

# Merimbula STP Upgrade and Ocean Outfall

## Appendix A SEARs Compliance Table

## Appendix A – SEARs compliance table

**Table 1** and **Table 2** provide a cross reference to where the Secretary's Environmental Assessment Requirements (SEARs) for the Project have been addressed in this EIS (relating to the general SEARs and key issue SEARs issued, respectively). **Table 3** outlines where in this EIS the requirements of Part 3 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* have been addressed.

**Table 1** General SEARs compliance table

General SEARs		
Item	Requirement	Where addressed in this EIS?
<p><b>1. Environmental Impact Assessment Process</b></p> <p>The process for assessment of the proposal is transparent, balanced, well focussed and legal.</p>	<p>1. The Environmental Impact Statement must be prepared in accordance with Part 3 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> (the Regulation).</p>	<p>Refer <b>Table 3</b> of this Appendix below</p>
	<p>2. It is the Proponent's responsibility to determine whether the project needs to be referred to the Commonwealth Department of the Environment for an approval under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). The Proponent must contact the Commonwealth Department of the Environment immediately if it is determined that an approval is required under the EPBC Act, as supplementary environmental assessment requirements may need to be issued to ensure a streamlined assessment under the Bilateral agreement can be achieved.</p>	<p>Based on the results of the environmental investigations carried out for this EIS, it is considered that matters of national environmental significance under the EPBC Act and the environment of Commonwealth land are not likely to be significantly impacted by the Project, and the Project would also not be located on Commonwealth land. Accordingly, the Proponent has determined that no referral is required at this stage.</p> <p>Refer to <b>Chapter 5 Statutory context</b> and <b>Chapter 11 Marine ecology</b> and <b>Chapter 12 Terrestrial ecology</b></p>

General SEARs		
Item	Requirement	Where addressed in this EIS?
	<p>3. Where the project requires approval under the EPBC Act and is being assessed under the Bilateral Agreement the EIS should address:</p> <ol style="list-style-type: none"> <li>Consideration of any Protected Matters that may be impacted by the development where the Commonwealth Minister has determined that the proposal is a Controlled Action.</li> <li>Identification and assessment of those Protected Matters that are likely to be significantly impacted.</li> <li>Details of how significant impacts to Protected Matters have been avoided, mitigated and, if necessary, offset.</li> <li>Consideration of, and reference to, any relevant conservation advices, recovery plans and threat abatement plans.</li> </ol>	As described above, the Proponent has determined that no referral is required at this stage.
	<p>4. The onus is on the Proponent to ensure legislative requirements relevant to the project are met.</p>	The legislative requirements relevant to the Project and how they are met, are described in <b>Chapter 5 Statutory context</b>
<p><b>2. Environmental Impact Statement</b> The project is described in sufficient detail to enable clear understanding that the project has been developed through an iterative process of impact identification and assessment and project refinement to avoid, minimise or offset impacts so that the project, on balance, has the least adverse environmental, social and economic impact, including its cumulative impacts.</p>	<p>1. The EIS must include, but not necessarily be limited to, the following:</p> <ol style="list-style-type: none"> <li>Executive summary</li> </ol>	<b>Executive Summary</b>
	<ol style="list-style-type: none"> <li>A description of the project, including all components and activities (including ancillary components and activities) required to construct and operate it;</li> </ol>	<b>Chapter 2 Project description; and Chapter 28 Synthesis of Environmental Impact Statement</b>
	A statement of the objective(s) of the project;	<b>Section 3.2 of Chapter 3 Project need and strategic context</b>
	A summary of the strategic need for the project with regard to its State significance and relevant State Government policy;	<b>Chapter 3 Project need and strategic context</b>
	An analysis of any feasible alternatives to the project;	<b>Section 4.3 of Chapter 4 Project development and alternatives</b>
	A description of feasible options within the project;	<b>Section 4.4 of Chapter 4 Project development and alternatives</b>
	<ol style="list-style-type: none"> <li>A description of how alternatives to and options within the project were analysed to inform the selection of the preferred alternative / option. The description must contain sufficient detail to enable an understanding of why the preferred alternative to and options(s) within the project were selected;</li> </ol>	<b>Chapter 4 Project development and alternatives</b>

General SEARs		
Item	Requirement	Where addressed in this EIS?
	d. A concise description of the general biophysical and socio-economic environment that is likely to be impacted by the project (including offsite impacts). Elements of the environment that are not likely to be affected by the project do not need to be described;	<b>Chapters 8 to 26</b> contain a description of the existing environment that may be impacted in relation to the environmental issue/s covered in each chapter.
	e. A demonstration of how the project design has been developed to avoid or minimise likely adverse impacts;	<b>Chapter 4 Project development and alternatives</b>
	f. The identification and assessment of key issues as provided in the 'Assessment of Key Issues' performance outcome;	<b>Chapter 7 Environmental scoping assessment</b> provides a scoping assessment for the EIS, and key issues are assessed in <b>Chapters 8 to 21</b>
	g. A statement of the outcome(s) the proponent will achieve for each key issue;	<b>Section 28.5 of Chapter 28 Synthesis of Environmental Impact Statement</b> contains a statement of the performance outcomes to be achieved for each key issue.
	h. For both construction and operation, measures to avoid, minimise or offset impacts must be linked to the impact(s) they treat, so it is clear which measures will be applied to each impact;	Mitigation measures are described in each assessment chapter ( <b>Chapters 8 to 27</b> ) which are directly linked to the impacts identified. A consolidated list of the performance outcomes and mitigation measures is provided in <b>Chapter 28 Synthesis of Environmental Impact Statement</b> .

General SEARs		
Item	Requirement	Where addressed in this EIS?
	<p>i. Consideration of the interactions between measures proposed to avoid or minimise impact(s), between impacts themselves and between measures and impacts;</p>	<p>Interactions between measures proposed, interactions between impacts, and interactions between measures and impacts, are considered in <b>Chapter 23 Social and economic</b> (refer amenity impacts) and <b>Chapter 27 Cumulative impacts</b>.</p> <p>Consideration of measures that address multiple impacts across more than one environmental issue have also been considered in the assessment chapters (in the mitigation and management measures section).</p>
	<p>j. An assessment of the cumulative impacts of the project taking into account other projects that have been approved but where construction has not commenced, projects that have commenced construction, and projects that have recently been completed;</p>	<p><b>Chapter 27 Cumulative impacts.</b></p>
	<p>k. Statutory context of the project as a whole, including:</p> <ul style="list-style-type: none"> <li>– how the project meets the provisions of the EP&amp;A Act and EP&amp;A Regulation;</li> <li>– a list of any approvals that must be obtained under any other Act or law before the project may lawfully be carried out;</li> </ul>	<p><b>Section 5.2 of Chapter 5 Statutory context</b> and <b>Table 3</b> of this appendix.</p>

General SEARs		
Item	Requirement	Where addressed in this EIS?
	<p>l. a chapter that synthesises the environmental impact assessment and provides:</p> <ul style="list-style-type: none"> <li>– a succinct but full description of the project for which approval is sought;</li> <li>– a description of any uncertainties that still exist around design, construction methodologies and/or operational methodologies and how these will be resolved in the next stages of the project;</li> <li>– a compilation of the impacts of the project that have not been avoided;</li> <li>– a compilation of the proposed measures associated with each impact to avoid or minimise (through design refinements or ongoing management during construction and operation) or offset these impacts;</li> <li>– a compilation of the outcome(s) the proponent will achieve;</li> <li>– the reasons justifying carrying out the project as proposed, having regard to the biophysical, economic and social considerations, including ecologically sustainable development and cumulative impacts;</li> </ul>	<b>Chapter 28 Synthesis of Environmental Impact Statement.</b>
	<p>m. relevant project plans drawings, diagrams in an electronic format that enables integration with mapping and other technical software (including mapping of: flood prone land; acid sulfate soils; rivers, streams, wetlands and estuaries; groundwater; groundwater dependent ecosystems; and proposed discharge locations).</p>	Accounted for throughout the EIS. Relevant electronic files will be provided to the Department of Planning, Industry and Environment.
	<p>2. The EIS must only include data and analysis that is reasonably needed to make a decision on the proposal. Relevant information must be succinctly summarised in the EIS and included in full in appendices. Irrelevant, conflicting or duplicated information must be avoided.</p>	Accounted for and succinctly summarised throughout the EIS. Relevant information on environmental assessments is succinctly summarised in <b>Chapters 8 to 26</b> from technical reports, which have been appended in full in <b>Appendices C to P</b> .
	<p>3. The EIS must outline approval pathways of all aspects of the development (i.e. whether some components are being assessed and/or constructed under other parts of the EP&amp;A Act).</p>	<b>Chapter 5 Statutory context.</b>

General SEARs		
Item	Requirement	Where addressed in this EIS?
<b>3. Assessment of Key Issues</b> Key issue impacts are assessed objectively and thoroughly to provide confidence that the project will be constructed and operated within acceptable levels of impact.	1. The level of assessment of likely impacts must be proportionate to the significance of, or degree of impact on, the issue, within the context of the proposal location and the surrounding environment. The level of assessment must be commensurate to the degree of impact and sufficient to ensure that the Department and other government agencies are able to understand and assess impacts.	Key issues (as identified in <b>Chapter 7 Environmental Scoping Assessment</b> , and based on the SEARs) are assessed in <b>Chapters 8 to 21</b> . Note that other (non-key) issues are assessed in Chapters 22 to 26.
	2. For each key issue the Proponent must: <ol style="list-style-type: none"> <li>a. describe the biophysical and socio-economic environment, as far as it is relevant to that issue;</li> </ol>	<b>Chapters 8 to 21</b> and associated technical reports found in <b>Appendices C to M</b> .
	<ol style="list-style-type: none"> <li>b. describe the legislative and policy context, as far as it is relevant to the issue;</li> </ol>	<b>Chapter 5 Statutory context</b> and in environmental assessment chapters where further consideration of legislative and policy context is relevant for that issue.
	<ol style="list-style-type: none"> <li>c. identify, describe and quantify (if possible) the impacts associated with the issue, including the likelihood and consequence (including worst case scenario) of the impact (comprehensive risk assessment), and the cumulative impacts;</li> </ol>	<b>Chapters 8 to 21</b> (and associated Technical Reports found in <b>Appendices C to M</b> ), and <b>Chapter 27 Cumulative impacts</b> .
	<ol style="list-style-type: none"> <li>d. demonstrate how potential impacts have been avoided (through design, or construction or operation methodologies);</li> </ol>	<b>Chapter 4 Project development and alternatives</b> describes the development of the Project design, including considerations for avoiding impacts.

General SEARs		
Item	Requirement	Where addressed in this EIS?
	e. detail how likely impacts that have not been avoided through design will be minimised, and the predicted effectiveness of these measures (against performance criteria where relevant); and	<b>Chapters 8 to 21</b> identify mitigation measures for each key issue, including those designed to minimise impacts that have not been avoided through design. The predicted effectiveness is captured in the post-mitigation risk assessment at the end of each chapter.  <b>Chapter 28 Synthesis of Environmental Impact Statement</b> provides the Project's performance outcomes, and a summary of residual impacts identified (i.e. those that remain post-mitigation).
	f. detail how any residual impacts will be managed or offset, and the approach and effectiveness of these measures.	<b>Chapter 28 Synthesis of Environmental Impact Statement</b> contains a summary of residual impacts expected.
	3. Where multiple reasonable and feasible options to avoid or minimise impacts are available, they must be identified and considered, and the proposed measure justified taking into account the public interest.	<b>Chapter 4 Project development and alternatives</b> and <b>Chapter 6 Consultation</b> describe the development of the Project design options with consideration to the public interest (including a multi-criteria analysis by a community working group).  <b>Chapter 23 Social and economic</b> also includes performance outcomes to minimise social and economic impacts through construction and operation of the Project.



General SEARs		
Item	Requirement	Where addressed in this EIS?
<b>4. Consultation</b> The project is developed with meaningful and effective engagement during project design and delivery.	1. The project must be informed by consultation, including with relevant government agencies, infrastructure and service providers, special interest groups, affected landowners, businesses, recreational fishers, commercial fishers, the aquaculture industry and the community. The consultation process must be undertaken in accordance with the current guidelines.	<b>Sections 6.1 to Section 6.4 of Chapter 6 Consultation</b>
	2. The Proponent must document the consultation process and demonstrate how the project has responded to the inputs received.	<b>Section 6.2 of Chapter 6 Consultation</b>
	3. The Proponent must describe the timing and type of community consultation proposed during the design and delivery of the project, the mechanisms for community feedback, the mechanisms for keeping the community informed, and procedures for complaints handling and resolution.	<b>Section 6.4 of Chapter 6 Consultation</b>

Table 2 Key Issue SEARs Compliance Table

Key issue		
Desired Performance Outcome	Requirement	Response
<p><b>1. Water - Quality</b> The project is designed, constructed and operated to protect the NSW Water Quality Objectives where they are currently being achieved, and contribute towards achievement of the Water Quality Objectives over time where they are currently not being achieved, including downstream of the project to the extent of the project impact including estuarine and marine waters (if applicable).</p>	1. The Proponent must:	<b>Chapter 8 Water quality, hydrology and flooding and Appendix E Water Quality Technical Report</b>
	a. state the ambient NSW Water Quality Objectives (NSW WQO) and environmental values for the receiving waters relevant to the project, including the indicators and associated trigger values or criteria for the identified environmental values;	
	b. identify and estimate the quality and quantity of all pollutants that may be introduced into the water cycle by source and discharge point and describe the nature and degree of impact that discharge(s) may have on the receiving environment, including consideration of all pollutants that pose a risk of non-trivial harm to human health and the environment;	<b>Chapter 8 Water quality, hydrology and flooding and Appendix E Water Quality Technical Report</b> ; note that human health risks are considered in <b>Chapter 17 Human health risk</b> and <b>Appendix J Human Health Risk Assessment</b>
	c. assess the significance of any identified impacts including consideration of the relevant ambient water quality outcomes;	<b>Chapter 8 Water quality, hydrology and flooding and Appendix E Water Quality Technical Report</b>
	d. demonstrate how construction and operation of the project will, to the extent that the project can influence, ensure that: <ul style="list-style-type: none"> <li>– where the NSW WQOs for receiving waters are currently being met, they will continue to be protected;</li> <li>– where the NSW WQOs are not currently being met, activities will work toward their achievement over time;</li> </ul>	<b>Chapter 8 Water quality, hydrology and flooding and Appendix E Water Quality Technical Report</b>
	e. include results of sampling of sediments (particularly particle size analysis) along the preferred pipeline route to quantify the risk of a sediment plume being created during the construction phase;	<b>Section 10.2 and Section 10.3 of Chapter 10 Marine and coastal processes</b>
	f. include results of effluent plume dispersal modelling including quantification of the impact zone under a range of conditions including northerly current, southerly current, and worst case scenario;	<b>Chapter 8 Water quality, hydrology and flooding and Appendix E Water Quality Technical Report, and Appendix Q Dispersion Modelling Report</b>
	g. include results of water quality modelling and analysis including descriptions of water quality impacts under the worst case scenario;	<b>Chapter 8 Water quality, hydrology and flooding and Appendix E Water Quality Technical Report</b>

Key issue		
Desired Performance Outcome	Requirement	Response
	h. justify, if required, why the WQOs cannot be maintained or achieved over time;	<b>Chapter 8 Water quality, hydrology and flooding and Appendix E Water Quality Technical Report</b>
	i. demonstrate that all practical measures to avoid or minimise water pollution and protect human health and the environment from harm are investigated and implemented.	<b>Chapter 8 Water quality, hydrology and flooding and Appendix E Water Quality Technical Report</b>
	j. identify sensitive receiving environments (which may include estuarine and marine waters downstream) and develop a strategy to avoid or minimise impacts on these environments.	<b>Chapter 8 Water quality, hydrology and flooding and Appendix E Water Quality Technical Report</b>
	k. identify proposed water quality monitoring locations, monitoring frequency and indicators of water quality, including groundwater quality.	<b>Chapter 8 Water quality, hydrology and flooding and Appendix E Water Quality Technical Report, and Chapter 9 Groundwater and Appendix D Groundwater Technical report</b>
<b>2. Hazards and Risks</b>	1. The Proponent must undertake a preliminary risk screening, with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development. Should preliminary screening indicate that the project is "potentially hazardous" a Preliminary Hazard Analysis (PHA) must be prepared in accordance with the guidelines.	<b>Chapter 16 Hazards and risk</b>
<b>3. Health and Safety</b> The project avoids or minimises any adverse health impacts arising from the project. The project avoids, to the greatest extent possible, risk to public safety.	1. The Proponent must assess any change to the risk to human health and identify mitigation and management measures to ensure appropriate standards are met.	<b>Chapter 17 Human health risk</b>

Key issue		
Desired Performance Outcome	Requirement	Response
<b>4. Biodiversity</b> The project design considers all feasible measures to avoid and minimise impacts on terrestrial and aquatic biodiversity.	1. The Proponent must assess biodiversity impacts in accordance with the Framework for Biodiversity Assessment (FBA).	<b>Chapter 12 Terrestrial ecology and Appendix H Biodiversity Assessment Report</b>
	2. The proponent must assess impacts on threatened biodiversity, native vegetation and habitats resulting from any changes to hydrology.	<b>Chapter 12 Terrestrial ecology and Appendix H Biodiversity Assessment Report and Groundwater dependant ecosystem assessment</b>
	3. The Proponent must assess impacts on endangered ecological communities (EECs), threatened species and/or populations, and provide the information specified in s9.2 of the FBA.	<b>Chapter 12 Terrestrial ecology and Appendix H Biodiversity Assessment Report</b>
	4. The Proponent must identify whether the project as a whole, or any component of the project, would be classified as a Key Threatening Process in accordance with the listings in the <i>Threatened Species Conservation Act 1997</i> (TSC Act), <i>Fisheries Management Act 1994</i> (FM Act) and <i>Environment Protection and Biodiversity Conservation Act 2000</i> (EPBC Act).	<b>Chapter 12 Terrestrial ecology and Appendix H Biodiversity Assessment Report</b>
	5. The proponent must undertake an assessment of significance as required by Part 7A of the FM Act for relevant threatened fish species according to NSW DPI Threatened Species Assessment Guidelines.	<b>Chapter 11 Marine ecology and Appendix G Marine Ecology Assessment</b>
	6. The Proponent must include a description of benthic habitats along and adjacent to the full length of the proposed outfall pipe and for at least 500m radius around the discharge point. Impacts to aquatic biodiversity (i.e. rocky reef, marine vegetation and benthic habitat, aquatic biota and fish assemblages) are to be assessed in accordance with the Policy and Guidelines for Fish Habitat Conservation and Management.	<b>Chapter 11 Marine ecology and Appendix G Marine Ecology Assessment</b>
	7. The Proponent must identify impacts to coastal wetlands and consider: <ol style="list-style-type: none"> <li>the category of wetland that is being impacted;</li> <li>whether the wetland itself and/or its buffer area is being impacted;</li> <li>the extent of the impact;</li> <li>the condition of the wetland or buffer area subject to the impact;</li> <li>any indirect impacts; and</li> <li>the measures proposed to minimise impact.</li> </ol>	<b>Chapter 12 Terrestrial ecology and Appendix H Biodiversity Assessment Report</b>

Key issue		
Desired Performance Outcome	Requirement	Response
	8. The Proponent must outline the considerations of site maintenance and proposed plans for the final condition of the site (ensuring its suitability for future uses) including rehabilitation of the site.	<b>Chapter 12 Terrestrial ecology</b>
<b>5. Socio-economic, Land Use and Property</b> The project minimises adverse social and economic impacts and capitalizes on opportunities potentially available to affected communities. The project minimises impacts to property and business and achieves appropriate integration with adjoining land uses, including maintenance of appropriate access to properties and community facilities, and minimisation of displacement of existing land use activities, dwellings and infrastructure.	1. The Proponent must assess social and economic impacts in accordance with the current guidelines.	<b>Chapter 23 Social and economic and Appendix O Socio-Economic Impact Assessment</b>
	2. The Proponent must assess impacts from construction and operation on potentially affected properties, businesses, recreational users and land and water users (for example, tourism, recreational and commercial fishers, aquaculture – existing and proposed), including property acquisitions/adjustments, access, amenity and relevant statutory rights.	<b>Chapter 23 Social and economic and Chapter 19 Property and land use</b>
	3. The Proponent must provide an analysis of the potential benefits of the project to recreational fishing along Merimbula Beach, in Merimbula and Pambula Lakes and the oyster industry in both lakes.	<b>Chapter 23 Social and economic, and Chapter 11 Marine ecology and Appendix G Marine Ecology Assessment</b>

Key issue		
Desired Performance Outcome	Requirement	Response
<p><b>6. Protected and Sensitive Lands</b></p> <p>The project is designed, constructed and operated to avoid or minimise impacts on protected and sensitive lands.</p> <p>The project is designed, constructed and operated to avoid or minimise future exposure to coastal hazards and processes.</p>	<p>1. The Proponent must assess the impacts of the project on environmentally sensitive land and processes (and the impact of processes on the project) including, but not limited to:</p> <p>a. land identified as a “coastal wetland” under the State Environmental Planning Policy (SEPP) (Coastal Protection) 2018;</p> <p>b. land identified as “proximity area for coastal wetlands” under the SEPP (Coastal Protection) 2018;</p> <p>c. land within the coastal environment area under the <i>State Environmental Planning Policy (Coastal Protection) 2018</i>;</p> <p>d. land within the coastal use area under the SEPP (Coastal Protection) 2018;</p> <p>e. land otherwise within the coastal zone;</p>	<p><b>Section 5.3 in Chapter 5 Statutory context</b> describes the application of the <i>State Environmental Planning Policy (Coastal Protection) 2018</i> to the Project, and impacts are addressed in <b>Chapter 10 Marine and coastal processes</b>.</p> <p>Ecological values are identified and potential impacts assessed in <b>Chapter 12 Terrestrial ecology</b>.</p>
	<p>f. coastal hazards identified in studies completed by local councils or state agencies (including risk mitigation strategies that reduce coastal hazards exposure);</p>	<p><b>Chapter 10 Marine and coastal processes.</b></p>
	<p>g. coastal processes (including dune stability, sediment movement etc.) associated with adopted risk mitigation actions;</p>	<p><b>Chapter 10 Marine and coastal processes.</b></p>
	<p>h. the integrity and resilience of the biophysical, hydrological and ecological environment;</p>	<p>This has been accounted for throughout the EIS.</p>
	<p>i. coastal environmental values and natural coastal processes;</p>	<p><b>Chapter 10 Marine and coastal processes</b></p> <p>Potential marine ecology impacts are addressed in <b>Chapter 11 Marine ecology</b>, and terrestrial ecology impacts are described in <b>Chapter 12 Terrestrial ecology</b>.</p>
	<p>j. water quality of the marine estate (within the meaning of the <i>Marine Estate Management Act 2014</i>);</p>	<p><b>Chapter 5 Statutory context and Chapter 10 Marine and coastal processes.</b></p> <p>Impacts are addressed in <b>Chapter 8 Water quality, hydrology and flooding</b>.</p>
	<p>k. marine vegetation, rocky reefs and benthic habitats, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms;</p>	<p><b>Chapter 11 Marine ecology, and Chapter 21 Noise and vibration (underwater).</b></p>

Key issue		
Desired Performance Outcome	Requirement	Response
	l. existing, safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability;	<b>Chapter 23 Social and economic and Chapter 10 Marine and coastal processes.</b>
	m. Aboriginal cultural heritage, practices and places;	<b>Chapter 14 Aboriginal heritage.</b>
	n. use of the surf zone;	<b>Chapter 10 Marine and coastal processes and Chapter 23 Social and economic.</b>
	o. protected areas (including land and water) managed by OEH ( <i>Office of Environment and Heritage; now the Environment, Energy and Science Group</i> ) and/or DPI Fisheries under the <i>National Parks and Wildlife Act 1974</i> and the <i>Marine Estate Management Act 2014</i> ;	A construction access of the Project would traverse the Ben Boyd National Park, and potential impacts have been assessed in <b>Chapter 12 Terrestrial ecology</b> (note that the Project would not directly impact on marine parks or aquatic reserves under the <i>Marine Estate Management Act 2014</i> ).
	p. Key Fish Habitat as mapped and defined in accordance with the FM Act;	<b>Chapter 11 Marine ecology and Appendix G Marine Ecology Assessment.</b>
	q. waterfront land as defined in the <i>Water Management Act 2000</i> ;	<b>Chapter 5 Statutory context.</b>
	r. land or waters identified as Critical Habitat under the TSC Act, FM Act or EPBC Act;	<b>Chapter 12 Terrestrial ecology and Appendix H Biodiversity Assessment Report.</b>
	s. areas of outstanding biodiversity value under the TSC Act; and	<b>Chapter 12 Terrestrial ecology.</b>
	t. biobank sites, private conservation lands and other lands identified as offsets.	Not applicable (land uses are described in <b>Chapter 19 Property and Land Use</b> ).

Key issue		
Desired Performance Outcome	Requirement	Response
<p><b>7. Water - Hydrology</b> Long term impacts on surface water and groundwater hydrology (including drawdown, flow rates and volumes) are minimised. The environmental values of nearby, connected and affected water sources, groundwater and dependent ecological systems including estuarine and marine water (if applicable) are maintained (where values are achieved) or improved and maintained (where values are not achieved).</p>	1. The Proponent must describe (and map) the existing hydrological regime for any surface and groundwater resource (including reliance by users and for ecological purposes) likely to be impacted by the project.	<b>Chapter 8 Water quality, hydrology and flooding and Chapter 9 Groundwater.</b>
	2. The Proponent must prepare a detailed water balance including inflow volumes and discharge locations, volume, frequency and duration.	Inflow into the STP and treated wastewater discharge volumes are provided in <b>Chapter 2 Project description</b> , however as only small volumes of water are required during operation, a detailed water balance has not been prepared.
	3. The Proponent must assess (and model if appropriate) the impact of the construction and operation of the project and any ancillary facilities (both built elements and discharges) on surface and groundwater hydrology in accordance with the current guidelines, including:	<b>Chapter 8 Water quality, hydrology and flooding (and Appendix E Water Quality Technical Report).</b>  Groundwater impacts are addressed in <b>Chapter 9 Groundwater.</b>
	a. natural processes within rivers, wetlands, estuaries, marine waters and floodplains that affect the health of the fluvial, riparian, estuarine or marine system and landscape health (such as modified discharge volumes, durations and velocities), aquatic connectivity and access to habitat for spawning and refuge;	
	b. impacts from any permanent and temporary interruption of groundwater flow, including the extent of drawdown, barriers to flows, implications for groundwater dependent surface flows, ecosystems and species, groundwater users and the potential for settlement;	<b>Chapter 9 Groundwater.</b>
	c. direct or indirect increases in erosion, siltation and destruction of vegetation; and	<b>Chapter 13 Landform, geology and soils.</b>  Vegetation impacts are also addressed in <b>Terrestrial 12 Terrestrial ecology.</b>
d. minimising the effects of proposed stormwater and wastewater management during construction and operation on natural hydrological attributes (such as volumes, flow rates, management methods and re-use options) and on the capacity of existing systems.	<b>Chapter 8 Water quality, hydrology and flooding (and Appendix E Water Quality Technical Report).</b>	



Key issue		
Desired Performance Outcome	Requirement	Response
	4. The Proponent must identify any requirements for baseline monitoring of hydrological attributes.	<p><b>Chapter 8 Water quality, hydrology and flooding and Appendix E Water Quality Technical Report.</b></p> <p>Baseline monitoring of groundwater is included in <b>Chapter 9 Groundwater</b> and <b>Appendix D Groundwater Impact Assessment.</b></p>
<p><b>8. Heritage</b> The design, construction and operation of the project facilitates, to the greatest extent possible, the long term protection, conservation and management of the heritage significance of items of environmental heritage and Aboriginal objects and places.</p>	<p>1. The Proponent must identify and assess any direct and/or indirect impacts (including cumulative impacts) to the heritage significance of:</p> <ol style="list-style-type: none"> <li>Aboriginal places and objects, as defined under the <i>National Parks and Wildlife Act 1974</i> and in accordance with the principles and methods of assessment identified in the current guidelines;</li> <li>Aboriginal places of heritage significance, as defined in the Standard Instrument – Principal Local Environmental Plan;</li> <li>environmental heritage, as defined under the <i>Heritage Act 1977</i>; and</li> <li>items listed on the National and World Heritage lists.</li> </ol>	<p><b>Chapter 14 Aboriginal heritage (and Appendix I Aboriginal Cultural Heritage Assessment).</b></p> <p>Environmental heritage under the <i>Heritage Act 1977</i> is addressed in <b>Chapter 15 Non-Aboriginal heritage</b> (note that item (d) is not applicable).</p>

Key issue		
Desired Performance Outcome	Requirement	Response
The design, construction and operation of the project avoids or minimises impacts, to the greatest extent possible, on the heritage significance of environmental heritage and Aboriginal objects and places.	<p>2. Where impacts to State or locally significant heritage items are identified, the assessment must:</p> <ol style="list-style-type: none"> <li>include a statement of heritage impact for all heritage items (including significance assessment);</li> <li>consider impacts to the item of significance caused by, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, visual amenity, landscape and vistas, curtilage, subsidence and architectural noise treatment (as relevant);</li> <li>outline measures to avoid and minimise those impacts in accordance with the current guidelines;</li> <li>be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria); and</li> <li>where potential archaeological impacts have been identified, develop an appropriate archaeological assessment methodology (terrestrial and maritime), including research design, to guide physical archaeological test excavations (as relevant) and include the results of these test excavations.</li> </ol>	<b>Chapter 15 Non-Aboriginal heritage.</b>
	<p>3. The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the proposal and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The investigation, assessment and reporting of Aboriginal cultural heritage values must be conducted in accordance with the current Code of Practice and Guide. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact on cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.</p>	An ACHAR has been prepared for the Project; it is provided in full in <b>Appendix I Aboriginal Cultural Heritage Assessment Report</b> , and summarised in <b>Chapter 14 Aboriginal heritage</b> .

Key issue		
Desired Performance Outcome	Requirement	Response
	4. Consultation with Aboriginal people must be undertaken and documented in accordance with the current consultation requirements for proponents. The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.	<b>Appendix I Aboriginal Cultural Heritage Assessment Report.</b> Note that consultation with Aboriginal people is also summarised in <b>Chapter 6 Engagement.</b>
<b>9. Soils</b> The environmental values of land, including soils, subsoils and landforms, are protected. Risks arising from the disturbance and excavation of land and disposal of soil are minimised, including disturbance to acid sulfate soils and site contamination.	1. The Proponent must verify the risk of acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Risk Map) within, and in the area likely to be impacted by, the project.	<b>Chapter 13 Landform, geology and soils.</b>
	2. The Proponent must assess the impact of the project on acid sulfate soils (including impacts of acidic runoff offsite) in accordance with the current guidelines.	<b>Chapter 13 Landform, geology and soils.</b>
	3. The Proponent must assess whether the land is likely to be contaminated and identify if remediation of the land is required, having regard to the ecological and human health risks posed by the contamination in the context of past, existing and future land uses. Where assessment and/or remediation is required, the Proponent must document how the assessment and/or remediation would be undertaken in accordance with current guidelines.	<b>Chapter 13 Landform, geology and soils.</b>
	4. The Proponent must assess whether salinity is likely to be an issue and if so, determine the presence, extent and severity of soil salinity within the project area and the impacts of the project and how it may affect groundwater resources and hydrology.	<b>Chapter 13 Landform, geology and soils.</b>
	5. The Proponent must assess the impacts on soil and land resources (including erosion risk or hazard). Particular attention must be given to soil erosion and sediment transport consistent with the practices and principles in the current guidelines.	<b>Chapter 13 Landform, geology and soils.</b>

Key issue		
Desired Performance Outcome	Requirement	Response
<p><b>10. Transport and Traffic</b> Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts. The safety of transport system customers is maintained. Impacts on network capacity and the level of service are effectively managed. Works are compatible with existing infrastructure and future transport corridors.</p>	<p>1. The Proponent must assess construction transport and traffic (vehicle, pedestrian and cyclists) impacts, including, but not necessarily limited to:</p> <ol style="list-style-type: none"> <li>a considered approach to route identification and scheduling of transport movements;</li> <li>the number, frequency and size of construction related vehicles (passenger, commercial and heavy vehicles, including spoil management movements);</li> <li>construction vehicle access arrangements to Merimbula Beach;</li> <li>construction worker parking;</li> <li>the nature of existing traffic (types and number of movements) on construction access routes (including consideration of peak traffic times and sensitive road users and parking arrangements);</li> <li>access constraints and impacts on public transport, pedestrians and cyclists; and</li> <li>the need to close, divert or otherwise reconfigure elements of the road and cycle network associated with construction of the project.</li> </ol>	<p><b>Chapter 18 Traffic and transport.</b></p>
<p><b>11. Noise and Vibration - Amenity</b> Construction noise and vibration (including airborne noise, ground- borne noise and blasting) are effectively managed to minimise adverse impacts on acoustic amenity. Increases in noise emissions and vibration affecting nearby properties and other sensitive receivers during operation of the project are effectively managed to protect the amenity and well-being of the community.</p>	<p>1. The Proponent must assess construction and operational noise and vibration impacts in accordance with current NSW noise and vibration guidelines including consideration of noise characteristics (tonal, intermittent and low frequency noise) and the impact on sensitive receivers.</p>	<p><b>Chapter 20 Noise and vibration (airbourne) and Appendix L Noise and Vibration Assessment (Airbourne).</b></p>
	<p>2. The assessment must include consideration of impacts to the structural integrity and heritage significance of items (including Aboriginal places and items of environmental heritage).</p>	<p><b>Chapter 20 Noise and vibration (airbourne) and Appendix L Noise and Vibration Assessment (Airbourne).</b></p>
	<p>3. The Proponent must demonstrate that blast impacts are capable of complying with the current guidelines, if blasting is required.</p>	<p>Blasting is not required and therefore this is not applicable.</p>

Key issue		
Desired Performance Outcome	Requirement	Response
<p><b>12. Flooding</b> The project minimises adverse impacts on existing flooding characteristics. Construction and operation of the project avoids or minimises the risk of, and adverse impacts from, infrastructure flooding, flooding hazards, or dam failure.</p>	<p>1. The Proponent must assess and (model where required) the impacts of flood behaviour during construction and operation for a full range of flood events up to the probable maximum flood (taking into account, sea level rise due to climate change) including:</p> <ol style="list-style-type: none"> <li>consistency (or inconsistency) with applicable Council floodplain risk management plans;</li> <li>compatibility with the flood hazard of the land;</li> <li>compatibility with the hydraulic functions of flow conveyance in flood ways and storage areas of the land;</li> <li>impacts the development may have upon existing community emergency management arrangements for flooding. These matters must be discussed with the State Emergency Services; and</li> <li>any impacts the development may have on the social and economic costs to the community as consequence of flooding.</li> </ol>	<p><b>Chapter 8 Water quality, hydrology and flooding (and Appendix F Flood Assessment Technical Report).</b></p>
<p><b>13. Air Quality</b> The project is designed, constructed and operated in a manner that minimises air quality impacts (including nuisance dust and odour) to minimise risks to human health and the environment to the greatest extent practicable.</p>	<p>1. The Proponent must undertake an air quality impact assessment (AQIA) for construction and operation of the project in accordance with the current guidelines.</p>	<p><b>Chapter 22 Air quality and Appendix N Air Quality Impact Assessment.</b></p>
	<p>2. The Proponent must ensure the AQIA demonstrates the ability to comply with the relevant regulatory framework, specifically the <i>Protection of the Environment Operations Act 1997</i> and the <i>Protection of the Environment Operations (Clean Air) Regulation (2010)</i>.</p>	<p><b>Appendix N Air Quality Impact Assessment.</b></p>

Key issue		
Desired Performance Outcome	Requirement	Response
<p><b>14. Waste</b> All wastes generated during the construction and operation of the project are effectively stored, handled, treated, reused, recycled and/or disposed of lawfully and in a manner that protects environmental values.</p>	<p>1. The Proponent must assess predicted waste generated from the project during construction and operation, including:</p> <ol style="list-style-type: none"> <li>classification of the waste in accordance with the current guidelines;</li> <li>estimates / details of the quantity of each classification of waste to be generated during the construction of the project, including bulk earthworks and spoil balance;</li> <li>handling of waste including measures to facilitate segregation and prevent cross contamination;</li> <li>management of waste including estimated location and volume of stockpiles;</li> <li>waste minimisation and reuse;</li> <li>lawful disposal or recycling locations for each type of waste; and</li> <li>contingencies for the above, including managing unexpected waste volumes.</li> </ol>	<b>Chapter 26 Waste.</b>
	<p>2. The Proponent must assess potential environmental impacts from the excavation, handling, treatment and storage on site and transport of the waste particularly with relation to sediment/leachate control, noise and dust.</p>	<b>Chapter 26 Waste</b> , noting that sediment/leachate control is addressed in <b>Chapter 13 Landform, geology and soils</b> , noise impacts are addressed in <b>Chapter 20 Noise and vibration (airbourne)</b> , and dust impacts are addressed in <b>Chapter 22 Air quality</b> .
<p><b>15. Sustainability</b> The project reduces the NSW Government's operating costs and ensures the effective and efficient use of resources. Conservation of natural resources is maximised.</p>	<p>1. The Proponent must assess the sustainability of the project in accordance with the Infrastructure Sustainability Council of Australia (ISCA) Infrastructure Sustainability Rating Tool and recommend an appropriate target rating for the project.</p>	<b>Chapter 24 Sustainability.</b>
	<p>2. The Proponent must assess the project against the current guidelines including targets and strategies to improve Government efficiency in use of water, energy and transport.</p>	<b>Chapter 24 Sustainability.</b>

Key issue		
Desired Performance Outcome	Requirement	Response
<b>16. Climate Change Risk</b> The project is designed, constructed and operated to be resilient to the future impacts of climate change.	1. The Proponent must assess the risk and vulnerability of the project to climate change in accordance with the current guidelines.	<b>Chapter 25 Climate change (and Appendix P Climate Impact Assessment).</b>
	2. The Proponent must quantify specific climate change risks with reference to the NSW Government's climate projections at 10km resolution (or lesser resolution if 10km projections are not available) and incorporate specific adaptation actions in the design.	<b>Chapter 25 Climate change (and Appendix P Climate Impact Assessment).</b>
	3. The Proponent must consider the capacity for ecosystem migration for mean sea levels of up to 0.9m above 1990 levels, having regard to the existing and proposed topography of the land.	<b>Chapter 25 Climate change (and Appendix P Climate Impact Assessment).</b>

Table 3 Requirements of Schedule 2, Part 3 of the EP&amp;A Regulation

Requirement	Where addressed in this EIS?
<b>6. Form of the environmental impact statement</b>	-
An environmental impact statement must contain the following information:	
a. the name, address and professional qualifications of the person by whom the statement is prepared	<b>Certification page.</b>
b. the name and address of the responsible person	<b>Certification page.</b>
c. the address of the land: i. in respect of which the development application is to be made, or on which the activity or infrastructure to which the statement relates is to be carried out	<b>Certification page.</b> The land the Project is located on is further described in <b>Chapter 19 Property and land use.</b>
d. a description of the development, activity or infrastructure to which the statement relates	<b>Chapter 2 Project description</b> and <b>Chapter 28 Synthesis of Environmental Impact Statement.</b>
e. an assessment by the person by whom the statement is prepared of the environmental impact of the development, activity or infrastructure to which the statement relates, dealing with the matters referred to in this Schedule	<b>Certification page.</b> A synthesis of the EIS is also provided in <b>Chapter 28 Synthesis of Environmental Impact Statement.</b>
f. a declaration by the person by whom the statement is prepared to the effect that: i. the statement has been prepared in accordance with this Schedule, and ii. the statement contains all available information that is relevant to the environmental assessment of the development, activity or infrastructure to which the statement relates, and that the information contained in the statement is neither false nor misleading.	<b>Certification page.</b>
<b>7. Content of environmental impact statement</b>	-
An environmental impact statement must also include each of the following:	
a. a summary of the environmental impact statement;	<b>Executive summary.</b>
b. a statement of the objectives of the development, activity or infrastructure;	<b>Section 3.2 of Chapter 3 Project need and strategic context.</b>
c. an analysis of any feasible alternatives to the carrying out of the development, activity or infrastructure, having regard to its objectives, including the consequences of not carrying out the development, activity or infrastructure;	<b>Chapter 4 Project development and alternatives.</b>
d. an analysis of the development, activity or infrastructure, including: i. a full description of the development, activity or infrastructure;	<b>Chapter 2 Project Description.</b>



Requirement	Where addressed in this EIS?
ii. a general description of the environment likely to be affected by the development, activity or infrastructure, together with a detailed description of those aspects of the environment that are likely to be significantly affected;	A description of the existing environment for each environmental issue is provided within <b>Chapters 8 to 27.</b>
iii. the likely impact on the environment of the development, activity or infrastructure;	<b>Chapters 8 to 27, and Chapter 28 Synthesis of Environmental Impact Statement.</b>
iv. a full description of the measures proposed to mitigate any adverse effects of the development, activity or infrastructure on the environment; and	<b>Chapters 8 to 27, and Chapter 28 Synthesis of Environmental Impact Statement.</b>
v. a list of any approvals that must be obtained under any other Act or law before the development, activity or infrastructure may lawfully be carried out;	<b>Chapter 5 Statutory context .</b>
e. a compilation (in a single section of the environmental impact statement) of the measures referred to in item (d) (iv); and	<b>Chapter 28 Synthesis of Environmental Impact Statement.</b>
f. the reasons justifying the carrying out of the development, activity or infrastructure in the manner proposed, having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development set out in subclause (4).	<b>Chapter 28 Synthesis of Environmental Impact Statement.</b>