

RFI ITEMS

BCD Recommendations	RFI Response Comments										
1. The comments on coastal issues provided by BCS on 27 May 2021 be addressed.	We understand the comments relating to coastal issues provided by BCS on 27 th May 2021 relate to addressing Clause 13 and Clause 14 of SEPP (Coastal Management) 2018.										
	SEPP (Coastal Management) 2018 has now been repealed and its provisions rolled into SEPP (Resilience and Hazards) 2021. The equivalent provisions to Clause 13 and Clause 14 of SEPP (Coastal Management) 2018 within SEPP (Resilience and Hazards) 2021, are Clause 2.10 and Clause 2.11.										
	Importantly we note that most of the project site is clear of the Coastal Use Area and the Coastal Environment Area. In the north-western corner of the site an irregular lot boundary partially intersects the Coastal Use Area and Coastal Environment Area. Further, only a relatively small area of Phase 11 (estimated as some 23,905m ²) falls within the Coastal Environment Area. Refer Attachment 2 – G&S Response Letter dated 28 th May 2025 for the location of the Coastal Use Area and Coastal Environment Area as it relates to the site and extract areas.										
	Clause 2.10 and Clause 2.11 are addressed below:										
	<table><tr><th colspan="3">2.10 Development on land within the coastal environment area</th></tr><tr><td colspan="3">2.10 (1) Development consent must not be granted to development on land that is within the coastal environment area unless the consent authority has considered whether the proposed development is likely to cause an adverse impact on the following:</td></tr><tr><td>2.10(1)(a)</td><td>The integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment</td><td> The potential impacts of the proposed TSP Expansion on the hydrological values of the coastal zone, particularly groundwater and surface water quality, have been analysed through a range of models, assessments and reports completed by G&S between 2021 and 2022. Collectively, these reports provide a comprehensive understanding of the hydrological and water quality implications of the proposed TSP expansion and include: • <i>Surface Water Assessment, Tweed Sand Plant Expansion, Cudgen, New South Wales (G&S, 2021)</i> • <i>Groundwater Assessment, Tweed Sand Plant Expansion, Cudgen, New South Wales (G&S, 2021)</i> • <i>Supplementary Groundwater Quality Report, Tweed Sand Plant Expansion (G&S, 2022)</i> • <i>Supplementary Groundwater Model Report, Tweed Sand Plant Expansion (G&S, 2021)</i> • <i>Acid Sulfate Soils Assessment, Tweed Sand Plant Expansion,</i> </td></tr></table>			2.10 Development on land within the coastal environment area			2.10 (1) Development consent must not be granted to development on land that is within the coastal environment area unless the consent authority has considered whether the proposed development is likely to cause an adverse impact on the following:			2.10(1)(a)	The integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment
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2.10(1)(a)	The integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment	The potential impacts of the proposed TSP Expansion on the hydrological values of the coastal zone, particularly groundwater and surface water quality, have been analysed through a range of models, assessments and reports completed by G&S between 2021 and 2022. Collectively, these reports provide a comprehensive understanding of the hydrological and water quality implications of the proposed TSP expansion and include: • <i>Surface Water Assessment, Tweed Sand Plant Expansion, Cudgen, New South Wales (G&S, 2021)</i> • <i>Groundwater Assessment, Tweed Sand Plant Expansion, Cudgen, New South Wales (G&S, 2021)</i> • <i>Supplementary Groundwater Quality Report, Tweed Sand Plant Expansion (G&S, 2022)</i> • <i>Supplementary Groundwater Model Report, Tweed Sand Plant Expansion (G&S, 2021)</i> • <i>Acid Sulfate Soils Assessment, Tweed Sand Plant Expansion,</i>									

				<i>Cudgen, New South Wales (G&S, 2021)</i> • <i>Supplementary Water Quality Report – Minimal Impact Considerations (G&S, 2021)</i> • <i>Soil and Water Management Plan, Tweed Sand Plant Expansion, Cudgen, New South Wales (G&S, 2023)</i> • <i>Response letter Re: Hanson Tweed Sand Plant Expansion (SSD-10398) (Tweed Shire) – Request for Information (RFI) (G&S, 16 January 2024)</i> These matters are further discussed within Attachment 2 – G&S Response Letter dated 28th May 2025. In regarding to the proposal impact upon the integrity and resilience of the ecological environment, this has been quantified in the BDAR, Refer Attachment 5 – Revised Biodiversity Development Assessment Report. A number of measures to avoid and mitigate impacts on existing flora, fauna and habitat values of the site have been incorporated. The most recent amendments to the proposed development footprint have been made to ensure the entire patch of Vegetation Zone 3 (i.e. the best quality vegetation remaining on the site with a score of 52.7 out of 100) is avoided. The proposed development will however result in unavoidable impacts on 2.98ha of native vegetation and 2.06 ha of land required to be rehabilitated under existing sand extraction approvals. These impacts are not considered to be serious or irreversible. Rehabilitation works are proposed as part of the project and will be completed on a phase-by-phase basis at the completion of sand extraction works within the respective phase. Rehabilitation works on the site will cover approximately 39.24 ha (over 16% of the site area) in total.	
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				Through the project design and implementation of the proposed mitigation measures the project is unlikely to adversely impact the integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment.	
		2.10(1)(b)	Coastal environmental values and natural coastal processes	The part of the project site that is located within the coastal environment area has a long history of agricultural use (typically grazing) and has been cleared of native vegetation. Works proposed within this area will include sand extraction and the creation of a minimum 10 metre vegetated riparian zone around the perimeter of the lake. The land is within private ownership and largely disconnected from the Coastal Use area by the Pacific Motorway. As the majority of the extraction footprint is located outside the Coastal Use Area and Coastal Environment Area, any increased risk to coastal processes or interaction with coastal hazards is minimised. For further detail with respect to site stability, we refer BCS to the Project's geotechnical report which proposes specific action in this vicinity to ensure stability of the extraction lake edges.	
		2.10(1)(c)	The water quality of the marine estate (within the meaning of the Marine Estate Management Act 2014), in particular, the cumulative impacts of the proposed development on any of the sensitive coastal lakes identified in Schedule 1.	The proposed development is not in proximity to any sensitive coastal lakes identified in Schedule 1, nor will the proposal have any impact on the water quality of any other marine estates. Refer discussion of water quality matters under 2.10(1)(a) above.	
		2.10(1)(d)	Marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms	The proposed development is clear of marine vegetation, undeveloped headlands, and rock platforms. Refer discussion under 2.10(1)(a) above in relation to native vegetation and fauna and their habitats.	

		2.10(1)(e)	Existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability	No adverse impact will occur, given the location of the site. The proposal is not envisaged to impact access to any key coastal area.	
		2.10(1)(f)	Whether the proposed development is likely to cause an adverse impact on Aboriginal cultural heritage, practices and places.	The site is not known to contain any heritage items or places. The site is also disturbed from past activities. The proposal is unlikely to adversely impact Aboriginal Cultural Heritage, practices and places. Refer previously submitted Aboriginal Cultural Heritage Assessment.	
		2.10(1)(g)	Whether the proposed development is likely to cause an adverse impact on the use of the surf zone.	The site is well clear of the surf zone. As a result, no adverse impact will occur.	
		(2) Development consent must not be granted to development on land to which this section applies unless the consent authority is satisfied that:			
		2.10(2)	(a) the development is designed, sited and will be managed to avoid an adverse impact referred to in subclause (1), or (b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or (c) if that impact cannot be minimised—the development will be managed to mitigate that impact.	Refer to the above comments, which confirm no adverse impact will occur.	
		2.11 Development on land within the coastal use area.			
		2.11(1)(a)	Development consent must not be granted unless it is demonstrated that: (i) existing, safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability, (ii) overshadowing, wind funnelling and the loss of views from public places to foreshores, (iii) the visual amenity and scenic qualities of the coast, including coastal headlands, (iv) Aboriginal cultural heritage, practices and places, (v) cultural and built environment heritage, and	All works are located clear of the Coastal Use Area. The proposal will not have a detrimental effect upon: - Access to the foreshore. - Overshadowing. - Visual Amenity. - Any potential Aboriginal Cultural Heritage; or - Cultural and built environment heritage.	
		2.11(1)(b)	is satisfied that— (i) the development is designed, sited and will be managed to avoid an adverse	The proposal has been designed to avoid any works in the Coast Use Area. As such the proposal has been appropriately	

			impact referred to in paragraph (a), or (ii) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or (iii) if that impact cannot be minimised—the development will be managed to mitigate that impact, and	designed and managed to avoid adverse impacts referred to in paragraph (a) as it relates to the area of the site mapped as Coastal Use Area.	
		2.11(1)(c)	has taken into account the surrounding coastal and built environment, and the bulk, scale and size of the proposed development.	As above.	
2. As the impacts of projected sea level rise above 0.5m on the site may be significant, the consent authority be satisfied that the proposal includes measures to ensure: a. the proposed lake does not become hydraulically connected to the estuary under projected future sea level rise scenarios over the planning period. b. the development is not likely to cause increased risk of coastal hazards on that land or other land as per s.2.1.2 of the State Environmental Planning Policy (Resilience and Hazards) 2021. c. measures are in place for appropriate responses to, and management of, anticipated future coastal processes and coastal hazards. d. risks to ground water and surface water associated with the proposal will not negatively impact the hydrological and ecological values of the coastal zone under current and future sea level rise projections over the planning period.	Refer Attachment 2 – G&S Response Letter dated 28th May 2025 for response against items 2a through 2d.				
3. The proposal be redesigned to avoid impacts to Threatened Ecological Communities in the north of proposed Phase 10.	The project has been revised to retain and buffer the Threatened Ecological Community in the north of Phase 10. Please refer to the following documents capturing this change: • Attachment 3 – Revised Concept Mine Closure Plan dated 13th May 2025 • Attachment 4 – Revised Concept Rehabilitation and Landscape Management Plan dated 13th May 2025 • Attachment 5 – Revised Biodiversity Development Assessment Report dated 20th May 2025. • Attachment 6 – Revised Visual Impact Assessment • Attachment 7 – Revised EIS Figures				
4. The BDAR be revised to:	The BDAR has been revised. Please refer to Attachment 5 – Revised Biodiversity Development Assessment Report dated 20 th May 2025.				

a. demonstrate and justify how reasonable efforts to avoid and minimise impacts on biodiversity values have been undertaken in accordance with section 6.12(c) of the <i>Biodiversity Conservation Act 2016</i> after recommendation 1 above has been addressed. b. provide further detailed evidence of the targeted survey effort undertaken for recently included Candidate Species that were removed from further assessment based on the results of previous field surveys. c. assess and apply an additional vegetation zone or zones for regenerating vegetation across the site. d. clarify or remove the reference to a biodiversity stewardship site in section 2.1 of the BDAR	
5. The proposed Independent Audit Report incorporate clear rehabilitation criteria that tie expansion of the next subsequent impact stage or phase upon demonstrated success of preceding ecological rehabilitation targets.	This comment is noted. The recommendation would appear to be provided for the Department's consideration in preparing proposed condition relating to an independent Audit Report for the project.
6. The proposed Independent Audit Report incorporate clear criteria to demonstrate water quality, recreational and ecological rehabilitation requirements are satisfied.	This comment is noted. The recommendation would appear to be provided for the Department's consideration in preparing proposed condition relating to an independent Audit Report for the project.
7. The consent authority be satisfied there is certainty regarding the future ownership and management obligations for the land, noting this may include a deed of agreement with the proponent and the requirement of an up-front bond to be retained until water quality, recreational and ecological rehabilitation requirements are satisfied.	This comment is noted. The recommendation would appear to be provided for the Department's consideration in preparing proposed condition relating to future ownership and management of the site.
8. The proposed Independent Audit Report include an adequacy review of the rehabilitation bond.	This comment is noted. The recommendation would appear to be provided for the Department's consideration in preparing proposed condition relating to an independent Audit Report for the project.

9. The proposed Independent Audit Report includes consultation with the Department of Planning, Housing and Infrastructure compliance team and be informed by the results of proposed annual monitoring reports.	This comment is noted. The recommendation would appear to be provided for the Department's consideration in preparing proposed condition relating to an independent Audit Report for the project.
10. The consent authority considers requiring revision of the Concept Mine Closure Plan, Concept Rehabilitation and Landscape Management Plan, Appendix 1 – End Use and Final Landform Plan, and any associated documents, extraction and phase plans, so they are all consistent.	These documents have been updated to address any minor inconsistencies. Please refer to the following documents: • Attachment 3 – Revised Concept Mine Closure Plan dated 13th May 2025 • Attachment 4 – Revised Concept Rehabilitation and Landscape Management Plan dated 13th May 2025 • Attachment 5 – Revised Biodiversity Development Assessment Report dated 20th May 2025. • Attachment 6 – Revised Visual Impact Assessment • Attachment 7 – Revised EIS Figures
11. Appropriately scaled and dimensioned plans and sections be provided that demonstrate what will be achieved for the rehabilitation works both for the riparian area and wetland area.	Please refer to Attachment 8 – Revised Lake Bank Profiles
12. Additional information be provided to: a. show the typical final landforms expected for the lake edges b. demonstrate how wetland and riparian rehabilitation is consistent with slope stabilisation c. identify measures to mitigate issues such as bank collapse or drops in water levels as experienced during stages 1-4 of the Hanson Sand Plant.	Please refer to Attachment 8 – Revised Lake Bank Profiles and Attachment 4 – Revised Concept Rehabilitation and Landscape Management Plan. These documents demonstrate typical final landforms expected for the lake edges, discusses vegetation planting and contribution to stability and identifies measures such as gabion and rock surface protections to mitigate issues such as bank collapse or drops in water level where required. These documents have been informed by the recommendations of the previously submitted Geotechnical Report.
13. Further clarification be provided for the rehabilitation of the north-west 'Nil Extraction Area' and the extent of approved riparian rehabilitation within 'Phase 4'.	No rehabilitation is proposed in this location. This area will remain grassed rural paddock. This clarification has been captured in the revisions made to the attached documents. Please refer to the following documents: • Attachment 3 – Revised Concept Mine Closure Plan dated 13th May 2025 • Attachment 4 – Revised Concept Rehabilitation and Landscape Management Plan dated 13th May 2025 • Attachment 5 – Revised Biodiversity Development Assessment Report dated 20th May 2025. • Attachment 6 – Revised Visual Impact Assessment • Attachment 7 – Revised EIS Figures
14. Riparian rehabilitation areas be delineated and expanded to provide a minimum 20m, but preferably 50m, wide fully vegetated riparian area.	The proposal has maintained a minimum buffer width of 10m; however, the documents have been updated to identify that an overall average width of 20m for these areas will be achieved. Please refer to the following documents:

	• Attachment 3 – Revised Concept Mine Closure Plan dated 13th May 2025 • Attachment 4 – Revised Concept Rehabilitation and Landscape Management Plan dated 13th May 2025 • Attachment 5 – Revised Biodiversity Development Assessment Report dated 20th May 2025. • Attachment 6 – Revised Visual Impact Assessment • Attachment 7 – Revised EIS Figures
15. Greater plant community diversity be included in the riparian rehabilitation scheme.	The Concept Rehabilitation and Landscape Management Plan has been revised to include greater plant community diversity in the riparian rehabilitation area. Refer Attachment 4 – Revised Concept Rehabilitation and Landscape Management Plan dated 13 th May 2025.
16. The required management for Broad-leaved cumbungi (<i>Typha orientalis</i>) and Common reed (<i>Phragmites australis</i>) within the Wetland Rehabilitation Area be clarified in consultation with Tweed Shire Council.	While this comment regarding Broad-leaved cumbungi (<i>Typha orientalis</i>) and Common reed (<i>Phragmites australis</i>) within the Wetland Rehabilitation Area is noted. <u>It is not intended to manage natural wetland regeneration where it occurs</u>. As it is not intended to manage these species, there is no requirement to discuss with Tweed Shire Council. The Concept Rehabilitation and Landscape Management Plan has been amended to specifically identify that management of these species is not intended. As stated in Section 2.8.1 of the Concept Rehabilitation and Landscape Management Plan “These stands by their very nature are often quite dense and often to the exclusion of other native species (i.e. forming monocultures) however this is a natural occurrence and is therefore not considered to trigger any management requirements. Furthermore, management of these stands may impact on waterbird roosting sites and habitat.” Refer Attachment 4 – Revised Concept Rehabilitation and Landscape Management Plan dated 13th May 2025.
17. Wetland rehabilitation areas be designed with a minimum 10m wide wetland revegetated area with appropriate slopes.	The proposal has been amended to identify the wetland areas at a minimum width of 10m. Please refer to the following documents: • Attachment 3 – Revised Concept Mine Closure Plan dated 13th May 2025 • Attachment 4 – Revised Concept Rehabilitation and Landscape Management Plan dated 13th May 2025 • Attachment 5 – Revised Biodiversity Development Assessment Report dated 20th May 2025. • Attachment 6 – Revised Visual Impact Assessment • Attachment 7 – Revised EIS Figures
18. The proposed Independent Audit Report, along with monitoring criteria within the CRLMP, demonstrate the regeneration of wetland and riparian rehabilitation areas is on track, or has reached a viable good condition over time, by requiring ongoing BAM plots to measure vegetation integrity (VI) and ensuring this is benchmarked to suitable ‘good condition’ PCT composition, structure and function condition scores.	This comment is noted. The recommendation would appear to be provide for the Department’s consideration in preparing proposed condition relating to an independent Audit Report for the project.
19. Fences and maintenance and access roads be located outside the 20-50m wide fully vegetated riparian area.	Fencing would be located on property boundaries and as outlined within the Revised Concept Rehabilitation and Landscape Management Plan are to be installed prior to planting commencing. Refer Attachment 4 – Revised Concept Rehabilitation and Landscape Management Plan dated 13 th May 2025. Access roads that will be retained post closure are not contained within the vegetated riparian areas. These will be located adjacent to these areas and not through these areas. Refer Attachment 7 – Revised EIS Figures, specifically Figure 26.
	The proposal has been amended to identify the central open space area separate to the riparian areas. Please refer to the following documents:

20. 'Open Space' areas be separated from the 'Riparian Rehabilitation' areas as the riparian rehabilitation areas must be fully vegetated.	• Attachment 3 – Revised Concept Mine Closure Plan dated 13th May 2025 • Attachment 4 – Revised Concept Rehabilitation and Landscape Management Plan dated 13th May 2025 • Attachment 5 – Revised Biodiversity Development Assessment Report dated 20th May 2025. • Attachment 6 – Revised Visual Impact Assessment • Attachment 7 – Revised EIS Figures
21. The consent authority be satisfied that the final lake form and geotechnical stability will allow the proposed recreational scenario and the ecological objectives, being the 'alternative or base case scenario', to be achieved.	This comment is noted. The recommendation would appear to be provided for the Department's consideration of the application. As outlined within all the technical assessments to date, the final lake form and the measures to be incorporated to ensure Geotechnical stability will allow both the recreational end use scenario and the 'alternative or base case' ecological end use scenario.
22. The consent authority be satisfied that the proposed open space areas in the current proposal are adequate and the reduction in open space relative to that required under the current approval is justified.	This comment is noted. The recommendation would appear to be provide for the Department's consideration of the application. In this regard we note the currently approved recreation end use for Phase 1 to 4 and the proposed end use items are private facilities and are not contributing to, nor form any part of Councils provision of public open space for the Tweed LGA.
23. The BDAR calculations be revised once all our previous recommendations have been fully addressed, given the final extraction footprint will change.	The BDAR calculations have been updated. Refer Attachment 5 – Revised BDAR and the accompanying BDAR spatial data.