

## Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*

Part 8 of the *Environmental Planning and Assessment Regulation 2021*

<b>Application Number</b>	SSD-56884966
<b>Project</b>	Stuarts Point Sewerage Scheme
<b>Location</b>	Lot 1 DP 1284907, Lot 7007 DP 105244, Lot 139 DP 752438, Lot 7300 DP 1152758 within Kempsey Shire
<b>Proponent</b>	Kempsey Shire Council ABN: 70 705 618 663
<b>Date of Issue</b>	21 April 2023
<b>General Requirements</b>	<p>The Environmental Impact Statement (EIS) must meet the minimum form and content requirements as prescribed by Part 8 of the <i>Environmental Planning and Assessment Regulation 2021 (EP&amp;A Regulation)</i> and must have regard to the <i>State Significant Development Guidelines 2022</i>.</p> <p>It is the Proponent's responsibility to determine whether Stuarts Point Sewerage Scheme (the project) needs to be referred to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) for an approval under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)</i>. If DCCEEW has determined that an approval is required under the <i>EPBC Act</i>, supplementary environmental assessment requirements may need to be issued to ensure a streamlined assessment can be undertaken.</p> <p>The EIS must include, but not necessarily be limited to, the following:</p> <ul style="list-style-type: none"> <li>A) An executive summary.</li> <li>B) A full description of the project, including: <ul style="list-style-type: none"> <li>i) The design for the project that is proposed to be constructed and operated, the strategic objectives of the proposal, the size and type of the operation, the nature of treatment processes and the products, by-products and wastes produced.</li> <li>ii) Details of all components, disturbance areas, materials, activities, site preparation and construction infrastructure required to construct the project, including any ancillary development that may require separate approvals.</li> <li>iii) A construction timetable and staging; hours of construction, proposed construction methods, including any earthworks or site clearing, reuse and disposal of cleared material.</li> <li>iv) Details of the operation of the project, and associated infrastructure that is proposed to be constructed.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>v) Likely staging or sequencing of the project, including construction, operation, maintenance, and any plans for future expansion.</li> <li>vi) Site plans, maps, drawings and diagrams at an adequate scale with dimensions in an electronic format that enables integration with mapping and other technical software, showing: <ul style="list-style-type: none"> <li>o The location and dimensions of all project components. Include a site diagram showing the site layout and location of environmental controls and proximity to water resources.</li> <li>o Existing infrastructure, land use, and environmental features.</li> <li>o The development corridor that has been assessed and consideration of design options.</li> </ul> </li> <li>vii) The likely interactions between the project and any other existing, approved, proposed, reasonably foreseeable development in the vicinity of the site, including an assessment of cumulative impacts.</li> </ul> <p>C) A summary of the strategic need with regard to its State Significance and relevant State Government policy.</p> <p>D) A description of how alternatives to and options within the project were analysed and optimised to inform the selection of the preferred approach. The description must contain sufficient detail to enable an understanding of why the preferred approach was selected over others considered for achieving the project strategic objective, including consideration of environmental outcomes.</p> <p>E) An assessment of the likely impacts of the project on the biophysical and socio-economic environment, focusing on the key issues identified below and any other significant issues identified, including:</p> <ul style="list-style-type: none"> <li>i) A description of the existing environment likely to be affected by the project using relevant and adequate data.</li> <li>ii) An assessment of the potential impacts of the project, including any cumulative impacts, and taking into consideration relevant guidelines, policies, plans and industry codes of practice. Include a description of methodology and any assumptions made. Issues may be linked where relevant.</li> <li>iii) A description and details of how the project has been designed to avoid, minimise and offset impacts (through design, or construction or operation methodologies).</li> <li>iv) A description of how any residual impacts will be managed, mitigated or offset, and the effectiveness of these measures, including detailed contingency plans for managing significant risks.</li> <li>v) Assessment must be in consultation with relevant agencies and in accordance with all agency advice.</li> </ul> <p>F) A chapter that synthesises the environmental impact assessment and provides:</p> <ul style="list-style-type: none"> <li>i) A succinct but complete description of the project for which approval is sought.</li> <li>ii) A description of any uncertainties that still exist around design, construction and/or operational methodologies and how these will be resolved in the next stages of the project.</li> <li>iii) A compilation of the impacts of the project that have not been avoided.</li> <li>iv) A compilation of the proposed measures associated with each impact to avoid or minimise or offset these impacts.</li> <li>v) A compilation of the outcome(s) the proponent will achieve.</li> </ul>
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	<p>vi) The reasons justifying carrying out the project as proposed, having regard to the biophysical, economic and social considerations, including ecologically sustainable development.</p> <p>vii) A consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS, including the anticipated level of performance in meeting required environmental standards and cleaner production principles.</p> <p>Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.</p> <p>The EIS must be accompanied by a declaration from a Registered Environmental Assessment Practitioner (REAP) in accordance with the <i>Registered Environmental Assessment Practitioner Guidelines 2022</i>.</p> <p>The EIS must also be accompanied by a Quantity Surveyor Report for Capital Investment Value and Employment, providing:</p> <ul style="list-style-type: none"> <li>A) A detailed calculation of the estimated capital investment value (CIV) of the development, prepared by a AIQS Certified Quantity Surveyor or RICS Chartered Quantity Surveyor in accordance with <i>Planning Circular PS 21-020: Calculation of capital investment value</i>. The calculation of the estimated CIV is to be accurate at the date of application and include details of all components and assumptions from which it is derived.</li> <li>B) An estimate of the retained and new jobs that would be created during the construction and operational phases, including details of the methodology to determine the figures provided.</li> </ul> <p>The EIS(s) must only include data and analysis that is reasonably needed to make a decision on the project. Relevant information must be succinctly summarised in the EIS and included in full in appendices. Irrelevant, conflicting or duplicated information must be avoided. While not exhaustive, Attachment A contains a list of some of the environmental planning instruments, guidelines, policies, and plans that may be relevant to the environmental assessment of the project.</p>
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<p><b>Key issues</b></p>	<p>The EIS must address the following specific matters:</p> <p><b>Statutory and Strategic Context</b></p> <p>1. Address the statutory provisions applying to the development contained in all relevant environmental planning instruments, including but not limited to:</p> <ul style="list-style-type: none"> <li>o Kempsey Local Environmental Plan 2013</li> <li>o State Environmental Planning Policy (Planning Systems) 2021</li> <li>o State Environmental Planning Policy (Transport and Infrastructure) 2021</li> <li>o State Environmental Planning Policy (Primary Production) 2021</li> <li>o State Environmental Planning Policy (Biodiversity and Conservation) 2021</li> <li>o State Environmental Planning Policy (Resilience and Hazards) 2021</li> </ul> <p>2. Include consideration of how the project meets the provisions of the <i>Environmental Planning and Assessment Act 1979 (the EP&amp;A Act)</i> and the <i>EP&amp;A Regulation</i> and a list of any approvals that must be obtained under any other Act or law before the project may lawfully be carried out.</p> <p>3. Identify all approvals and licences required under environmental protection legislation including details of all scheduled activities, types of ancillary activities and types of discharges (to air, land and water).</p> <p>4. Address the relevant planning provisions, goals and strategic planning objectives in the following:</p> <ul style="list-style-type: none"> <li>o North Coast Regional Plan 2036</li> <li>o North Coast Regional Water Strategy 2021</li> <li>o Future Macleay – Growth and Character (Kempsey Shire Council 2020)</li> <li>o Kempsey Coastal Zone Management Plan 2016</li> </ul> <p><b>Water</b></p> <p>5. Describe background conditions for any water resource likely to be affected by the project, including:</p> <ul style="list-style-type: none"> <li>A) Existing surface and groundwater across all sites, including hydrological and geomorphological conditions.</li> <li>B) Describe the catchment including proximity of the development to any waterways and provide an assessment of their sensitivity/significance from a public health, ecological and economic perspective.</li> <li>C) Water quality and Water Quality Objectives (as endorsed by the NSW Government) including groundwater, that represent the community's uses and values for the receiving waters.</li> <li>D) Indicators and trigger values/criteria for the environmental values identified at C) in accordance with the <i>Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2018</i> and/or local objectives, criteria or targets endorsed by the NSW Government.</li> </ul> <p>6. Assess the impacts of the project on receiving water bodies, including:</p> <ul style="list-style-type: none"> <li>A) The nature and degree of impact on receiving waters for both surface and groundwater sources, (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, groundwater dependent ecosystems, and ground water levels.</li> <li>B) Identification of proposed monitoring of water quality.</li> </ul>
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	<p>C) Demonstrate how the project protects the Water Quality Objectives and River Flow Objectives where they are currently being achieved and contributes towards achievement of the Water Quality Objectives and River Flow Objectives over time where they are currently not being achieved.</p> <p>D) Details of any proposed effluent reuse and any impacts to water bodies.</p> <p>E) Description of water treatment measures.</p> <p>F) Detail how existing WaterNSW groundwater monitoring sites will be managed, including protection from potential infiltration related to the project.</p> <p>G) Indicate the potential impacts to water quality and adjacent Priority Oyster Aquaculture Areas associated with the operation of the project including the project will comply with the water quality objectives and guidance set out within the <i>NSW Oyster Industry Sustainable Aquaculture Strategy 2021</i> and the <i>NSW Healthy Estuaries for Healthy Oysters Guidelines 2017</i>.</p> <p>H) Identification of mitigation and management measures. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management both during and after construction.</p> <p>7. Assess the impact of the development on hydrology, including:</p> <p>A) Water balance including quantity, quality and source.</p> <p>B) Volume, frequency and quality at proposed intake and discharge locations.</p> <p>C) Effects to downstream rivers, wetlands, estuaries, marine waters, groundwater and floodplain areas.</p> <p>D) Effects to water-dependent fauna and flora including groundwater dependent ecosystems.</p> <p>E) Impacts to natural processes and functions within rivers, wetlands, estuaries, coastal areas and floodplains that affect water body and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge.</p> <p>F) Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.</p> <p>G) Site drainage details and runoff yield, including mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.</p> <p>H) Identify potential geomorphological impacts to landforms and/or aquatic areas the extent of project influence.</p> <p>I) Identification of proposed monitoring of hydrological attributes, and mitigation or management measures.</p> <p>8. Include mapping of the project's interaction with:</p> <p>A) Acid sulfate soils</p> <p>B) Rivers, streams, wetlands, estuaries (as described in s4.2 of the <i>Biodiversity Assessment Method 2020</i>).</p> <p>C) Groundwater and groundwater dependent ecosystems.</p> <p>D) Proposed intake and discharge locations.</p>
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	<p><b>Water take and licensing</b></p> <p>9. Description of all works/activities that may intercept, interfere with, extract, use, divert, remove or receive surface water and/or groundwater, both temporary and permanent.</p> <p>10. Details of all water take for the operational life of the project and post closure, where applicable. This is to include water taken directly and indirectly, and the relevant water source where water entitlements are required to account for the water take. If the water is to be taken from an alternative source confirmation should be provided by the supplier that the appropriate volumes can be obtained.</p> <p>11. Details of Water Access Licences (WALs) held to account for any take of water where required, or demonstration that WALs can be obtained prior to take of water occurring. This should include an assessment of the current market depth where water entitlement is required to be purchased. Any exemptions or exclusions to requiring approvals or licenses under the <i>Water Management Act 2000</i> should be detailed by the proponent.</p> <p><b>Flooding</b></p> <p>12. Identify flood risk (detailing the most recent flood studies for the project area) and consideration of any relevant provisions of the <i>Floodplain Development Manual 2005</i>, including the potential effects of climate change and an increase in rainfall intensity. If there is a material flood risk, include design and stormwater management solutions for mitigation, including for any risk to the community.</p> <p>13. Map the following features relevant to flooding as described in the <i>Floodplain Development Manual 2005</i> including:</p> <ul style="list-style-type: none"> <li>A) Flood prone land.</li> <li>B) Flood planning area, the area below the flood planning level.</li> <li>C) Hydraulic categorisation (floodways and flood storage areas).</li> <li>D) Flood hazard</li> </ul> <p>14. Assess the impacts of the project on flood behaviour, including:</p> <ul style="list-style-type: none"> <li>A) Whether there will be detrimental increases in the potential flood affectation of other properties, assets, and infrastructure.</li> <li>B) Consistency with Council floodplain risk management plans.</li> <li>C) Consistency with any Rural Floodplain Management Plans.</li> <li>D) Compatibility with the flood hazard of the land.</li> <li>E) Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.</li> <li>F) Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.</li> <li>G) Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of riverbanks or watercourses.</li> <li>H) Any impacts the project may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council.</li> <li>I) Whether the project incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the NSW SES and Council.</li> <li>J) Emergency management, evacuation and access, and contingency measures for the project considering the full range of flood risk (based upon the probable maximum flood or an equivalent extreme flood</li> </ul>
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	<p>event). These matters are to be discussed with and have the support of Council and the NSW SES.</p> <p>K) Any impacts the project may have on the social and economic costs to the community as consequence of flooding.</p> <p>L) Develop an appropriate business emergency plan to assist in being prepared for, responding to and recovering from flooding.</p> <p>15. Model the effect of the project on the current flood behaviour for a range of design events as identified in 16. below and including the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.</p> <p>16. Describe flood assessment and modelling undertaken in determining the project's design flood levels for a range of flood events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP flood levels and the probable maximum flood, or an equivalent extreme event.</p> <p>17. Modelling in the EIS must consider and document:</p> <p>A) Existing Council flood studies in the area and examine consistency to the flood behaviour documented in these studies.</p> <p>B) The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood, or an equivalent extreme flood.</p> <p>C) Impacts of the project on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazard categories and hydraulic categories.</p> <p>D) Relevant provisions of the <i>NSW Floodplain Development Manual 2005</i>.</p> <p>E) Impacts of climate change for the project design life at 20-year intervals.</p> <p><b>Aboriginal Cultural Heritage</b></p> <p>18. Provide an Aboriginal Cultural Heritage Assessment Report (ACHAR), prepared in accordance with relevant guidelines and requirements, identifying, describing and assessing any impacts to Aboriginal cultural heritage sites or values associated with the site.</p> <p><b>Non-Aboriginal Heritage</b></p> <p>19. Provide an assessment including but not limited to any impacts to State and local heritage. Where impacts to State or locally significant heritage items are identified, the assessment shall:</p> <p>A) Outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the <i>NSW Heritage Manual 1996</i>.</p> <p>B) 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).</p> <p>C) Include a statement of heritage impact for all heritage items (including significance assessment).</p>
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	<p>D) Where potential archaeological impacts have been identified, develop an appropriate archaeological assessment methodology, including research design.</p> <p><b>Social</b></p> <p>20. Provide a Social Impact Assessment prepared in accordance with the <i>Social Impact Assessment Guideline for State Significant Projects 2021</i>.</p> <p><b>Ecologically Sustainable Development (ESD)</b></p> <p>21. Identify how ESD principles (as defined in section 193 of the <i>EP&amp;A Regulation</i>) are incorporated in the design and ongoing operation of the project.</p> <p>22. Demonstrate how the project:</p> <ul style="list-style-type: none"> <li>A) Will meet or exceed the relevant industry recognised building sustainability and environmental performance standards.</li> <li>B) Minimises greenhouse gas emissions (reflecting the Government's goal of net zero emissions by 2050) and consumption of energy, water (including water sensitive urban design) and material resources.</li> </ul> <p>23. Provide an environmental mass balance for the project and any life-cycle strategies, developed in consultation with the NSW Environment Protection Authority (NSW EPA).</p> <p>24. Climate modelling is to be on accordance with NSW and ACT Government Regional Climate Modelling (NARCLiM) version 1.5 or later, as determined in consultation with the relevant agency.</p> <p>25. Demonstrate that the project incorporates objectives and mechanisms for achieving ESD, including:</p> <ul style="list-style-type: none"> <li>A) An assessment of a range of options available for use of the resource, including the benefits of each option to future generations.</li> <li>B) Proper valuation and pricing of environmental resources.</li> <li>C) Identification of who will bear the environmental costs of the proposal.</li> </ul> <p><b>Biodiversity</b></p> <p>26. The EIS must assess biodiversity impacts related to the project in accordance with Section 7.9 of the <i>Biodiversity Conservation Act 2017</i> using the <i>Biodiversity Assessment Method 2020 (BAM)</i> and must document this assessment in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the <i>Biodiversity Conservation Act 2016 (s6.12)</i>, <i>Biodiversity Conservation Regulation 2017 (s6.8)</i> and the <i>BAM</i>, unless the Biodiversity and Conservation Division and Planning and Assessment Group determine that the project is not likely to have any significant impacts on biodiversity values.</p> <p>27. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the <i>BAM</i>.</p> <p>28. The BDAR must include details of the measures proposed to address the offset obligation as follows:</p> <ul style="list-style-type: none"> <li>A) The total number and classes of biodiversity credits required to be retired for the project.</li> </ul>
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	<p>B) The number and classes of like-for-like biodiversity credits proposed to be retired.</p> <p>C) The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules.</p> <p>D) Any proposal to fund a biodiversity conservation action.</p> <p>E) Any proposal to conduct ecological rehabilitation.</p> <p>F) Any proposal to make a payment to the Biodiversity Conservation Fund.</p> <p>29. If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.</p> <p>30. The BDAR must be submitted with all spatial data associated with the survey and assessment as per Appendix 11 of the <i>BAM</i>.</p> <p>31. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the <i>Biodiversity Conservation Act 2016</i>.</p> <p>32. The EIS should identify the existing hydrological functioning of coastal wetlands mapped by the <i>State Environmental Planning Policy (Resilience and Hazards) 2021 (SEPP)</i> in the vicinity of the proposal, and address the range of potential impacts including, construction impacts, changes to hydrology, any vegetation removal required for the construction and/or maintenance of access tracks, flooding, activation of acid sulfate soils and the potential for effluent to be discharged into any of the mapped wetlands due to the failure of the sewer network. The EIS should identify how the proposed effluent disposal area will be accessed during the construction and operational phases of the project.</p> <p>33. The EIS should consider strategies and actions to avoid and minimise potential impacts on threatened entities and their habitats (including remnant vegetation) occurring on and/or adjoining the site.</p> <p>34. The EIS and BDAR should assess the impact of the project on any shorebird foraging and/or roosting habitat located within and/or adjoining the development site for both construction and operational stages of the project.</p> <p>35. The EIS should assess the impact of the project on wildlife corridors in the locality, including the Stuarts Point, Fishermans-Clybucca, and South-West Rocks-Macquarie regional corridors.</p> <p>36. Provide an up-to-date coastal erosion and recession study for the effluent disposal area. The updated study must consider the latest IPCC projections and <i>NSW Coastal Management Manual 2018</i> requirements of a probabilistic assessment over multiple probabilities and planning horizons.</p> <p><b>National Parks Estate</b></p> <p>37. Assess the nature, extent and duration of any potential direct or indirect impacts on all environmentally and culturally sensitive land reserved under the <i>National Parks and Wildlife Act 1974</i> in the proximity of the proposal, including:</p> <p>A) Yarriabini National Park.</p> <p>B) Yarrhapinni Wetlands National Park.</p> <p>C) Fishermans Bend Nature Reserve.</p> <p>D) Clybucca Historic Site.</p>
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	<p>E) Clybucca Aboriginal Area.</p> <p>The assessment should address all matters outlined in Developments adjacent to <i>National Parks and Wildlife Service lands: guidelines for consent and planning authorities (DPIE NPWS 2020)</i>.</p> <p>38. The following National Park specific issues should also be addressed:</p> <ul style="list-style-type: none"> <li>A) Impacts to groundwater, estuary and wetlands in the parks, resulting from dewatering.</li> <li>B) Impacts to water quality and hydrology of water entering the parks, resulting from effluent disposal.</li> <li>C) Odour and air quality impacts on the parks, including visitor infrastructure and facilities.</li> <li>D) The values of each reserve as identified in relevant plans of management should be considered in the assessment of the proposal's impacts on reserved land.</li> <li>E) The reserve fire management strategies for the parks identify access for fire management for each reserve. Existing NPWS access should be considered in the assessment of the proposal's impacts on reserved land.</li> </ul> <p>39. Identify measures proposed to avoid, mitigate and manage any potential direct and indirect impacts on National Parks, including an evaluation of the effectiveness and reliability of the proposed measures, and quantify any residual impacts.</p> <p><b>Aquatic Ecology</b></p> <p>40. Prepare an aquatic ecology assessment in accordance with the <i>Policy and Guidelines for Fish Habitat Conservation and Management 2013</i> addressing all direct and indirect impacts of the project and associated works on Key Fish Habitat and associated flora and fauna including threatened species, populations, and communities during construction and operation for the life of the project. The aquatic ecology assessment should include:</p> <ul style="list-style-type: none"> <li>A) A clear description of aquatic environments including: an aquatic and riparian vegetation survey map of the area potentially impacted by the project which shows the location and/or coverage of saltmarsh, mangrove, seagrass, macroalgae, macrophytes, riparian vegetation and snags.</li> <li>B) Map(s) of the development area and adjacent areas – this should include nearby waterways, adjacent infrastructure and land use.</li> <li>C) Details of the nature, timing, magnitude and duration of the proposed disturbance to the aquatic environment.</li> <li>D) Identification of mapped key fish habitat as per DPI Fisheries Spatial Data.</li> <li>E) Description of local wave and current regimes, and water quality.</li> <li>F) Details on types of surrounding land use.</li> <li>G) Condition of riparian and/or marine vegetation.</li> <li>H) Substrate type.</li> <li>I) Photographs of the potentially impacted areas at high and low tide including any vegetation present.</li> <li>J) Presence of any listed threatened or protected aquatic species or 'critical habitat' under the <i>Fisheries Management Act 1994</i> and the <i>EPBC Act</i>.</li> <li>K) Details of the general regional context, any protected areas, other developments in the area, and/or cumulative impacts.</li> </ul>
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	<p>L) Consideration of geomorphic impacts relating to effluent disposal, and potential impacts on aquatic ecology.</p> <p>M) Details of any activities that damage marine vegetation, including:</p> <ol style="list-style-type: none"> <li>i) Type, area, density and distribution of marine vegetation to be harmed.</li> <li>ii) Reasons and methods of harm, including details of construction.</li> <li>iii) Options analysis of alternative activities including justification for the preferred option.</li> </ol> <p>41. Details how the proposal has been or may be modified and managed to minimise impacts to aquatic ecological values and details of mitigation measures during construction and operation that minimise impacts to aquatic ecological values.</p> <p>42. Information on an offset proposal, if necessary, that will offset unavoidable impacts to Fisheries resources, developed in consultation with DPI Fisheries.</p> <p>43. Details of any proposed dredging and reclamation works in accordance with DPI Fisheries requirements.</p> <p><b>Traffic and Transport</b></p> <p>44. Provide a Traffic Impact Assessment (TIA) prepared by suitably qualified person/s in accordance with the <i>Austroads Guide to Traffic Management Part 12 2020</i>, the complementary <i>Transport for NSW (TfNSW) Supplement</i> and <i>RTA Guide to Traffic Generating Developments</i>. The TIA should be tailored to the scope of the proposed development. The TIA should be prepared in accordance with TfNSW requirements and include consideration of emergency vehicle access.</p> <p>45. Consult with TfNSW regarding any potential impacts to navigable waterways.</p> <p><b>Air Quality</b> - in consultation with NSW EPA:</p> <p>46. Provide an Air Quality Impact Assessment report including the following:</p> <ol style="list-style-type: none"> <li>A) Identify all sources or potential sources of air emissions from the development.</li> <li>B) Provide details of the project that are essential for predicting and assessing air impacts including: <ol style="list-style-type: none"> <li>i) The quantities and physio-chemical parameters of materials to be used, transported, produced or stored.</li> <li>ii) An outline of procedures for handling, transport, production and storage.</li> <li>iii) The management of solid, liquid and gaseous waste streams with potential to generate emissions to air.</li> </ol> </li> <li>C) Describe the topography and surrounding land uses. Provide details of the exact locations of dwellings, schools and hospitals, and buildings that may affect plume dispersion. Where appropriate provide a perspective view of the study area such as the terrain file used in dispersion models.</li> <li>D) Provide a description of existing air quality and meteorology, using existing information and site representative ambient monitoring data. Provide and analyse site representative data on meteorological parameters.</li> <li>E) Identify all pollutants of concern and estimate emissions by quantity (and size for particles), source and discharge point.</li> </ol>
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	<p>F) Estimate the resulting ground level concentrations of all pollutants. Where necessary use an appropriate dispersion model to estimate ambient pollutant concentrations.</p> <p>G) Describe the effects and significance of pollutant concentration on the environment, human health, amenity and regional ambient air quality standards or goals.</p> <p>H) Provide the emission rates in terms of odour units. Use sampling and analysis techniques for individual or complex odours and for point or diffuse sources, as appropriate.</p> <p>I) Outline specifications of pollution control equipment and management protocols for both point and fugitive emissions. Where possible, this should include cleaner production processes, including any proposals to reuse and treat emissions and emission levels relative to relevant standards in regulations.</p> <p><b>Soils and Contamination</b> - in consultation with NSW EPA:</p> <p>47. Provide details of site history and any details needed to describe the existing situation in terms of soil types and properties and soil contamination.</p> <p>48. Identify any likely impacts resulting from the construction or operation of the proposal, including the likelihood of:</p> <ul style="list-style-type: none"> <li>A) Disturbing any existing contaminated soil.</li> <li>B) Contamination of soil by operation of the activity.</li> <li>C) Subsidence or instability.</li> <li>D) Soil erosion.</li> <li>E) Disturbing acid sulfate or potential acid sulfate soils.</li> </ul> <p>49. Describe and assess the effectiveness or adequacy of any soil management and mitigation measures during construction and operation of the proposal including:</p> <ul style="list-style-type: none"> <li>A) Erosion and sediment control measures.</li> <li>B) Proposals for site remediation.</li> <li>C) Proposals for the management of these soils including cleaner production processes, contamination treatment and prevention systems.</li> </ul> <p><b>Waste and chemicals</b> - in consultation with NSW EPA:</p> <p>50. Describe any existing waste or chemical operations related to the proposal and any approved regional or industry waste plans.</p> <p>51. Provide details of liquid waste and non-liquid waste generated, handled, processed, managed or disposed of at the facility, including:</p> <ul style="list-style-type: none"> <li>A) Outline cleaner production actions including measures to minimise the consumption of natural resources, minimise waste and proposals for use or recycling.</li> <li>B) The transportation, assessment and handling of waste arriving at or generated at the site.</li> <li>C) Any stockpiling of wastes or recovered materials at the site.</li> <li>D) Any waste processing related to the facility, including reuse, recycling, reprocessing or treatment both on- and off-site.</li> <li>E) The method for disposing of all wastes or recovered materials at the facility.</li> <li>F) The emissions arising from the handling, storage, processing and reprocessing of waste at the facility.</li> <li>G) The proposed controls for managing the environmental impacts of these activities.</li> </ul>
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	<p>52. Provide details of spoil disposal with particular attention to:</p> <ul style="list-style-type: none"> <li>A) The quantity of spoil material likely to be generated.</li> <li>B) Proposed strategies for the handling, stockpiling, reuse/recycling and disposal of spoil.</li> <li>C) The need to maximise reuse of spoil material in the construction industry.</li> <li>D) Identification of the history of spoil material and whether there is any likelihood of contaminated material, and if so, measures for the management of any contaminated material.</li> <li>E) Designation of transportation routes for transport of spoil.</li> </ul> <p>53. Provide details of procedures for the assessment, handling, storage, transport and disposal of all hazardous and dangerous materials used, stored, processed or disposed of at the site, in addition to the requirements for liquid and non-liquid wastes.</p> <p>54. Provide details of the type and quantity of any chemical substances to be used or stored and describe arrangements for their safe use and storage.</p> <p>55. Assess the adequacy of proposed measures to minimise natural resource consumption and minimise impacts from the handling, transporting, storage, processing and reprocessing of waste and/or chemicals.</p> <p><b>Noise and Vibration</b> – in consultation with NSW EPA:</p> <p>56. Undertake a noise and vibration impact assessment including but not limited to the following:</p> <ul style="list-style-type: none"> <li>A) Determine the existing background noise levels.</li> <li>B) Identify any noise and vibration sensitive locations likely to be affected by activities associated with the project.</li> <li>C) A plan showing the assumed location of each noise and vibration source for each prediction scenario.</li> <li>D) A list of the number and type of noise and vibration sources used in each prediction scenario to simulate all potential significant construction and operating conditions on the site.</li> <li>E) Any assumptions made in the predictions in terms of source heights, directivity effects, shielding from topography, buildings or barriers.</li> <li>F) Methods used to predict noise and vibration impacts including identification of any noise models used.</li> <li>G) The weather conditions considered for the noise predictions.</li> <li>H) The predicted noise and vibration impacts from each noise source as well as the combined noise level for each prediction scenario.</li> <li>I) An assessment of the need to include modification factors as detailed in Fact Sheet C of the NSW Noise Policy for Industry 2017.</li> <li>J) Management and mitigation measures.</li> </ul> <p><b>Land Use</b></p> <p>57. Undertake a Land Use Conflict Risk Assessment (LUCRA), including clear identification of the lots affected during both construction and operation, all ongoing access arrangements, and any acquisitions and/or easements that may be required. The LUCRA must identify any impacts of the proposal on agricultural land uses and the potential for impacts from agricultural land uses on the proposal. The LUCRA must also include measures to avoid or mitigate potential impacts.</p> <p>58. Prepare a biosecurity risk assessment outlining the likely plant, animal, and disease risks in relation to surrounding agricultural land uses. The assessment</p>
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	<p>should include details of how the proposal will deal with the identified biosecurity risks as well as contingency plans for any failures. Details of monitoring and mitigation measures for weed and pest management during construction and operation should also be included.</p> <p>59. Provide details of any proposed effluent reuse areas, including impacts to agricultural land, and water sources used for agricultural production.</p> <p><b>Health and Public Safety</b></p> <p>60. A Health Impact Assessment in accordance with current guidelines.</p> <p>61. An assessment of the likely risks of the project to public safety including flood risk, subsidence risks, and the handling and use of dangerous goods.</p> <p>62. A bushfire assessment report which identifies the extent to which the proposed development conforms with or deviates from the relevant provisions of <i>Planning for Bushfire Protection 2019</i>.</p> <p><b>Visual and Design</b></p> <p>63. An assessment of the visual impact of the project and any ancillary infrastructure during construction and operation on:</p> <ul style="list-style-type: none"> <li>A) The existing visual environment of the area, including views.</li> <li>B) Key sites and buildings.</li> <li>C) Heritage items.</li> <li>D) The local community and public amenity.</li> </ul> <p>64. Provide details and illustrations of how the project has minimised adverse visual impacts.</p> <p>65. Address the scale and design of the proposed development, considering impacts upon the visual amenity of the sites, including:</p> <ul style="list-style-type: none"> <li>A) Identify how services and plant are integrated into the overall design of the proposed development.</li> <li>B) Provide details of any proposed landscaping, including the number of trees to be removed and the numbers of trees to be planted.</li> <li>C) Identify any services to be relocated or rerouted to facilitate the development.</li> </ul> <p><b>Crown Lands</b></p> <p>66. Assess any impacts to Crown Lands resulting from the project in consultation with NSW Crown Lands.</p>
<p><b>Plans and Documents</b></p>	<p>The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Part 8 of the <i>EP&amp;A Regulation</i>. Provide these as part of the EIS rather than as separate documents.</p> <p>In addition, the EIS must include the following:</p> <ul style="list-style-type: none"> <li>- High quality files of maps and figures of the subject site and proposal.</li> <li>- Technical details and associated data for any completed surface and groundwater modelling.</li> <li>- Geo-referenced file formats as per the GIS Data Specifications as detailed in the <i>State significant development guidelines – preparing an environmental impact statement 2022</i>.</li> <li>- An Appendix with legible, electronic portable document format engineering plans.</li> </ul>

<b>Engagement</b>	<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. Ensure that all consultation undertaken is documented in the EIS.</p> <p>In particular you must consult with:</p> <ul style="list-style-type: none"> <li>- Registered Aboriginal Parties</li> <li>- NSW Fire and Rescue</li> <li>- NSW DPI Fisheries</li> <li>- NSW Environment Protection Authority</li> <li>- DPE Water</li> <li>- DPI Agriculture</li> <li>- NSW Crown Lands</li> <li>- NSW Local Land Services</li> <li>- Transport for NSW (including NSW Maritime)</li> <li>- Kempsey Local Aboriginal Land Council</li> <li>- DPE Biodiversity and Conservation Division</li> <li>- NSW SES</li> <li>- NSW RFS</li> <li>- Heritage NSW</li> <li>- WaterNSW</li> </ul> <p>The EIS must detail the engagement undertaken and demonstrate how it was consistent with the <i>Undertaking Engagement Guidelines for State Significant Projects 2022</i>. The EIS must detail how issues raised and feedback provided have been considered and responded to in the project.</p>
<b>Expiry Date</b>	<p>If you do not lodge a Development Application and EIS for the development within 2 years of the issue date of these SEARs, your SEARs will expire. If an extension to these SEARs will be required, please consult with the Planning Secretary prior to the expiry date.</p>
<b>References</b>	<p>The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following Attachment A contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.</p>

## ATTACHMENT A

## Technical and Policy Guidelines

The following guidelines may assist in the preparation of the environmental impact statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal. Note that it is the responsibility of the applicant to ensure that the correct and most recent version of any guideline is used.

Many of these documents can be found on the following websites:

<http://www.planning.nsw.gov.au>

<http://www.shop.nsw.gov.au/index.jsp>

<http://www.australia.gov.au/publications>

<http://www.epa.nsw.gov.au/>

<http://www.environment.nsw.gov.au/>

<http://www.dpi.nsw.gov.au/>

## Policies, Guidelines & Plans

### State Significant Development Guidelines

State Significant Development Guidelines (DPIE 2022)

Undertaking Engagement Guide – Guidance for State Significant Projects (DPIE 2021)

Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE 2021)

Registered Environmental Assessment Practitioner Guidelines (DPIE 2022)

### Water and Coastal Zone

NSW Water Quality and River Flow Objectives

Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG 2018)

Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DECC 2008)

NSW Aquifer Interference Policy (DPI 2012)

Water Management Act 2000

Water Management Regulation 2018

Water use approval exemptions Fact Sheet (DPE 2022)

Guidelines for Controlled Activities on Waterfront Land (NRAR 2018)

Relevant floodplain management plans

Relevant NSW Water Resource Plans

Relevant NSW Regional Water Strategies

Relevant Water Sharing Plans

Groundwater Assessment toolbox for major projects in NSW (DPE 2022)

Guidelines for Groundwater Documentation for SSD/SSI Projects (DPE 2022)

Minimum Groundwater Modelling Requirements for SSD/SSI Projects (DPE 2022)

Cumulative Groundwater Impact Assessment Approaches (DPE 2022)

Coastal Management Act 2016

NSW Oyster Industry Sustainable Aquaculture Strategy (DPI 2021)

NSW Healthy Estuaries for Healthy Oysters (DPI 2017)

Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions (OEH/EPA 2017)

Environmental Guidelines: Use of Effluent by Irrigation (DEC 2004)

NSW Coastal Management Manual (OEH 2018)

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Coastal Management Act 2016

### **Flooding**

Flood Risk Management Manual (Draft DPE 2022)

Floodplain Development Manual (DIPNR 2005)

Australian Rainfall and Runoff: A Guide to Flood Estimation (Geoscience Australia 2019)

Climate Change Impacts and Risk Management: A Guide for Business and Government (2006)

NSW Climate Impact Profile

### **Aboriginal Heritage**

Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011)

Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW (DECCW 2010)

Aboriginal Cultural Heritage consultation requirements for proponents (DECCW 2010)

### **Non-Aboriginal Heritage**

NSW Heritage Manual (HO and DUAP 1996)

Assessing Heritage Significance (DPIE 2001)

### **Social**

Social Impact Assessment Guideline for State Significant Projects (DPIE 2021)

Technical Supplement: Social Impact Assessment Guideline for State Significant Projects (DPIE 2021)

### **Ecologically Sustainable Development**

NSW and ACT Government Regional Climate Modelling climate change projections (NARCLiM)

### **Biodiversity and Aquatic Ecology**

Biodiversity Conservation Act 2016

Biodiversity Assessment Method (DPIE 2020)

Biodiversity Conservation Regulation 2017

BAM 2020 Operational Manual – Stage 1 (DPE 2022)

BAM Operational Manual Stage 2 (DPIE 2019)

BDAR Template (DPE 2022)

Guidance to assist a decision maker to determine a serious and irreversible impact (DPIE 2019)

NSW Guide to surveying threatened plants (OEH 2016)

NSW Fisheries Management Act 1994

Policy and Guidelines for Fish Habitat Conservation and Management (DPI Update 2013)

Threatened Species Assessment Guidelines - Assessment of Significance (DPI 2008)

Why Do fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries 2003)

The Installation and Operation of Instream Structures that alter Natural Flow Regimes of Rivers and Streams (2005)

DPI Fisheries Fishway Design Guidelines (DPI Fisheries 2015)

### **NPWS Estate**

Clybucca Historic Site Plan of Management (DECC 2007)

Fishermans Bend Nature Reserve Plan of Management (DEC 2005)

Yarrhapinni Wetlands National Park Plan of Management (NPWS 2013)

Yarriabini National Park Plan of Management (DPIE 2021)

Fishermans Bend Nature Reserve Fire Management Strategy (DECC 2006)

Yarrhapinni Wetlands National Park, Clybucca Historic Site and Aboriginal Area Fire Management Strategy (DECC 2009)

National Parks and Wildlife Act 1974

### **Soils and Contamination**

Consultants Reporting on Contaminated Land: Contaminated Land Guidelines (EPA 2020)

Acid Sulfate Soil Manual (NSW Acid Sulfate Soil Management Advisory Committee 1998)

National Acid Sulfate soils guidance: Overview and management of monosulfidic black ooze accumulations in waterways and wetlands, (DAWR 2018)

National Acid Sulfate Soils Guidance: National acid sulfate soils identification and laboratory methods manual (DAWR 2018)

National Acid Sulfate Soils guidance: National acid sulfate soils sampling and identification methods manual (DAWR 2018)

National Acid sulfate soils guidance: Guidelines for the dredging of acid sulfate soil sediments and associated dredge spoil management (DAWR 2018)

National Acid Sulfate Soils Guidance: Guidance for the dewatering of acid sulfate soils in shallow groundwater environments (DAWR 2018)

Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP/EPA 1998)

Sampling Design Guidelines for Contaminated Land (EPA 2022)

National Environment Protection (Assessment of Site Contamination) Measure (NEPC, as amended 2013)

Contaminated Land Management Act 1997

Acid Sulfate Soils Risk Map

### **Waste and chemicals**

Protection of the Environment Operations Act 1997

Waste Classification Guidelines (EPA 2014)

NSW Sustainable Design Guidelines Version 3.0 (TfNSW 2013)

NSW Waste Avoidance and Resource Recovery Strategy 2014-2021 (EPA 2014)

### **Sediment, Erosion and Dust**

Managing Urban Stormwater - Soils & Construction Volume 2C (Landcom 2004)

Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA 2022)

### **Transport**

Austrroads Guide to Traffic Management (Austrroads 2020)

RTA Guide to Traffic Generating Developments (RTA 2013)

TfNSW Supplements to Austrroads

### **Health and Public Safety**

Environmental Health Risk Assessment, Guidelines for assessing human health risks from environmental hazards (Commonwealth of Australia 2012)

Health Impact Assessment: A practical guide (NSW Health 2007)

SES Emergency Plan

Planning for Bushfire Protection (NSW RFS 2019)

### **Noise and Vibration**

NSW Noise Policy for Industry (EPA 2017)

Interim Construction Noise Guideline (DECC 2009)

Assessing Vibration: A Technical Guideline (DEC 2006)

### **Land Use**

Crown Land Management Act 2016

Aboriginal Land Rights Act 1983

Native Title Act 1993

Roads Act 1993

Land Use Conflict Risk Assessment Guide (DPI 2011)

Managing biosecurity risks in land use planning and development guide (DPI 2020)

Infrastructure proposals on rural lands (DPI 2013)

Relevant Regional Weed Management Plans