high-value and irrigated high-value agriculture applications* viewed 16 September 2015, www.qld.gov.au/environment/land/vegetation/agriculture/

Department of Natural Resources and Mines 2014, *Preparing an environmental impact statement*, viewed 23 July 2015, www.dnrm.qld.gov.au/our-department/corporate-publications/preparing-an-environmental-impact-statement

Department of State Development, Infrastructure and Planning, 2013, *State Development Assessment Provisions*, viewed 23 July 2015, www.statedevelopment.qld.gov.au/development-applications/sdap.html

Department of State Development, Infrastructure and Planning 2014, *State Planning Policy* July 2014, viewed 23 July 2015, www.statedevelopment.qld.gov.au/resources/policy/state-planning/state-planning-policy-jul-2014.pdf

Queensland Government 2014, *Environmental offsets. An environmental offsets framework for Queensland, including the Act, regulation, policy and guidelines*, viewed 18 September 2015

<http://www.qld.gov.au/environment/pollution/management/offsets/>

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