

Work Package 1: Strategic Environmental Assessment for the proposed Boegoebaai Port and Special Economic Zone.

Completed Comments and Responses sheet

10-Dec-25

Note that some comments were submitted in Afrikaans and have been translated to English

Reviewer name	Id	SEA WP1 Report	Page range #	Line/s #	Table/Fig/Box #	Comment	Responses to Comments
Megan Cloete	1	12 – 15 August 2025 Public Information Sessions Work Package 1 Feedback	9 of 12			<p>"7. Establish and implement a comprehensive, transparent, and continuous consultation plan, starting from the earliest project planning and management phases. Focused on fair consultation and negotiations (including the principles of "Free, Prior & Informed Consent (FPIC)")."</p> <p>This pamphlet makes a statement about FPIC or VVVI (voluntary, prior and ongoing, fully informed consent). Nowhere else in the report, which consists of a total of 1,014 pages, is this principle and proposal further developed or substantiated. The statement stands alone and is not properly grounded.</p> <p>It therefore appears that the sixty paid experts appointed by the CSIR either do not understand the principle or do not consider it important enough to justify or elaborate on.</p>	<p>Karoo Development Foundation: The very important matter of public participation, decision-making and meaningful input is discussed in the Socio-economic Chapter of Work Package 2. This includes FPIC, as well as other participatory methodologies. We argue that the consultation process will require specialists in mediation to design a process which will be generally acceptable and legitimate.</p> <p>CSIR: The SEA recognises the fundamental importance of the principles of FPIC and related participatory approaches in ensuring transparent and inclusive decision-making processes. The more detailed treatment of FPIC and consultation methodologies is provided in the Socio-economics Chapter of Work Package 2 which offers a framework and operational guidance for how such processes should be undertaken during subsequent project planning and authorisation phases. The WP2 draft reports (currently being peer reviewed), once available will be released for public comment in due course (public review period will be communicated accordingly). The SEA engagement process for WP2 will also include in-person and online public information and input sessions.</p> <p>TNPA: The FPIC was followed in commissioning the study on the land owned by the community. The objective of the SEA is to provide the impact and mitigations for the proposed development. It is not an approval document for the project.</p>
Ann Friedberg on behalf of Alexander Bay Community	2	Chapter 1				<p>1. Introduction</p> <p>We, the residents of Alexander Bay and surrounding towns in the Richtersveld, address this letter to the CSIR to share our input and concerns about how the Strategic Environmental Assessment (SEA) for the Boegoebaai project has been handled.</p> <p>Although it is claimed that this process allows for community participation, it is clear that its structure has excluded ordinary people. The CSIR requests that communities submit their comments using a form, with references to page numbers, technical chapters, and reasons for disagreement. This method requires people not only to access the more than 1,000-page report in English or technical Afrikaans, but also to understand, interpret, and submit it electronically. For most of us, this is simply impossible.</p> <p>We believe this method of consultation is neither fair nor inclusive. It leaves ordinary people out of a conversation about their own land and future.</p>	<p>CSIR: Concerns about the accessibility and inclusivity of the SEA process for the Boegoebaai project is acknowledged. We understand that the SEA report is technical and extensive. To address this, a Summary for Policymakers document was prepared as part of the SEA outputs in both English and Afrikaans with the intention of making the content more accessible. Recognising that these summaries may still be difficult to interpret or access, in-person presentations in Afrikaans were undertaken within the communities where both written and verbal comments were invited and captured. The feedback received was shared with the authors of the relevant chapters for consideration. Regarding the comments and responses process: ideally structured comments that reference specific sections of the report are sought. This approach ensures clarity, accuracy and transparency in the review process, allowing authors to trace and address each comment, integrate new information in the correct context, and maintain a clear record of how feedback was considered and incorporated. However, this does not mean that general comments, or those not submitted using the comments template, are excluded or not accepted. All comments, whether general or specific, have been recorded in this comments and responses sheet, and have been responded to.</p> <p>Karoo Development Foundation: The SEA process is primarily a scientific one, to determine the potential impacts of various aspects of the proposed project. The main audience, at this stage, are fellow scientists and policy-makers. The purpose is to clarify the numerous causal chains involved in the project. In the SEA (Work Package 2) there is a policy-level recommendation for a thorough and rigorous public participation process. After the SEA is complete, the policy-makers must engage with the SEA report, and (with the assistance of mediation specialists) design and fund a proper participation process. For example, NCEDA would presumably be responsible to allocating funding for a thorough participation process. At that point, the key insights of the SEA process should indeed be simplified and translated, so that these findings may be useful for public participation. Such participation would include: Communities and community leaders, municipal councillors and officials, businesspeople (tourism, agriculture, mining), environmental activists, heritage enthusiasts, and other stakeholders. The really important aspect of such a participation process is that Government and economic decision-makers should be prepared to consider alternative options, on a wide range of issues, e.g. whether the projects should proceed at all, on what scale, and how risks can be mitigated, how communities can be empowered in the project, etc.</p>
Ann Friedberg on behalf of Sanddrift Community	3	Chapter 1				<p>1. Introduction and General Position</p> <p>The Sanddrift community acknowledges the importance of public participation in development processes. However, we wish to express our serious concern about the manner in which the consultation process for the proposed Boegoebaai Port Development has taken place.</p> <p>The CSIR requested that communities provide input using a standardized form, referencing specific page numbers, issues, and motivations. This technical format assumes that community members have access to the full Strategic Environmental Assessment (over 1,000 pages, in English), can read and interpret the content, and have the necessary equipment to participate online. This is not the reality of our community.</p> <p>We wish to make it clear that this process is inaccessible, unfair, and exclusionary. It does not reflect a meaningful or informed form of participation, but rather an administrative exercise that limits community involvement to those with technical knowledge and internet access.</p>	<p>CSIR: Concerns about the accessibility and inclusivity of the SEA process for the Boegoebaai project is acknowledged. We understand that the SEA report is technical and extensive. To address this, a Summary for Policymakers document was prepared as part of the SEA outputs in both English and Afrikaans with the intention of making the content more accessible. Recognising that these summaries may still be difficult to interpret or access, in-person presentations in Afrikaans were undertaken within the communities where both written and verbal comments were invited and captured. The feedback received was shared with the authors of the relevant chapters for consideration. Regarding the comments and responses process: ideally structured comments that reference specific sections of the report are sought. This approach ensures clarity, accuracy and transparency in the review process, allowing authors to trace and address each comment, integrate new information in the correct context, and maintain a clear record of how feedback was considered and incorporated. However, this does not mean that general comments, or those not submitted using the comments template, are excluded or not accepted. All comments, whether general or specific, have been recorded in this comments and responses sheet, and have been responded to.</p> <p>Karoo Development Foundation: As explained in response to comment IDW2, the SEA process is a scientific endeavour, aimed at clarifying technical and scientific matters, so that a proper participation process (at various levels) is indeed possible and meaningful. The SEA process is not the main participatory process. The main reason for the call for comment during the SEA process is to check, evaluate and verify scientific claims. The main audience for the SEA is scientists and policy-makers, and then the results feed usefully into the actual participation process. One cannot have a meaningful participation process if the basic facts have not been established first.</p>
Peter Hawkes	4	Chapter 1	1-7	14		Broken cross-reference link	<p>CSIR: The cross-reference link appeared in error, there was no intended reference in this section. This is corrected in the final document.</p>
Louise Geldenhuys	5	Chapter 1	7	21-24		Is it realistic to expect the port to be fully operational and already exporting the quantities given in 2030 (in 5 years)?	<p>Karoo Development Foundation: One cannot set dates at all, at this stage. The main question should be: Will the port be in operation (say) five years from start of construction? It may be the case that the port is completed in phases, with different components coming onstream at different points in time. I am not a port expert, but I would imagine that five years would be sufficient construction time.</p> <p>TNPA: According to the current project schedule, the forecasted operational date is 2033.</p>
Louise Geldenhuys	6	Chapter 1	11-13		Figure 1-4 and Table 1-20	It is indicated that the conservancy area (zone 2) demarcation is also based on the seal colony on the Boegoebaai point. However, the seal colony is located in zone 1, not in zone 2 as it is currently demarcated. (Seal colony location indicated in red below). How was the current location and size of the seal colony considered for the zonation?	<p>CSIR: Whilst the early SEZ layout zoning determined by NCEDA includes a conservancy area (zone 2) focussed primarily on the Boegoeberg Twins and not taking into consideration the location of the seal colony, a recommendation from the SEA is that the port breakwater (and thus landside port infrastructure) should avoid the seal colony. This is captured in Figure SPW7 (strategic spatial planning) showing a possible port area shifted elsewhere to avoid the Boegoeberg headland and seal colony. Future port and SEZ layout zoning and design should take into account these strategic spatial planning recommendations, as well as additional site-specific recommendations that may be revealed by future research and surveys.</p>
Louise Geldenhuys	7	Chapter 1	11-13		Figure 1-4 and Table 1-20	Following on comment above - the marine ecology specialist study indicated that "If displaced, it is unlikely that the Cape fur seal colony would re-establish on adjacent low-profile rocky shore areas as these offer no shaded refugia, pools or protection from land-based predators". How has this information been considered to inform sustainable planning?	<p>CSIR: A key recommendation drawn from the SEA is that the port breakwater (and thus landside port infrastructure) should avoid the seal colony. This is captured in Figure SPW7 (strategic spatial planning) showing a possible port area shifted elsewhere to avoid the Boegoeberg headland and seal colony. Future port and SEZ layout zoning and design should take into account these strategic spatial planning recommendations, as well as additional site-specific recommendations that may be revealed by future research and surveys.</p>
Louise Geldenhuys	8	Chapter 1	13		Table 1-2	A reference is needed for the statement about the Swartvlei Heuweltjie Strandveld habitat unit.	<p>CSIR: The source and full citation has been included accordingly in the final document.</p>
Louise Geldenhuys	9	Chapter 1	Overall			Can it be expected that the layout and zoning of the proposed harbour and SEA will be re-drawn following the conclusions and recommendations of the specialist studies?	<p>CSIR: A key outcome from the SEA is captured in Figure SPW7 (strategic spatial planning) showing regions, at a strategic level, within the SEZ / SEA study area that are less suitable for development (e.g. where environmental sensitivities must be avoided) and areas that are more suitable for development (e.g. areas that have been disturbed by mining). Future port and SEZ layout zoning and design should take into account these strategic spatial planning recommendations, as well as additional site-specific recommendations that may be revealed by future research and surveys.</p> <p>TNPA: Yes, that is possible depending on the recommendations of the specialist studies (Environmental and Technical).</p>
Natural Justice	10	Chapter 1	1-4	8-12		<p>The focus of the SEA seems to be placed on Green Ammonia and Green Methanol. However when the reports are considered in totality, the purpose for the port and SEZ is exporting of products like mineral resources, green hydrogen and ammonia and importing of diesel (Page 1 – 5 lines 14 – 15, page 1 – 7 lines 16 to 24). The SEA should evaluate all projects that are included in this development programme but instead solely focuses on the environmental impacts of chosen industry like green ammonia and green hydrogen and is misleading on the creation of the port. Cumulative impacts of mining of resources, transportation of resources like oil and minerals, and current environmental impacts should be included in the assessment for the port. Only within the port, impacts seem to be considered as table 1.1 on page 1-9). Therefore, it is unclear how the SEA is able to function as a tool to guide sustainability planning at local, regional, national or international scale as per the presentation done by CSIR which can be found at https://www.csir.co.za/sites/default/files/Documents/Appendix%20SEA%20Overview%20%26%20Scope%20and%20Methodology%20for%20Specialists.pdf (slide 3).</p> <p>Chapter 1 indicates that the purpose of the port and SEZ is to "reduce reliance on fossil fuels and become a player in the globally emerging GH2 market". It also indicates that it is primarily an export port, and that green hydrogen specifically will be exported. Renewable energy generation will be for the primary purpose of fueling the green hydrogen and related plants – it is not for any purpose to electrify the Northern Cape. It is therefore false to paint this project as one that seeks to reduce reliance on fossil fuels in South Africa.</p>	<p>TNPA: The report highlights the strategic drivers of the project. The other commodities such as break bulk and dry bulk for the export market are also highlighted.</p> <p>CSIR: The proposed port and SEZ does envisage to handle multiple commodities, not only fuels derived from green hydrogen and Power-to-X (PtX) products (e.g. green ammonia). WP1 focusses on the proposed port and SEZ - particularly the environmental sensitivities of the area and the potential impacts that may arise from infrastructure and activities that could occur in these areas (e.g. vessels, fuel bunkering, seawater desalination, dry bulk handling, hydrogen and PtX production and associated ancillary infrastructure) (see Tables 1-1 and 1-2, WP1, Chapter 1). WP2 focusses on a broader regional context (study areas consisting of the Richtersveld, Kamiesberg, Nama-Khoi and Khai-Ma local municipalities) and evaluated three possible future scenarios: 1) green hydrogen-related development is not introduced, other environmental, social and development trends (including mining, renewable energy, commodity transport etc) continues as is; 2) green hydrogen developments introduced (in addition to the baseline) and realises in the short-to-medium term at moderate scale; and 3) green hydrogen development is introduced (in addition to the baseline) and realises in the longer term at considerable scales. WP1 thus contributes more to local (port and SEZ scale planning) and WP2 to regional and national scales of planning. Refer to slide 9 of the presentation cited - https://www.csir.co.za/sites/default/files/Documents/Appendix%20SEA%20Overview%20%26%20Scope%20and%20Methodology%20for%20Specialists.pdf</p> <p>Chapter 1 indicates that "As part of South Africa's ambition to reduce its reliance on fossil fuels and become a player in the globally emerging GH2 market, the Northern Cape has proposed the development of large-scale GH2 production in the region" (Pg 1-4, lines 10-12). The SPW, pg 10, lines 11-31, further elaborates that three main components are proposed to "reduce reliance on fossil fuels and become a player in the globally emerging GH2 market" which consist of a proposed 1) port, 2) SEZ, and 3) regional renewable energy, electricity grid and supporting infrastructure. The sole purpose of the port is not to export PtX products and the purpose of green hydrogen produced from renewable energy in the region is not to solely serve an export market.</p>

Natural Justice	11	Chapter 1	1-5	9-13		Both the Boegoebaai Port and Rail Infrastructure Project are listed at Strategic Integrated Projects. It is thus unclear why the sustainability and impacts of these projects, including the port, are only being assessed now. The SEA appears to be part of a process to rubber stamp the port https://www.csir.co.za/sites/default/files/Documents/Appendix%20SEA%20Overview%20%26%20Scope%20and%20Methodology%20for%20Specialists.pdf (slide 3). After the SEA, EIA's will be undertaken which according to CSIR are the "yes-no" answer. However, this seems to be a project already decided on, regardless of the comments. As a Strategic Integrated Project, the port development will be subject to a truncated EIA process, which has not been made clear at all in the public meetings or in the SEA documents.	CSIR: Strategic Integrated Project (SIP) designation means that a project has national or regional strategic importance. While the Boegoebaai Port and Rail project, and the Boegoebaai Green Hydrogen Development Programme have been designated as SIPs due to their identified national and regional economic significance, this designation does not mean that environmental authorisations are pre-approved. The SEA is intended to inform decision-making for subsequent project Environmental Impact Assessments (EIAs) and is not a substitute for the statutory EIA processes.
Natural Justice	12	Chapter 1	1-7	1-3		Macro socio-economic benefits and local benefits across local supply chain are mentioned as a reason for GH2 products exports from the port. However, there is no explanation as to how this opinion is formed, and what information informed such a conclusion. In addition, it is not set out what alternatives, if any, were assessed to arrive at this outcome.	CSIR: It is unclear what "outcome" is being referred to here. Chapter 7 of Work Package 2 (socio-economics Chapter [Atkinson et al., in press]), which will be available in draft form in January 2026 (at https://www.csir.co.za/work-with-us/services-and-testing/environmental-management-services/strategic-environmental-assessment/boegoebaai-port), provides, in volume, the possible socio-economic benefits (and risks) that might materialise if a new port and SEZ, and regional GH2 economy were to be established at any significant scale. Work Package 2 uses a scenarios approach which looks from the present day, 30 years into the future, at cumulative social and ecological impact. The scenarios approach does not implicitly assume "that development will go ahead" (for example Scenario 0 is no development future), but operates from the point of departure that "if development were to go ahead ahead", these would be the risk and these would be the opportunities. The scenarios approach then compares the no development option (Scenario 0), to two alternative development options (Scenario 1 and Scenario 2). On the other hand, if the comment refers to the selection of the Boegoebaai site as the primary point of interest for export, versus other potential sites along the West Coast, a site selection process was undertaken and the report for this process is available here: https://publisheddefenders.blob.core.windows.net/publisheddefenderscontainer/9063/Annexure%20D%20-%20Business%20Case%20V1%202020.05.2020%20R01%20Final.pdf . This report formed the basis of TNPA's site selection presentation to the Working Group on 10 October 2024.
Natural Justice	13	Chapter 1	1-7 1-16	12-14 12-16		No clarity is given on what is in Work Package 1 versus 2. Comments have been requested on this Work Package with no clarity on whether it is inclusive of all aspects as there is no knowledge of what is in Work Package 2. According to the description, the SEZ is in Work Package 1, however no economic analysis or baseline is provided of this SEZ or what other options for an economy are considered except for an export market through GH2. Is this economic analysis of GH2 as an export been considered in Work Package 2 as current reports on viability of GH2 export market and competition with other countries is of concern https://www.nature.com/articles/s41560-025-01768-y (Mapping the cost effectiveness of Africa green hydrogen imports to Europe)? Impacts relating to SEZ development are missing with aspects of construction and social impacts not been sufficiently considered. It is also unclear what the SEZ will specifically be doing on its economic viability and its impacts on local benefits, including water and electricity. There is inclusion of a sustainable port planning report but no planning report on the SEZ, which would be the reason for the port's construction.	CSIR: Chapter 1 of the SEA report (Introduction and context) outlines the respective scopes of each Work Package (See Section 1.3, 1.4 and Table 1-3). Work Package 1 focuses on the local-scale assessment of the proposed Boegoebaai Port and SEZ. Chapter 1 further includes detailed descriptions of the proposed infrastructure associated with the proposed Port and SEZ (table 1-1 and 1-2, respectively), and the SEA assesses the sensitivities associated with these development components. Work Package 2 represents a regional scale assessment covering four local municipalities within the Namakwal District. It is designed to assess the broader economic, social and ecological implications of region-wide green hydrogen development scenarios, including cumulative impacts, including and extending beyond the localised footprint of the port and SEZ. Karoo Development Foundation: Work Package 2 deals to a large extent with these matters - i.e. the impacts on the Namaqualand region. However, the SEA is not at all addressing the question of whether any of the project components are economically viable. We only address the question of: if the project were to be constructed - what its impacts on the region would be. The matter of economic viability is determined by international market forces, as well as the supply-side factors (e.g. availability of capital). Political will of Government and investors are key. The SEA cannot address those matters. It is possible that these factors may change over time. The project may be regarded as viable now, but not in two years' time; or alternatively, may be more financially sustainable in two years' time. The SEA researchers do not engage with that question.
Natural Justice	14	Chapter 1	1-8	8-10		How is this estimated amount of green ammonia calculated as there is no reference or report showing how this amount is calculated. In addition, no proof is shown of the demand for this exported amount or who this volume would be exported to. See policy brief from SAIIA "The Green Hydrogen Catalyst: Igniting Local Development through Green Trade Enablers" page 6 https://saiia.org.za/wp-content/uploads/2025/05/SAIIA_PB-305_GreenHydrogenCatalyst.pdf .	TNPA: Government and industry planning are based on techno-economic modeling and life cycle assessments. South Africa is already a regional hub for nitrogenous fertilizers, supplying almost half of the SADC region's imports. This creates a strong baseline for green ammonia as a substitute for fossil-based ammonia in agriculture. Market studies: Quantify fertilizer imports, shipping fuel needs, and industrial feedstock requirements. Scenario modeling: Techno-economic models projecting cost competitiveness and carbon savings. Policy alignment: Integration into national strategies and SEZ incentives. Infrastructure planning: Ports and grid upgrades tied to projected export volumes. The referenced articles does not indicate that there is no demand. It cites that Global enthusiasm is high, but only 7% of announced projects were operational by 2023, thus there is low investment drive thus other catalyst are required to galvanise trade. Thus the arguments that there is no proof of demand is not validated by this article, as the article cites key enablers.
Natural Justice	15	Chapter 1	1-13		Table 1-2	Under green ammonia facility, through the reports there is no indication of the impacts of the brine discharge beyond it having a negative impact on marine ecosystems and the discharge of brine is environmentally harmful (report Chapter 3, page 3 – 56 table 3 – 3, page 3 – 62 report chapter 3e, page 56 and 58, table 3). From the reports it is unclear how the conclusion is reached that it is acceptable for seawater discharge. Further how this impact will be avoided or mitigated or monitored.	Anchor Environmental Consultants: It is noted that the SEA does not constitute a project-level Environmental Impact Assessment (EIA). The SEA is upstream in the overall process and is intended to identify key sensitivities, potential risks, and areas requiring more detailed investigation during subsequent project-specific studies and EIAs. Accordingly, the full assessment of brine discharge, will form part of the EIA process once detailed engineering designs and construction methodologies are available. Importantly, while the impact of discharging brine into the marine environment is known to have negative consequences for many marine receptors, the impacts from discharged brine can be effectively mitigated (e.g., siting location of outfall, dilution of brine etc.). This has been documented and implemented elsewhere and will be put forward as essential mitigation during the EIA phase.
Louise Geldenhuys	16	Chapter 2	2-3	36-42		It is stated that "Boegoebaai Point is immensely suitable in this respect (which it why it has been selected for this purpose) but there are a number of important marine ecological considerations that militate against the selection of this site as being suitable for port development (highlighted below). There are many other locations on the shoreline between the Orange River Mouth and Port Nolloth where the bathymetry profile of the shoreline is also likely to be suitable for port development that are not as sensitive from a biophysical perspective, which should be considered for this purpose." How will this recommendation be considered in planning going forward?	Anchor Environmental Consultants: A number of alternative potentially suitable sites for port development have been identified in the report. The project proponent is urged to revisit the site selection/prioritisation process. See Figure 2-6.1.
Louise Geldenhuys	17	Chapter 2	4	118		Typing mistake: "Including Endangered the" instead of "Including the Endangered"	Anchor Environmental Consultants: Thanks for your comment. This has been corrected.
Louise Geldenhuys	18	Chapter 2	4	131-132		It is stated that the seal colony remains small - this is based on 2007 data. It has grown significantly since then. Change this to reflect recent counts. See more info in later comment.	Anchor Environmental Consultants: Thank you for the comment. We have contacted the relevant authorities at DFFE regarding these data and are currently awaiting feedback.
Louise Geldenhuys	19	Chapter 2	5	134-135		It would be more correct to say "any activities that disturbs seals without a permit " are deemed to be illegal".	Anchor Environmental Consultants: Thanks for your comment. This has been corrected.
Louise Geldenhuys	20	Chapter 2	5	147-148		Repetition of out-dated data on the size of the seal colony (see other comments)	Anchor Environmental Consultants: Thank you for the comment. We have contacted the relevant authorities at DFFE regarding these data and are currently awaiting feedback.
Louise Geldenhuys	21	Chapter 2	5	150-153		"Construction of a breakwater and or port at Boegoebaai is likely to seriously disturb both the seal colony and breeding seabirds present at this site. It is strongly recommended that consideration be given to identifying an alternate site for port development for this reason alone". How will this recommendation influence further planning?	Anchor Environmental Consultants: A number of alternative potentially suitable sites for port development have been identified in the report. The project proponent is urged to revisit the site selection/prioritisation process. TNPA: The SEA report recommendations will be taken into account when the project reaches an advanced stage in terms of the port engineering works.
Louise Geldenhuys	22	Chapter 2	6	187		African Black Oystercatchers are no longer listed as a threatened seabird.	Anchor Environmental Consultants: Thanks for your comment. This has been corrected.
Louise Geldenhuys	23	Chapter 2	6	197-200		Will the potential to move the breakwater to the south of Boegoebaai Point as suggested been considered for further planning of the development?	Anchor Environmental Consultants: A number of alternative potentially suitable sites for port development have been identified in the report. The project proponent is urged to revisit the site selection/prioritisation process. See Figure 2-6.1.
Louise Geldenhuys	24	Chapter 2	39	386-398		Repetition of text	Anchor Environmental Consultants: Repeated text lines 386-398 deleted.
Louise Geldenhuys	25	Chapter 2	50	615-619		Can add a reference to the new paper by Harris et. al. (2025) here for the endangered status of <i>Yfous granatidis</i> : Harris, L. R., Raimondo, D., Sink, K. J., Holmes, S. D., & Skowron, A. L. (2025). Sandy beach ecosystem and species red listing highlight priorities for beach conservation and restoration. Estuarine, Coastal and Shelf Science, 198447.	Anchor Environmental Consultants: Thank you. Reference has been added.
Louise Geldenhuys	26	Chapter 2	56	5-8		Could the <i>Africochestia</i> sp. Mentioned possibly be <i>Africochestia quadrispinosa</i> , assessed as Near Threatened by Harris et. al. (2025) (see above)?	Anchor Environmental Consultants: The specimens recorded in beach samples were not consistent with A. quadrispinosa.
Louise Geldenhuys	27	Chapter 2	63	112-126		I agree with the suggestion that the comparatively low sandy beach invertebrate abundances found on the beaches sampled are linked to the disturbances caused by intertidal diamond mining. This highlights the case for identifying and protecting the rare sandy beach areas that are not yet impacted, or which have been mined historically and been left undisturbed for a significant amount of time since. Area there any such beaches within the study area, or have all of them been compromised?	Anchor Environmental Consultants: To the best of our knowledge there are no beaches in the study area that have not been compromised.
Louise Geldenhuys	28	Chapter 2	73	316		Missing closing bracket	Anchor Environmental Consultants: Thanks for your comment. This has been corrected.
Louise Geldenhuys	29	Chapter 2	75	339-344		It is recommended that the presence of a breeding colony of Bank Cormorants in the study area should be included as important	Anchor Environmental Consultants: Thank you for the recommendation. After discussing with the field team, no colonies were observed during sampling. Their presence may be seasonal; therefore, we cannot ascertain the importance of these species in the region. During the EIA phase it is recommended that the avifauna specialists make this a priority site for a field visit and survey.
Louise Geldenhuys	30	Chapter 2	76	358		Should be noted that Crowned Cormorant status is not Least Concern, but Near Threatened both Globally and Regionally.	Anchor Environmental Consultants: According to the IUCN Red List, the Crowned Cormorant is classified as "Least Concern" globally (https://www.iucnredlist.org/species/22696730/181721741). It has been noted that they are considered "Near Threatened" by SANBI who have, in turn, acknowledged the rationale of the IUCN status. This status has been added accordingly.
Louise Geldenhuys	31	Chapter 2	82	78-80		These numbers are significantly outdated. The DFFE have an ongoing pup counting monitoring program, and is counted every 3 years. The latest counts for Buchu Terns are significantly higher than indicated in this chapter. The count data is available from DFFE marine mammal scientists, and it is strongly requested that the most recent numbers be obtained and used, since the presence of seals at the proposed breakwater and port site is a critical consideration in assessing the environmental impact of the proposed port.	Anchor Environmental Consultants: Thank you for the comment. We have contacted the relevant authorities at DFFE regarding these data and are currently awaiting feedback.

Louise Geldenhuys	32	Chapter 2	83		Figure 2-2.44	The red arrow should point to the location just south of the Orange River to indicate the location of the Buchu Twins colony. It is currently pointing to the Cliff Point colony. There are 4 established seal breeding colonies in the Northern Cape: Buchu Twins, Cliff Point, Kleinzee and Strandfontein point. Coordinates of the North and Southern boundaries of these colonies are indicated below (source: Northern Cape Department of Agriculture, Environmental Affairs, Rural Development and Land Reform, Coastal Audit database), and spatial dataset can be obtained from lgeldenhuys@daerl.co.za .	Anchor Environmental Consultants: Thank for your comment. The arrow has been amended; moved slightly north to better identify the Buchu Twins colony.
Louise Geldenhuys	33	Chapter 2	117	337		Missing "h" from high	Anchor Environmental Consultants: Thank you. This has been corrected.
Louise Geldenhuys	34	Chapter 2	Overall			The DAERL Coastal Audit database contains information that can contribute to this report (e.g. Oystercatcher counts, breeding sites with nest counts etc.). lgeldenhuys@daerl.co.za can be contacted to obtain this data.	Anchor Environmental Consultants: Thank you for the comment. We have contacted the relevant authorities at DAERL regarding these data and are currently awaiting feedback.
Louise Geldenhuys	35	Chapter 2	117-118	335-345	Figure 2-6.1	The conclusion/recommendations of this specialist study is that the area around Boegoebaai point, where the current plan is to construct the port, is of the highest environmental sensitivity of the whole area. Evidence presented support this conclusion. Alternatives sites to the south are suggested for the port development. How will this conclusion impact the development planning process? This question is not aimed at the specialists, but at the overall higher-level planning structures.	CSIR: Future port and SEZ layout zoning and design should take into account these strategic spatial planning recommendations, as well as additional site-specific recommendations that may be revealed by future research and surveys. The conclusions and recommendations, drawn from a credible and transparent SEA process, are recorded and published and is intended to provide a reference point of departure for stakeholders (incl. e.g. Government, authorities, decision-makers, project proponents and assessment practitioners) involved in future policy and project-specific planning and EIA.
Natural Justice	36	Chapter 2				The Marine Ecology Report finds a number of factors which militate against the construction of the port at this location: 1) Serious risks to seabirds 2) Likely permanent and irreversible harm to a breeding seal colony 3) Impacts on critical biodiversity areas These are set out in more detail below. It is clear that the Boegoebaai site is not suitable for the construction of a port, as proposed, and for these reasons should not be constructed at Boegoebaai. Any decision to proceed with the port development nonetheless will likely be subject to successful challenge. Affected seabirds and the seals are protected in terms of the Sea Birds and Seals Protection Act of 1973, the National Environmental Management: Biodiversity Act 10 of 2004, as well as through general protections of the National Environmental Management: Integrated Coastal Management Act. Section 12 and 21 of NEM:ICMA requires the State to ensure that coastal public property is used, managed, protected, conserved and enhanced in the interests of the whole community, and take whatever reasonable legislative and other measures it considers necessary to conserve and protect coastal public property for the benefit of present and future generations. The "interests of the whole community" is defined as follows: "interests of the whole community" means the collective interests of the community determined by— a) prioritising the collective interests in coastal public property of all persons living in the Republic over the interests of a particular group or sector of society; b) adopting a long-term perspective that takes into account the interests of future generations in c) inheriting coastal public property and a coastal environment characterised by healthy and productive ecosystems and economic activities that are ecologically and socially sustainable; and d) taking into account the interests of other living organisms that are dependent on the coastal environment;" Whilst ports are excluded from the definition of coastal public property in NEM:ICMA, any decisions preceding the formal determination (including the determination decision itself) as a port are subject to protection under the act as coastal public property. The Marine Ecology Report sets out clearly that the construction and operation of the port at Boegoebaai will not be in the interests of the whole community, and the State is obliged to take positive measures to conserve and protect important ecological sites for the benefit of present and future generations.	Anchor Environmental Consultants: Thank you for your comment.
Natural Justice	37	Chapter 2	2-2 [Exec Summary] 2-115 [Sec 2.6.1]	34-42 210-220		Site alternatives Based on the SEA documents, it is unknown what sites were considered for the port development, and what factors were taken into account in assessing site alternatives. The pre-feasibility study report has not been made available as part of the SEA process. Despite this being raised in the online public meeting on 8 October, study was not circulated to the working group members. It is unknown to us what alternative sites have been considered, and on what basis the Boegoebaai site was chosen, but we take note of the Marine Ecology Report that "there are many other location on the shoreline between the Orange River Mouth and Port Nolloth where the bathymetry profile of the shoreline is also likely to be suitable for the port development that are not as sensitive from a biophysical perspective". We request a copy of the pre-feasibility study and all previous assessments which led to the selection of the Boegoebaai site.	TNPA: The main factor considered for the site is the natural depth, which does not require dredging. The engineering works have not been concluded. As the environmental considerations need to be factored into final preliminary engineering works. CSIR: A TNPA presentation of the "Boegoebaai Port and Rail development site selection" was presented at the online Working Group meeting # 2 on 10 October 2024 and was made available here: https://www.csir.co.za/sites/default/files/2025-10/Appendix%20C_Overview%20of%20Boegoebaai%20Site%20Selection%20process.pdf .
Natural Justice	38	Chapter 2	2-5 to 2-6 [Sec 2.4.4] 2-117 [Sec 2.6.3]	178-185 335-345		Risks to seabirds The Marine Ecology Report finds that the proposed development will pose serious risks to seabirds, particularly those already threatened and/or IUCN listed, like the Bank Cormorants and the White-breasted Cormorants – which breed on the rocky cliffs at the Boegoebaai Point (the identified site for the port breakwater), other coastal seabirds which breed on the rocky and mixed shore (e.g. African Black Oystercatcher) and sandy beach (White fronted plover). On the basis of this significant impact, and the headland being rated as of very high sensitivity, the specialists strongly recommend that an alternative site be found for the port development.	Anchor Environmental Consultants: Thank you for your comment. CSIR: This comment is noted. The SEA identifies the Boegoebaai Point area as highly sensitive and therefore recommends that the port breakwater and associated infrastructure avoid the seal colony. Figure SPK7, in the Summary for Policymakers document illustrates potential alternative breakwater and port locations that avoid the most sensitive areas of the Boegoebaai headland. While the SEA cannot determine the final port location, its role is to highlight environmental constraints and provide guidance for higher-level planning. Based on the findings of the specialist studies, one of the strategic recommendations of the SEA, as presented in the Summary for Policymakers, is that relocation of the port breakwater to avoid this area should be considered by the project proponent/s.
Natural Justice	39	Chapter 2	2-110 to 2-111 [Sec 2.4.4]	154-177		Impact on Seals The Marine Ecology Report finds that the construction of a breakwater and port at Boegoebaai is likely to seriously disturb and/or displace Cape fur seals, who are unlikely to be re-establish on adjacent low-profile rocky shores, as these areas do not offer shaded refugia, pools or protection from land-based predators. There is also no guarantee that the construction of an artificial haul-out area will be successful. Consequently, the risks to seals is significant, long-term and likely irreversible. Seals are protected under the Sea Birds and Seals Protection Act of 1973, the National Environmental Management: Biodiversity Act 10 of 2004, as well as through general protections of the National Environmental Management: Integrated Coastal Management Act, as outlined above. The impacts on seals are so significant that the specialists recommend that an alternative site for the port be found.	Anchor Environmental Consultants: Thank you for your comment. CSIR: This comment is noted. The SEA identifies the Boegoebaai Point area as highly sensitive and therefore recommends that the port breakwater and associated infrastructure avoid the seal colony. Figure SPK7, in the Summary for Policymakers document illustrates potential alternative breakwater and port locations that avoid the most sensitive areas of the Boegoebaai headland. While the SEA cannot determine the final port location, its role is to highlight environmental constraints and provide guidance for higher-level planning. Based on the findings of the specialist studies, one of the strategic recommendations of the SEA, as presented in the Summary for Policymakers, is that relocation of the port breakwater to avoid this area should be considered by the project proponent/s.
Natural Justice	40	Chapter 2	2-23 [Sec 2.2.1.1] 2-59 [Sec 2.2.6.2.3] 2-63 [Sec 2.2.6.2.4]	86-91 41-53 107-109		Baseline information The Marine Ecology Report indicates in a few instances that there is a lack of baseline information – for example, in relation to air temperature, in relation to beaches pre-mining destruction. This lack of baseline information poses a significant challenge in evaluating the potential impacts of the project, and for continuous monitoring. A precautionary approach should be applied in these instances.	Anchor Environmental Consultants: Thank you for the comment. Agreed, we support a precautionary approach in the event of the lack of baseline information as it is often a constraint. To address this, and where possible, applicable projects of comparable scope, environment and impacts are drawn upon to inform our assessments as was the approach here.
Natural Justice	41	Chapter 2	2-31 [Sec 2.2.5]	212-220		Climate change impacts The Marine Ecology Report indicates that increases in sea level and increased storm surges are "likely the greatest threats to the Boegoebaai development", as well as an increase in the intensity of sea storms and wave heights. Apparently this is taken into account in the 2015 pre-feasibility assessment, but as this document has not been provided as part of the SEA, it is unclear how this has been taken into account and what impacts are expected on the construction and operation of the port. However, it is clear that a full assessment of climate change impacts will be necessary before any decisions are taken.	CSIR: The SEA identifies climate change as a significant driver of change in the Boegoebaai area and region, including climate change threats such as sea-level rise and storm surges noted in the Marine Ecology study. In particular WP1 Chapter 7 (Sustainable Port Planning) notes that "climate change - specifically sea-level rise and increased storminess ... - is becoming a major risk facing ports worldwide that must be addressed towards securing sustainability...in terms of (i) Adaptation (e.g. upgrading infrastructure and designing new infrastructure to withstand projected climate change impacts)" (Pg/-10, lines 38-41). These aspects will, however, need to be examined in greater detail during project-level assessments, planning and design, where more refined modelling and site-specific ecological conditions and sensitivities can be determined.
Natural Justice	42	Chapter 2	2-102 [Sec 2.3.4] 2-117 [Sec 2.6.3] 2-118 [Sec 2.6.4]	327-376 331 350-360		Critical Biodiversity Areas Much of the habitats within the SEZ are listed as CBA-Restore, which should be subject to as little disturbance as possible. In particular, the report recognises that further deterioration in the ecological condition of CBA-Restore sites must be avoided, and instead there exists a positive obligation to consider restoration options. Furthermore, in accordance with the draft Marine Biodiversity Sector Plan, the development of new ports is non-compatible with CBA Natural or CBA Restore areas. The specialists further opine that the consideration of alternative biodiversity offsets should not be considered for Boegoebaai, as the impact Boegoebaai Point is unacceptable, as an area that has been identified as being of very high sensitivity and is likely irreplaceable. The development of a port at the Boegoebaai site will be contrary to the State's purpose and commitments in relation to critical biodiversity areas.	Anchor Environmental Consultants: Thank you for your comment. CSIR: The Marine Ecology study (WP1, Chapter 2) recognises that significant biodiversity impacts are likely to occur in the marine and coastal realms and that these warrant avoidance or consideration in terms of biodiversity offsets where impacts cannot be avoided. The chapter emphasises proactive avoidance of areas identified as irreplaceable or of Very High sensitivity, in line with the mitigation hierarchy. As noted, it identifies Boegoebaai Point as an area of Very High sensitivity and likely irreplaceable, where development should not occur even if offsets are proposed elsewhere. These strategic considerations and/or principles/actions for management are also highlighted in the Summary for policymakers document for consideration during future planning or decision-making processes. Whilst the early port and SEZ layout zoning concepts are proposed by TNPA and NCEDA, a recommendation from the SEA include initial identification of coastal and inland areas (mostly that have already been disturbed or destroyed by mining activities) that could be more suitable for development. This is captured in Figure SPK7 (strategic spatial planning). Future port and SEZ layout zoning and design should take into account these strategic spatial planning recommendations, as well as additional site-specific recommendations that may be revealed by future research and surveys.

Natural Justice	43	Chapter 2				<p>Transboundary impacts</p> <p>Transboundary impacts have not been considered in any detail in the Marine Ecology Report, despite the close proximity of the proposed port site to Namibia waters. Section 21 of NEM:ICMA requires that coastal activities are controlled and managed in accordance with the State's obligations under international law. Both NEMA and international commitments obligate the State to consider transboundary impacts. See paragraphs 158 – 189 of the High Court judgment in <i>Green Connection NPC and Another v Minister of Forestry, Fisheries and the Environment and Others</i> (5676/2024) [2025] ZAWCHC 349 (13 August 2025).</p>	<p>Anchor Environmental Consultants: Thank you for the comment. It is our opinion that transboundary impacts are not anticipated, as the proposed activities and associated impacts are expected to be highly localised in both space and time. The proposed port site lies approximately 15 km in a direct line (and a greater distance following the coastline) from the Namibian border and waters, making measurable transboundary effects unlikely. Furthermore, as this is a strategic-level assessment, project-specific details are not yet available, and potential transboundary impacts will be reassessed during the subsequent Environmental Impact Assessment (EIA) phase once more detailed project information becomes available.</p>
Natural Justice	44	Chapter 2				<p>Operational and cumulative impacts</p> <p>Other than as set out in the aspects and impacts register, there is little evaluation of the ecological impacts associated with the operation of the port, including substantially increased ship traffic, brine discharges, or impacts of other coastal activities associated with the SEZ.</p>	<p>Anchor Environmental Consultants: The current assessment is a Strategic Environmental Assessment, which is intended to identify key environmental issues, sensitivities, and potential interactions at a strategic and programmatic level. As such, the SEA includes an aspects and impacts register to highlight potential operational and cumulative effects, but does not provide detailed evaluation of specific project-level impacts. These will be comprehensively assessed during the subsequent Environmental Impact Assessment (EIA) phase once project designs, locations, and operational parameters are defined.</p>
Peter Hawkes	45	Chapter 3	56	22-25		<p>The Species Environmental Assessment Guideline has twice been updated since publication in 2020 and I would recommend referencing the latest version (Version 3.1) published in 2022.</p>	<p>Bios Diversitas Consultants: This has been updated to reflect the correct reference.</p> <p>Ekotrust CC: Reference has also been corrected in the Integrated report Chapter 3.</p>
Dewidine van der Coll	46	Chapter 3	NA	NA	NA	<p>There is no mention or consideration for invertebrate fauna, even though I submitted data on threatened species occurring within the study area. Please see the submission of the Screening tool data by SANBI via Babalwa Mqikel</p>	<p>Bios Diversitas Consultants: The data submitted is acknowledged and well received. Not assessing invertebrates deeply, at this level of assessment, is neither a flaw nor an oversight – it's a matter of prioritizing the most salient ecological drivers at this course scale to get a high-level overview of potential sensitivities and impacts for policymakers. Using available data such as CBAs, vegetation units, threatened ecosystems etc., is an adequate proxy for invertebrates at this strategic level of assessment. Specific taxa should be better addressed through localised assessments like EIAs which include detailed desktop and fieldwork assessments.</p>
Louise Geldenhuys	47	Chapter 3	6	16-22		<p>The specialist report recommends that an in-depth, fine-scale analysis of the vegetation should be conducted - due to the high sensitivity rating and lack of comprehensive data. How will this recommendation be taken up in the further planning and layout development? This question is not aimed at the specialists, but the overall higher-level planning structures.</p>	<p>CSIR: A key outcome from the SEA is captured in Figure SPM7 (strategic spatial planning) showing regions, at a strategic level, within the SEZ / SEA study area that are less suitable for development (e.g. where environmental sensitivities must be avoided) and areas that are more suitable for development (e.g. areas that have been disturbed by mining). Future port and SEZ layout zoning and design should take into account these strategic spatial planning recommendations, as well as additional site-specific recommendations that may be revealed by future research and surveys. The conclusions and recommendations, drawn from a credible and transparent SEA process, are recorded and published and is intended to provide a reference point of departure for stakeholders (incl. e.g. Government, authorities, decision-makers, project proponents and assessment practitioners) involved in future policy planning, site- and project, specific planning and EIA.</p>
Louise Geldenhuys	48	Chapter 3	12			<p>The abbreviation DEARL should be DAERL - Department of Agriculture, Environmental Affairs, Rural Development and Land Reform.</p>	<p>Ekotrust CC: Corrected</p>
Louise Geldenhuys	49	Chapter 3	Overall			<p>Due to the remoteness of the area and the limitations of desktop databases available, it is a significant limitation that the scope did not make greater provision for field surveys and the collection of baseline data. Ongoing discoveries of new species is an indicator that this area is still relatively undersampled, and our knowledge on the species and systems of this site is still incomplete.</p>	<p>Ekotrust CC: We fully agree and have stressed the limitations of desktop studies.</p> <p>CSIR: A key recommendation from the SEA WP1 is to initiate environmental monitoring early since the area is undersampled and isolated. Robust field surveys during project- and site specific assessments like EIAs will be required.</p>
Louise Geldenhuys	50	Chapter 3	22	4-15		<p>From personal observations made in the area, the national land cover products are inaccurate to a large extent in this area, especially in the distinction between natural almost-bare semi-desert shrubland and mined areas. There is a great need for ground-truthing transformed and natural remaining areas in the study area.</p>	<p>Ekotrust CC: Agreed. This should be done when an in-depth, fine-scale analysis of the vegetation is done for the entire site or for individual EIAs.</p> <p>CSIR: High resolution aerial imagery for the area was acquired for the purpose of the SEA and used to manually digitise areas that were visibly directly disturbed by mining and anthropogenic activities. Although this is still not 100% accurate, it can be regarded as more accurate than satellite imagery-derived land cover products. It is agreed that ground-truthing during project- and site specific assessments like EIAs will be required.</p>
Louise Geldenhuys	51	Chapter 3	22	14-15		<p>"In 2000" - should it be 2020?</p>	<p>Ekotrust CC: 2000 is correct. The 2000 land cover map was included in the report on the vegetation and flora (3e). A reference to "Fig 8, Chapter 3e" was included in the text to clarify.</p>
Louise Geldenhuys	52	Chapter 3	27	1-5	Figure 3-9	<p>The updated 2024 Northern Cape Biodiversity Spatial Plan can now be used for finer-scale and updated CBAs (available at https://bgis.sanbi.org/SpatialDataset/Details/7743)</p>	<p>Ekotrust CC: 1. The authors' inputs went through a thorough peer review and a cut-off date had to be set for sourcing publicly available data. It was decided that the date of the submission of the first draft (14 March 2025) would be the cut-off date. 2. The maps in the SEA therefore represent best available information at a point in time (the cut-off date) and there will always be new information coming available. The subsequent planning and project-level EIAs will need to take cognisance of the latest available data. 3. Note that the final version of the CBA data referred to as the "2024" CBA map was not available at the date of submission of the first draft and was released into the public domain in July 2025.</p>
Louise Geldenhuys	53	Chapter 3	30	23-29		<p>Other development applications/proposals: Mining right application by Whale Head Minerals, and construction of a water supply pipeline between Alexanderbaai and Port Nolloth.</p>	<p>Ekotrust CC: These developments have now been included in the text.</p>
Louise Geldenhuys	54	Chapter 3	69	39-42		<p>The specialist report recommends that alternative sites with lower sensitivities be revisited. How will this recommendation be addressed in further planning for the development? This question is not addressed at the specialists, but at the development planning structures.</p>	<p>TNPA: The SEA report recommendations will be taken into account when the project reaches an advanced stage in terms of the port engineering works.</p> <p>CSIR: A key outcome from the SEA is captured in Figure SPM7 (strategic spatial planning) showing regions, at a strategic level, within the SEZ / SEA study area that are less suitable for development (e.g. where environmental sensitivities must be avoided) and areas that are more suitable for development (e.g. areas that have been disturbed by mining). Future port and SEZ layout zoning and design should take into account these strategic spatial planning recommendations, as well as additional site-specific recommendations that may be revealed by future research and surveys. The conclusions and recommendations, drawn from a credible and transparent SEA process, are recorded and published and is intended to provide a reference point of departure for stakeholders (incl. e.g. Government, authorities, decision-makers, project proponents and assessment practitioners) involved in future policy planning, site- and project, specific planning and EIA.</p>
Connal Eardley	55	Chapter 3				<p>Bee biodiversity conservation is not mentioned in your document</p> <p>There are three good reasons for including all bees (not just the honeybee that is uncommon in the succulent karoo).</p> <ol style="list-style-type: none"> 1. The Succulents Karoo has an estimated 400 bee species most of which are endemic. <ol style="list-style-type: none"> a. There are quite a few endemic bee genera. b. Many unique biologies, such as the oil collecting bee genus <i>Rediviva</i>. c. Several tribes have the centre of diversity in the Succulent Karoo. 2. Pollination is an essential ecosystem service. <ol style="list-style-type: none"> a. Pollinator biodiversity conservation is fundamental to all biodiversity conservation, especially in ecosystems with a high diversity of insect pollinated plants. b. Bees are very important pollinators. c. Monitoring pollinators gives an indication of future change in floral biodiversity, and all biodiversity. 3. Bees <ol style="list-style-type: none"> a. There is a very good taxonomic knowledge, with scientific literature, on South African Bees. b. Guides are currently being produced to help not taxonomists and citizen scientists to identify bees. These are designed to facilitate monitoring bees. c. A guide to bee genera with one or a few easily recognisable species in each genus is being written. It is specifically designed to facilitate a broad survey of bees across the family, as the other guides focus on a few relatively easy to identify, common bees. d. There is a growing public interest in solitary bees. IRS citizen scientists solitary project, Urban solitary bee project, southern Africa bees site in iNaturalist and more 	<p>Bios Diversitas Consultants: Thank you for your comment. This is acknowledged and well received. Not assessing invertebrates, or specifically bee biodiversity deeply at this level of assessment, is neither a flaw nor an oversight – it's a matter of prioritizing the most salient ecological drivers at this course scale to get a high-level overview of potential sensitivities and impacts for policymakers. The key ecological sensitivities are still adequately represented through other fauna groups including CBAs and threatened ecosystems on site - the project overall is considered sensitive and if a systematic conservation and biodiversity offset approach is taken at a landscape / ecosystem scale, it is likely to include any sensitive invertebrates habitat on site. Specific taxa should be better addressed through localised assessments like EIAs which include detailed desktop and fieldwork assessments.</p>

Brownyn van Neel	56	Chapter 3	Aquatic ecology 2-3	6-45		<p>Section 24(b) of the Constitution states clearly: everyone has a right to have the environment protected, for the benefit of present and future generations, through reasonable legislative...this include ecosystems. NEMA Section 2(3) states that development should be socially, environmental and economically sustainable, how does proposed assessment show sustainable growth? We as the Richtersveld communities are already experiencing water scarcity, wetlands are important sources and has so many biodiversity and also stores CO2. You've seen the Richtersveld are experiencing droughts that are about to get worse over the next 5 years, these wetlands are a source of mitigating to ensure that we reduce the green houses gases and that we can implement plans to reduce gases and rebuild our agro ecology structures. Wetlands supports plants that thrive in moist conditions, these are very important ecosystems because they store and purify water, reduce flooding and provide habitats for many animals, birds and plants. Protecting wetlands is vital for maintaining biodiversity and ensuring a healthy environment for future generations. There are two main concerns are as follows; the orange river estuary is a vital wetland located where the Orange River flows into the sea between Alexander Bay and Oranienmund. It features a unique combination of a river mond, braided channel system, saltmarsh and is considered a rare wetland type on South-Africa's arid coastline. The estuary has been designed as a Ramsar Wetland of international importance. The Holgat Rivier , which enters the sea just south of the study area, is an ephemeral river that rarely reaches the estuarine area. Its outlet has been significantly altered by mining operations. Both the Orange River Estuary and the Holgat River face environmental challenges, including degradation and the potential impacts of proposed development. This area holds dear so much ecosystems that are clearly going to be violated under the NEMA section 2 (p, r, 3 & 3(viii)).</p>	<p>Liz Day Consulting: I concur with the stated importance of the Orange River Estuary and the fact that both this estuary and the Holgat Estuary have been impacted by past development and need to be protected and actively rehabilitated to address these. Any new development in the area must take cognisance of this. The aquatic report supports this concern.</p>
Natural Justice	57	Chapter 3	3-1 to 3-9			<p>Inadequate Baseline and Methodological Gaps The SEA acknowledges that "no detailed baseline data on air temperature at Boegoebaai are available" and that "no baseline data (prior to mining activities) for the Boegoebaai beaches are available," further admitting that "it needs to be acknowledged that there are no baseline data against which current results can be compared" (Ch 3 p. 3-48 – 3-49, 106 – 107). Such concessions confirm that the SEA is founded on desktop extrapolations rather than empirical field data. Under s 24(1)(b) of NEMA, competent authorities must ensure that environmental decisions rest on "sufficient information." Where sites lack historical or reference data, sensitivity rankings, and biotic inventories, the information base is plainly insufficient. This deficiency undermines the precautionary principle in s 24(a)(vi) NEMA, which mandates that decisions not be taken in the face of material uncertainty. A Strategic Environmental Assessment that relies on unverifiable datasets cannot rationally guide project siting or mitigation planning.</p>	<p>Anchor Environmental Consultants: We acknowledge that baseline information for the Boegoebaai area is limited. However, the SEA team undertook in situ validation during field surveys, informed by a comprehensive desktop review and delineation of habitats and environmental sensitivities. Field samples were collected to verify key environmental characteristics and to strengthen the information base used for this strategic-level assessment. As noted in the SEA, the absence of long-term or pre-disturbance baseline data remains a recognised constraint. We therefore, support the application of the precautionary principle where data gaps exist. To address these gaps, the assessment draws on data and findings from comparable coastal and port development projects of similar scope and environmental setting to provide context and inform sensitivity rankings and management recommendations. It is emphasised that this SEA is intended to operate at a strategic and programmatic level, with project-level Environmental and Social Impact Assessments to follow, at which stage more detailed and site-specific baseline studies will be undertaken to guide design and mitigation.</p> <p>CSIR: The SEA is not a decision-making process and the SEA does not result in a decision for any development proposals to proceed or not. The SEA aims to develop an integrated decision-making framework to guide the planning based on current knowledge and understanding. The lack of data for the area acknowledged in the SEA as a gap that needs to be filled. A key recommendation from the SEA WP1 is to initiate environmental monitoring early since the area is undersampled and isolated. Robust field surveys during project- and site specific assessments like EIAs will be required.</p>
Natural Justice	58	Chapter 3				<p>Terrestrial Habitat Sensitivity and Endemism The SEA identifies the terrestrial environment as "arid Namaqualand coastal plains characterised by sparse vegetation cover" but under-represents the ecological value of the Namaqualand Strandveld, Namaqualand Coastal Duneveld, and Namaqualand Sandveld vegetation types. The vegetation and flora including <i>Pachypodium namaquanum</i> (Namaqua halbmense – NEMBA Protected), <i>Lithops comptonii</i>, <i>Drosanthemum namibense</i>, and <i>Tylecodon wallichii</i>. Several of these occur on "quartz-gravel plains and coastal dune hummocks within the proposed port and SEZ footprint." (Appx A pp. 32 – 33; Appx B pp. 46 – 48) The SEA classifies these habitats as "moderate sensitivity," despite its own specialists noting that "vegetation recovery potential is extremely low" and that "loss of micro-endemic species would be irreversible." (Appx A p. 54). This inconsistency demonstrates a failure to integrate specialist findings into the SEA's sensitivity mapping, contravening the integration requirement in s 24(a)(b) NEMA. No avoidance corridors or buffer zones are delineated around these habitat units, amounting to a breach of the duty to first avoid environmental harm under s 24(a)(a)(i) NEMA.</p>	<p>Ekorust CC: The quotes could not be found in any of the documents of Chapter 3. These pages referenced (Appx A pp. 32 – 33; Appx B pp. 46 – 49.) could also not be found. It is thus not possible to respond to the comment in detail. It should however be noted that Chapter 3 as a whole does not under-represent the ecological value of the area, but rather highlights the ecological value of the study area and its high sensitivity.</p> <p>CSIR: The complete SEA report was searched for the content quoted in this comment but these statements could not be found.</p>
Natural Justice	59	Chapter 3				<p>Faunal Assemblages and Habitat Fragmentation The terrestrial mammals listed in the SEA including <i>Parahyaena brunnea</i> (Brown Hyena – Near Threatened), as well as reptiles such as <i>Bittis cornuta cornuta</i> (Homed Adder) and <i>Bradypodion namakwensis</i> (Namaqua Dwarf Chameleon) (Ch 3 pp. 3-27 – 3-28). However, the assessment fails to quantify the spatial extent of habitat loss or the fragmentation resulting from roads, rail corridors, and port infrastructure. The SEA merely asserts that "faunal mobility may be affected" without modelling dispersal routes or population connectivity. Noise, vibration, and artificial light from 24-hour operations are not assessed despite acknowledged nocturnal behaviour of these species. This failure to model or mitigate such secondary impacts violates Reg 31(2)(i) which require consideration of the cumulative and secondary effects. Moreover this omission of biodiversity corridors linking inland habitats to the coast ignores the principles of ecosystem connectivity set out in the National Biodiversity Framework 2019 (s 6.2)</p>	<p>Bioe Diversitas Consultants: Thank you for your comment. This is not a flaw or an oversight as it does not replace the need for detailed impact assessments, but the SEA process in itself needs to be acknowledged for what it is: a desktop assessment at a very coarse scale which highlights potential concerns should the project proceed. This SEA does not substitute the need for localised impact assessments which requires detailed desktop and fieldwork, and to address all impacts adequately.</p>
Natural Justice	60	Chapter 3	3-34 to 3-45	10-55		<p>Aquatic and Coastal Ecosystems and Species of Concern The SEA recognises that "the rocky headland within the proposed port precinct serves as a breeding site for Cape Fur Seals (<i>Arctocephalus pusillus</i>)", Bank Cormorants (<i>Phalacrocorax neglectus</i>), and African Black Oystercatchers (<i>Haematopus quoyii</i>)," and concedes that "development in this area poses a high risk of disturbance with irreversible consequences." (Ch 2 pp. 185 – 188). Despite this explicit acknowledgement, the SEA proceeds to rank the ecological significance as "manageable through mitigation." No assessment of construction-phase underwater noise, vessel traffic, or turbidity is provided. NEMBA lists both Bank Cormorant and African Black Oystercatcher as protected species. By proposing a breakwater within 500 m of these breeding areas, the SEA endorses a development incompatible with statutory protections contrary to ICMA s 63(1) (duty to maintain coastal integrity of coastal ecosystems).</p>	<p>Anchor Environmental Consultants: Thank you for the comment. It is noted that the SEA does not constitute a project-level Environmental Impact Assessment (EIA). The SEA is upstream in the overall process and is intended to identify key sensitivities, potential risks, and areas requiring more detailed investigation during subsequent project-specific studies and EIAs. Accordingly, the full assessment of construction-phase impacts, including underwater noise, vessel traffic, and turbidity, will form part of the EIA process once detailed engineering designs and construction methodologies are available. The rocky headland within the proposed port precinct, referenced in the SEA, was identified as the most sensitive area within the study area, due to its importance as a breeding site for Cape Fur Seals, Bank Cormorants, and African Black Oystercatchers. The SEA explicitly recognises that direct disturbance to this feature would constitute a high-impact activity and recommends that it be avoided wherever possible. While African Black Oystercatchers breed widely along the coastline and may recolonise disturbed areas following construction, the Bank Cormorant, being Endangered and more sensitive to disturbance, warrants particular caution. Potential mitigation measures (to be refined during the EIA) could include timing construction to avoid breeding seasons and establishing buffer zones around active colonies. The "500 m" distance referenced in the comment does not appear in the SEA and may reflect a misunderstanding. The SEA does not propose specific infrastructure placements at that proximity to breeding colonies; such details will be determined and assessed at the EIA stage.</p>
Natural Justice	61	Chapter 3	3-46 to 3-54	1-40		<p>Climate and Hydrological Linkages The SEA states that "increases in sea level and storm surges are likely the greatest threats to the Boegoebaai development" and that "projected increases in sea level and wave height have been taken into account in the Boegoebaai port prefeasibility assessment (PDOW 2015)." (Ch 2 pp. 212 – 220). However, there is no evidence that these projections have been integrated into the terrestrial or aquatic ecology assessments. The omission of flood-zone mapping and salt-spray intrusion modelling means the SEA cannot predict how rising sea levels will alter coastal dune vegetation, groundwater salinity, or the persistence of intertidal organisms. Failure to integrate climate-change variables into ecological sensitivity assessment contravenes the precautionary principle in s 24(a)(a)(vi) NEMA and the adaptation duties articulated in the National Climate Change Adaptation Strategy 2020 (p. 27). An SEA that isolates climate projections from ecological data produces an incomplete and thus irrational foundation for long-term sustainability planning.</p>	<p>Anchor Environmental Consultants: We acknowledge the concerns raised regarding climate and hydrological linkages. However, at the strategic level of the SEA, we do not consider the detailed integration climate sensitivity assessments to be ecologically meaningful for this phase of planning. Predictions of ecological responses e.g., intertidal organisms, cannot be made at this stage. The SEA's purpose is to provide a high-level framework for guiding development decisions, rather than to replicate project-level EIAs, which are the appropriate stage for incorporating site-specific climate adaptation measures. The SEA has recognized climate change as a key driver of risk and has flagged sea-level rise and storm surge as critical considerations for subsequent design and operational phases, which reflects the prefeasibility assessment (PDOW 2015 report) and has been reiterated in the marine ecological report. However, these issues will be addressed in detail during project-level studies, where precise modeling and ecological sensitivity analyses can be undertaken with the necessary resolution and data availability. Our approach aligns with the precautionary principle and the National Climate Change Adaptation Strategy by ensuring that climate risks are identified early and carried forward into future assessments. At this strategic stage, the emphasis is on identifying broad vulnerabilities and ensuring that adaptive management frameworks are embedded in subsequent planning processes.</p> <p>CSIR: The SEA summarises current knowledge on macro-climatic trends and its potential impact to various social and ecological aspects (e.g. on the marine environment see WP1 Chapter 2, pg 2-30-31; on terrestrial and aquatic ecology see WP1 Chapter 3, pg 3-32; on aquatic ecosystems see Chapter 3a, pg 14-15; on herpetofauna, see WP1 Chapter 3d, pg 28; 31; 40; on vegetation see WP1 Chapter 3e, pg 26; 37; 38; on fisheries and coastal livelihoods see WP1 Chapter 6 pg 6-4; 10; 15; 37; 39).</p> <p>Liz Day Consulting: The aquatic ecology chapter has been expanded to include direct discussion of these aspects: See [new] Section 4.3. The report already notes uncertainty with regard to surface/groundwater interactions in the study area, and this adds to the uncertainty of predicting sea level rise and surge impacts, both of which would indeed have an impact on ecosystem resilience, making additional impacts associated with further development more likely.</p>

Natural Justice	62	Chapter 3	3-55 to 3-63	All			<p>Lack of Integration between Ecology, Offsets, and Alternatives</p> <p>The ecological baseline established in Chapter 3 is not integrated with the Biodiversity Offset Framework in Chapter 4. Although the SEA acknowledges that “large portions of the terrestrial and coastal habitats are of high ecological sensitivity” it nevertheless proposes offsets “to compensate for unavoidable losses.” (Ch 4 p. 4-2.) This reveals a disjunction between the findings and the mitigation strategy. No analysis demonstrates that avoidance was fully explored; the SEA fails to model alternative port configurations that might exclude the sensitive headland and dune complexes. This omission breaches the statutory requirement in Reg 21(b) <i>EIA Regulations</i> 2014 to assess “reasonable and feasible alternatives,” and violates s 2(4)(a)(i) <i>NEMA</i> (avoidance before mitigation). A strategic instrument that acknowledges ecological sensitivity yet endorses development without spatial redesign amounts to pre-determination and undermines rational administrative action under s 6(2)(f)(iii)(cc) <i>PAIA</i>.</p>	<p>Conservation Strategy Tactics & Insight: The SEA is not an EIA, and is not proposing that the high ecological sensitivity sites be lost and compensated for with Offsets. Indeed, the specialists firmly support the relocation of key facilities and redesign of the layout, and substantial setbacks of the primary threatened biodiversity features (including the headland and dune complexes) to avoid the most significant negative impacts. However, they also acknowledge that some impacts will inevitably result from a development of this scale in this region, and have crafted an offset framework for those lower sensitivity biodiversity features accordingly. Concur that the location of the Port is problematic and without spatial redesign it might amount to pre-determination.</p> <p>CSIR: The SEA is not an EIA and is not legally subject to the EIA regulations, but is grounded in best practice principles of the NEMA and other instruments such as the IFC Performance Standards and the mitigation hierarchy. A recommendation from the SEA is that that the port breakerwater (and thus landside port infrastructure) should avoid, inter alia, the sensitive Boegoeberg headland and Twins. This is captured in Figure SPM7 (strategic spatial planning) showing a possible port area shifted elsewhere to avoid the Boegoeberg headland and seal colony. Future port and SEZ layout zoning and design should take into account these strategic spatial planning recommendations, as well as additional site-specific recommendations that may be revealed by future research and surveys.</p>
Natural Justice	63	Chapter 3	3-63 to 3-72				<p>There is no indication that SANBI, the Northern Cape Department of Nature and Environmental Conservation (DENC), or independent ecological specialists peer-reviewed the Chapter 3 findings. Without third-party validation, the SEA’s sensitivity mapping lacks credibility and cannot be relied upon in downstream EIAs. The omission of traditional ecological knowledge from local Nama communities further breaches s 2(4)(f) <i>NEMA</i>, which affirms the value of community knowledge in environmental management.</p> <p>Ekotrust CC: Chapter 3 was sent to an independent ecological specialist with extensive knowledge of the Richtersveld. Furthermore, Pieter van Wyk, a Richtersveld botanical specialist, was part of the vegetation team and he also shared his expert knowledge of the Richtersveld on many topics with the entire ecological team. SANBI and DAERL have now been able to comment on the draft documents.</p> <p>CSIR: The peer review and public comments and responses are published together with the final SEA reports.</p>	
Peter Hawkes	64	Chapter 3, 3a, 3b, 3c, 3d, 3e, 3f; whole SEA WP1	first page to last page	first to last line on every page			<p>Virtually no consideration is given to the terrestrial invertebrate fauna in Chapter 3, or anywhere else in the entire SEA, despite the fact that 1) invertebrates are widely recognised as being a critical component of all terrestrial ecosystems, 2) a number of invertebrate species of conservation concern (SCC) [five butterfly species and seven grasshopper & katydid species, i.e. 12 of a total of 35 animal SCC species listed] were included in the data provided by SANBI to the CSIR team in 2024, and 3) major global concerns have been raised in recent times about potentially catastrophic observed declines in invertebrate abundance and diversity. The limited knowledge of our invertebrate fauna, especially in the Northern Cape, means that the known invertebrate SCC in the region are probably far outnumbered by unknown or un-assessed species that would be considered of equal or greater concern if sufficient data were available. While plants were covered in two chapters, and the vertebrate fauna was awarded detailed attention in the form of three separate chapters – one covering birds, another bats and the third other mammals plus herpetofauna – the invertebrate fauna, which globally forms over 90% of animal diversity and the bulk (about 95%) of wild animal biomass, was apparently considered of no consequence by the leaders of the SEA team. There are a few vague mentions in Chapter 3 of influences on insect numbers, mostly in relation to their role as food for bats, and one mention of an area (Visagiesfonteinokop) being home to insects not found elsewhere on the coastal plains. Chapter 3 (page 3-5, line 38) also notes under “information gaps” in the Mammals, reptiles and amphibians section-without giving any reason-that “No invertebrates were assessed”. Chapter 3e (page 11, line 38) also indicates “invertebrates not assessed for current SEA”, with no justification for the omission being given, but does at least include invertebrate specialists in a suggested consortium to be contracted to produce fine-scale maps based on field surveys to guide layouts. But that is the entire extent of the consideration of invertebrates in these documents. 30 years after the Convention on Biological Diversity was ratified by South Africa it is utterly inconceivable that a supposedly highly competent SEA team appears mostly (perhaps with the exception of the vegetation team) to have deliberately dismissed as irrelevant what is arguably the most important non-plant biodiversity component of terrestrial ecosystems globally. Without this omission being addressed and a chapter on the invertebrate fauna included and incorporated into the overall assessment, this SEA cannot be considered to be valid or complete. After this has been addressed the SEA should be re-published for public comment so that the additional chapter and any changes arising from its inclusion can be assessed. Since two of the chapters do mention the omission of terrestrial invertebrates, the project leaders and peer reviewers, as well as other stakeholders-including representatives of government departments such as DFFE and DAERL-cannot claim to have been unaware of this shortcoming, which must therefore be considered to constitute a deliberate exclusion, without any justification being provided, of terrestrial invertebrates from consideration in the SEA. I believe the South African public deserves an explanation of why the decision not to include an assessment of terrestrial invertebrates in the SEA was taken.</p> <p>Bio Diversitas Consultants: Your comment is valid and noted, and needs to be addressed at the appropriate scale of investigation. Not assessing terrestrial invertebrate fauna as part of the SEA process is neither a flaw nor an oversight – it’s a matter of prioritizing the most salient ecological drivers at this course scale to get a high-level overview of potential sensitivities and impacts for policymakers. The key ecological sensitivities are still adequately represented through other fauna groups including CBAs and threatened ecosystems on site – the project overall is considered sensitive and if a systematic conservation and biodiversity offset approach is taken at a landscape / ecosystem scale, it is likely to include any sensitive invertebrates habitat on site. This will be better addressed through localised assessments like EIAs which include detailed desktop and fieldwork assessments. This SEA does not substitute the need for such localised impact assessments which requires detailed desktop studies and fieldwork, and to address all relevant taxa groups and impacts adequately.</p>	
Louise Geldenhuis	65	Chapter 3a	24		Figure 2.8		<p>The updated 2024 Northern Cape Biodiversity Spatial Plan can now be used for finer-scale and updated CBAs (available at https://bgis.sanbi.org/SpatialDataset/Details/7743)</p> <p>Ekotrust CC: 1. The authors’ inputs went through a thorough peer review and a cut-off date had to be set for sourcing publicly available data. It was decided that the date of the submission of the first draft (14 March 2025) would be the cut-off date. 2. The maps in the SEA therefore represent best available information at a point in time (the cut-off date) and there will always be new information coming available. The subsequent planning and project-level EIAs will need to take cognisance of the latest available data. 3. Note that the final version of the CBA data referred to as the “2024” CBA map was not available at the date of submission of the first draft and was released into the public domain in July 2025.</p>	
Samantha Ralston-Paton	66	Chapter 3b	6	20-21	Figure 1		<p>In addition to defining the “broader area”, which was, according to the report, identified to “get a more representative impression of the birdlife in the area”, we suggest that the project area of influence should also be defined, based on anticipated impacts.</p> <p>AfriAvian Environmental: The Project Area of Influence (PAOI) has been defined as a 5 km buffer around the Boegoebaai Port and SEZ, and a target species list was generated by assessing SABAP2 data, BirdLasser citizen science data and intersecting species distribution models within the PAOI - see Section 4, lines 41-43 on page 4 of the WP1 Terrestrial Avifaunal Specialist Report (Chapter 3b)</p>	
Samantha Ralston-Paton	67	Chapter 3b	20		Table 2		<p>Although the Ramsar Convention is mentioned, no mention is made of the proximity of the study area or potential impacts on the Orange River Estuary Ramsar site. Impacts on this site are, however, mentioned in Chapter 3 (Page 3-65, lines 8-13). This exemplifies the need for better integration between the different specialist studies.</p> <p>AfriAvian Environmental: Kindly note that the Orange River Estuary Ramsar site is located outside of the PAOI from an terrestrial avifaunal perspective as it relates to the WP1 assessment. The Orange River Estuary Ramsar site does however fall within the boundaries of the WP2 study area i.e., the Namakwa Region. Assessment of potential impacts to birds that could occur in the Namakwa Region are discussed in the WP2 Terrestrial Avifaunal Specialist Report (currently under peer review).</p>	
Samantha Ralston-Paton	68	Chapter 3b					<p>There is also a need for better integration between the Avifaunal/Terrestrial Biodiversity study and the Marine Ecology study, which also makes recommendations with regard to seabirds that nest and roost on land.</p> <p>AfriAvian Environmental: Kindly note that the WP1 Terrestrial Avifaunal Specialist Study did not assess marine/seabirds to limit duplication between studies but instead focussed on terrestrial avifauna within the PAOI.</p>	
Samantha Ralston-Paton	69	Chapter 3b	17	25-36			<p>Weighted sensitivity analysis: We suggest that more detail on this approach should be provided, including how the cut-off threshold was decided and after which species were excluded from further consideration in the study.</p> <p>AfriAvian Environmental: The SABAP data has recorded 87 bird species in the broader area (20 pentads). Of the 87 bird species, 47 are considered priority species where priority species are defined as South African Red List species (SCC); South African endemics, near-endemics or range-restricted species; waterbirds; raptors; and species vulnerable to disturbance and/or habitat loss. Of these 47 priority species, 13 species were selected for further assessment in WP1. The selection of these 13 species was derived from spatially explicit species distribution models (SDMs) weighted by species-specific vulnerability parameters (threat status, range size, endemism, and susceptibility to each impact type). Considering the types of development that are planned for the Port and SEZ, the weighted sensitivity analysis focussed on these 13 priority species because of their vulnerability to specifically displacement due to disturbance or habitat loss/transformation. As such, the analysis provides an ecologically informed spatial risk surface that indicates potential sensitivity or relative risk, rather than formal exclusionary constraints. The authors followed a similar approach when compiling the WP2 Terrestrial Avifaunal Specialist Report for the Namakwa Region and a detailed description of the approach is provided in Section 4, Section 6.2 and Section 6.4 of the WP2 Terrestrial Avifaunal Specialist Report (currently under peer review).</p>	
Samantha Ralston-Paton	70	Chapter 3b	12 (and elsewhere)		Table 1		<p>We acknowledge that this report was finalised prior to the releases of the new regional red list status, but suggest that the report be updated to reflect more recent statuses and population estimates.</p> <p>AfriAvian Environmental: The authors acknowledge that the new regional Red List for birds has been released in June 2025, however, kindly note that the new regional Red List for birds was not available at the date of submission of the first draft of the WP1 Terrestrial Avifaunal Specialist Report and was only released into the public domain in June 2025. The Integrated Ecology underwent peer review and a cut-off date had to be set for sourcing publicly available data. It was decided that the date of the submission of the first draft of the WP1 Terrestrial Avifaunal Specialist Report (i.e., February 2025) would be the cut-off date. Therefore, the bird spatial distribution data, population estimates, conservation statuses and maps considered for purposes of WP1 of the SEA therefore represent best available information at a point in time (i.e., the cut-off date) and there will always be new information coming available. The subsequent planning and project-level EIAs will therefore need to take cognisance of the latest available data. Also, note that the authors’ WP2 Terrestrial Avifaunal Specialist Report has been compiled taking into consideration the new 2025 regional Red List for birds.</p>	
Samantha Ralston-Paton	71	Chapter 3b	18-20				<p>Potential Impacts on Avifauna: This section could do with more detailed discussion and consideration of potential impacts (in addition to habitat loss and displacement). Some of these impacts are in the “Avifaunal Aspects and Impacts Register”, but details are limited. We also suggest that potential mitigation measures should be proposed, where mitigation can be expected to be fairly standard regardless of the environment (e.g. for powerlines, lighting, pollution etc).</p> <p>AfriAvian Environmental: Noted. However, considering the types of development that are planned for the Port and SEZ, the weighted sensitivity analysis focussed on the 13 priority species because of their vulnerability to specifically displacement due to disturbance or habitat loss/transformation, and as such was the focus of the WP1 Terrestrial Avifaunal Specialist Report. The authors were also tasked to assess potential impacts to avifauna in the WP2 study area i.e., the Namakwa Region that encompasses the WP1 study area i.e., Port and SEZ including the PAOI in its entirety, and a detailed description of the key potential impacts to birds from the planned development types have been included in Section 3 of the WP2 Terrestrial Avifaunal Specialist Report (currently under peer review). A discussion on recommended mitigation measures and strategic management actions to minimise avifaunal impacts are included in Section 7.5 and Section 8 of the WP2 Terrestrial Avifaunal Specialist Report (currently under peer review).</p>	
Samantha Ralston-Paton	72	Chapter 3b	17	32-33			<p>The report claims that “there was no nest or roost site data within the Boegoebaai SEZ”, but the Marine Ecology study states that “[t]he most sensitive area is around the headland within the proposed port precinct area of the SEZ on account of the cliffs and rocky headland, with sheltered coves, suitable for seal haul-out. This area is also host to the roosting and nesting sites of a number of IUCN-listed seabirds. The area is rated as of very high environmental sensitivity (this area includes a 300 m buffer to the north and south of the colony)” (emphasis added). Again, better integration is required.</p> <p>AfriAvian Environmental: Kindly note that the WP1 Terrestrial Avifaunal Specialist Study did not assess marine/seabirds to limit duplication between studies but instead focussed on terrestrial avifauna within the PAOI. This sentence was updated to indicate that no <u>terrestrial</u> bird nest or roost data existed in the study area. And footnote added “Roosting and nesting sites for a number of IUCN-listed seabirds are present, refer to WP1 Chapter 2.”</p>	

Samantha Ralston-Paton	73	Chapter 3b	23			Conclusions and recommendations: The only real recommendation included in the avifaunal report is "all proposed developments within the SEZ should incorporate an avifaunal specialist study." This does little to support step-wise decision-making and consideration of alternative layouts, etc. We suggest that recommendations for avoidance should be incorporated. It is unclear if the absence of avoidance recommendations is a) due to the absence of features that will require avoidance, or b) due to limitations on the available data. Where the latter is the case, we suggest that a description of these potential features should be included in the report, and this information be highlighted as knowledge gap that needs to be filled, either at the EIR stage or prior to that. If the former is the case, this should be discussed in more detail. We also suggest that consideration be given to including a) recommended thresholds for acceptable losses, b) knowledge gaps and next steps, c) further details on recommendations for avifaunal assessments, and d) if offsets and/or compensation for impacts on avifauna are recommended.	Avifaunal Environmental: Noted. The authors were tasked to also assess potential impacts to avifauna in the WP2 study area i.e., the Namaqua Region that encompasses the WP1 study area i.e., Port and SEZ including the WP1 PAOI in its entirety, and detailed descriptions of these aspects are provided in the WP2 Terrestrial Avifaunal Specialist Report (currently under peer review) as follows: 1. Recommended strategic management actions to minimise avifaunal impact including the mitigation hierarchy and avoidance recommendation - refer to Section 7.5 and Section 8 2. Knowledge gaps - refer to Section 5 3. Further details on recommendations for avifaunal assessments - refer to Section 8 4) If offsets and/or compensation for impacts on avifauna are recommended - refer to Chapter 4 of the WP1 SEA Report, as well as the chapter on Biodiversity Offset Framework that will be included in the WP2 SEA Report. 5. As far as recommended thresholds for acceptable losses are concerned, a Biodiversity Management Plan (BMP) for each development site must be developed prior to commercial operation, and site-specific mortality thresholds for each avifaunal priority species must be calculated in relation to their potential biological removal (PBR) values. The calculation of PBR values will consider population sizes of the species and thus determine annual fatality thresholds for the site. If fatality numbers exceed these annual thresholds during operations, additional mitigation measures must be implemented as part of the adaptive management strategy. The choice of additional mitigation measures will be dependent on the measures in place at the time and could involve the implementation of additional measures during high-risk periods as outlined in Section 7.5 of the WP2 Terrestrial Avifaunal Specialist Report (currently under peer review).
Louise Geldenhuys	74	Chapter 3d	18-19		Figure 3-2	The updated 2024 Northern Cape Biodiversity Spatial Plan can now be used for finer-scale and updated CBAs (available at https://figs.sanbi.org/SpatialDataaset/Detail/7745)	Ekuruvu CC: 1. The authors' inputs went through a thorough peer review and a cut-off date had to be set for sourcing publicly available data. It was decided that the date of the submission of the first draft (14 March 2025) would be the cut-off date. 2. The maps in the SEA therefore represent best available information at a point in time (the cut-off date) and there will always be new information coming available. The subsequent planning and project-level EIAs will need to take cognisance of the latest available data. 3. Note that the final version of the CBA data referred to as the "2024" CBA map was not available at the date of submission of the first draft and was released into the public domain in July 2025.
Elsabe Swart	75	Chapter 4	1	1		The absence of a biodiversity offset framework for the highly significant residual impacts expected on marine ecosystems is regarded a short-coming that should form part of the Biodiversity Offset Framework Strategy. Although offset strategies for marine ecosystems and species are not yet well established, it does not exempt the developers from it being triggered and thus accordingly need to be developed. With the SEA being a strategic document, strategic direction is expected also on the marine biodiversity offsetting.	Conservation Strategy Tactics & Insight: Agreed. This clarification was sought and integration suggested upfront. Perhaps it is easier at this stage for a dedicated section in the Marine WP1 Chapter to include offset and ecological compensation framework. CSIR: Refer to WP1, Chapter 2, Section 2.6.4. The WP1 Marine Ecology study (Chapter 2 of the SEA) recognises that significant biodiversity impacts are likely to occur in the marine and coastal realms and that these warrant consideration in terms of biodiversity offsets. The chapter emphasises proactive avoidance of areas identified as irreplaceable or of Very High sensitivity. In line with the mitigation hierarchy, Notably, it identifies Boegoebaai Point as an area of Very High sensitivity and likely irreplaceable, where development should not occur even if offsets are proposed elsewhere. The study further acknowledges that while the National Biodiversity Offset Guideline (2023) currently applies only to terrestrial and freshwater realms, this does not exempt residual impacts on estuarine and marine biodiversity from requiring offsets. To address this policy gap, the study recommends applying the International Finance Corporation's (IFC) Performance Standard 8 on biodiversity conservation as a recognised international framework for designing and implementing marine biodiversity offsets. The report outlines the key steps and design principles to be followed in identifying and implementing such offsets in line with the mitigation hierarchy, should residual impacts be confirmed. Although a full offset plan is beyond the study's scope, it strongly recommends that these principles guide any future offsetting to mitigate residual impacts on habitats classified as CBA Natural or CBA Restore.
Elsabe Swart	76	Chapter 4				Propose inclusion of context L.t.o. costing of delivering an offset and the high level components of such an endeavour. It is my experience that developers do not grasp the cost and capacity implications accompanying an offset delivery. It escalates development costs for which they must be prepared. It is acknowledged that detailed calculations and timeframes cannot be provided, but some context is needed for transparency and preparedness.	Conservation Strategy Tactics & Insight: Agreed. However, at this scale and with the data to hand, it is impossible to advance an even remotely accurate costing. Perhaps this is explicit guidance for project-specific EIAs (i.e. incorporate a costing early on at Pre-application engagement stage with regulators) but can, to an extent be overcome by the proposed approach of requiring the SEZ to proactively offset impacts for all tenants and suppliers.
Elsabe Swart	77	Chapter 4				The 'unequal' level of specialist report chapters (some are only desktop while others contain some fieldwork) is of concern, as it will cause additional risk L.t.o. biodiversity offsetting from the developers' side (additional offset requirements might be the result).	CSIR: The SEA aims to develop an integrated decision-making framework to guide the planning based on current knowledge and understanding. SEA is not a research project and very rarely includes field studies. However, given that access to the Port and SEZ area has historically been limited due to it being an active mining area, the SEA incorporated rapid field visits for key themes (e.g. marine ecology, vegetation, heritage). The lack of data for the area acknowledged in the SEA as a gap that needs to be filled. A key recommendation from the SEA WP1 is to initiate environmental monitoring early since the area is undersampled and isolated. Robust field surveys during project- and site specific assessments like EIAs and to inform biodiversity offset planning and implementation (if needed as mitigation hierarchy last resort) will be required.
Elsabe Swart	78	Chapter 4				It is recommended that the Biodiversity Offset Framework clearly capture the need for biodiversity offset planning to cater for climate change scenarios to ensure adaptability is catered for in ecosystem function and species adaptability.	Conservation Strategy Tactics & Insight: The spatial scale of WP1 is likely too small to effectively cater for climate change on function. However, specific proposals are included in WP2.
Elsabe Swart	79	Chapter 4	4-7	2		Would it be acceptable if acronyms CBA, NPAES and SDF are dated? As these are key planning information used, it would just be helpful for readers.	Conservation Strategy Tactics & Insight: Will insert dates where possible.
Elsabe Swart	80	Chapter 4	4-10	37-38		The sentence "Although detailed parameters of footprints are not available, it can be assumed that the following impacts would materialise at the local and regional scales:" The ':' suggest a list will follow. Recommend a list to be included for ease of reader, especially those who are unfamiliar with biodiversity offsets and /or features and parameters used for offset calculations.	Conservation Strategy Tactics & Insight: Removed to avoid confusion. The subheadings that follow were the list.
Elsabe Swart	81	Chapter 4	4-13	14		The date and chapter number of the 'Froneman et al' reference should be included.	Conservation Strategy Tactics & Insight: Done.
Elsabe Swart	82	Chapter 4	4-14	46-47		Literature referencing for supporting statement that sandveld vegetation could re-establish is recommended. Dr Peter Carrick used to work on rehabilitation research in the coastal area and might be a good person to contact (pcarrick.nrl@gmail.com)	Conservation Strategy Tactics & Insight: Done.
Elsabe Swart	83	Chapter 4	4-17	36	4.1	Although the risk averse / precautionary principle has been recommended for implementation, it would not be implemented in the event if placement and/or design cannot accommodate this component in the mitigation hierarchy. Accordingly, in such an event an additional 'offset loading' is recommended towards the larger scale (WP2) of the project. Ecological function scales within this environment is poorly understood and thus functionality and resilience would impact the confidence levels of the outcome of the biodiversity offset. The gap of the SEA towards reflecting on the local climate and regional climate systems (combined with projected climate change impacts) is a concern and must be catered for (this is needed in another chapter of the SEA, but then needs to be included in the offset framework). With many species being dependent on mist from the ocean - large solar fields could cause heat islands that changes the natural influx of mist from the coast. The mist have an ecological role for up to >50km inland. These will be secondary impacts that must be catered for in the ratio and significance ratio calculations. Reference for additional insight/information: Norbert Juergens's latest Richtersveld publication on 'desert expansion' being observed in the Richtersveld (online article link: https://authors.elsevier.com/sd/article/S0145-1963(25)00143-0) A link to download the doc-file of the supplementary online material, which shows all the study sites, is available in the html-format, at the end of the main text, before the references.)	Conservation Strategy Tactics & Insight: Concur. WP2 has incorporated a scale "loading" for exactly this reason. Ecological function and climate corridor/incorporation in offset studies is very difficult at the SEA level - better done through design by project specific EIAs if they are impacting on these features. The location of the offset receiving areas (in both WP1 but especially WP2) explicitly cater for climate change, by for instance taking into account gradients and the few models of likely change that exist. It is unlikely that PVs will be located in the coastal zone precisely because of the mist. However, the point is taken that fine scale design is needed to ensure mist still ventures far enough inland and isn't stopped by large industrial and heating installations. It is not sensible to cater for some influences through ratios - rather through design. CSIR: A key component of the SEA WP2 is to also consider the key drivers of change in the region (such as climate change and other land uses), in the absence of the proposed Boegoebaai Port, SEZ and Green Hydrogen development (i.e., scenario 0). This is in addition to assessing the risks or opportunities associated with the two Green Hydrogen development scenarios in the region; that is a "small-scale" Green Hydrogen development scenario (Scenario 1) and "Big/large-scale" Green Hydrogen scenario (Scenario 2). The scenarios assessment in the relevant chapters of Work Package 2 provide an outlook of the estimated positive and negative cumulative impacts in the region might be. In particular the draft WP2 Regional Ecology report (to be published for comment in due course) provides a discussion on current biodiversity pressures, emerging threats, and observed vegetation productivity trends, as well as an analysis of climate change trends (including desert biome expansion predictions). This reports also references Juergens et al. (2025) on desertification processes in the Richtersveld. Furthermore, the WP2 Ecology report does acknowledge the ecological role of fog and precipitation traps, although it does not quantify potential changes from solar heat islands or their effects on mist-dependent species. It is recommended that these aspects are well studied during future project-level EIAs.
Elsabe Swart	84	Chapter 4	4-20	12		Support suggestion that all irreplaceable and CR ecosystems and habitats should be set-aside and not count towards offsetting.	CSIR: Noted Conservation Strategy Tactics & Insight: Concur. All High and Very High areas set aside do not count towards offset liabilities. This is accepted practice.
Elsabe Swart	85	Chapter 4	4-22	10-15		Concur with paragraph, but would like to add that connectivity in the landscape to secure long-term ecosystem functionality and resilience (amongst others) will also form part of considerations.	Conservation Strategy Tactics & Insight: Added in.
Elsabe Swart	86	Chapter 4	4-27	1-4		It should be reflected that island protected areas will escalate capacity requirements and costs L.t.o. the offset establishment and management.	Conservation Strategy Tactics & Insight: Incorporated.
Elsabe Swart	87	Chapter 4	4-16	12		Full stop use to be consistent throughout document at the end of sentences.	Conservation Strategy Tactics & Insight: Inserted.
Elsabe Swart	88	Chapter 4	4-18	18, 20, 23, 25		Same applies for where points are listed OR ':' should be used consistently.	Conservation Strategy Tactics & Insight: Inserted.
Elsabe Swart	89	Chapter 4	4-19	9		Same applies for where points are listed OR ':' should be used consistently.	Conservation Strategy Tactics & Insight: Inserted "7".
Elsabe Swart	90	Chapter 4	4-22	34		Same applies for where points are listed OR ':' should be used consistently.	Conservation Strategy Tactics & Insight: Inserted.
Elsabe Swart	91	Chapter 4	4-24	11, 13		Same applies for where points are listed OR ':' should be used consistently.	Conservation Strategy Tactics & Insight: Now consistent.

Elsabe Swart	92	Chapter 4	4-25	35, 41		Same applies for where points are listed OR "; should be used consistently.	Conservation Strategy Tactics & Insight: Inserted
Louise Geldenhuys	93	Chapter 4	3		Figure S.1	The updated 2024 Northern Cape Biodiversity Spatial Plan can now be used for finer-scale and updated CBAs (available at https://bgis.sanbi.org/SpatialDatabases/Details/7743)	Conservation Strategy Tactics & Insight: The old version was deliberately used to indicate the reigning CBA implications of selecting Boegoebergbaai as the location for the SEZ. Other chapters delve into the BSP. It was intended as a frontispiece in a standalone report. CSIR: Note that the SEA chapter underwent peer review and a cut-off date had to be set for sourcing publicly available data. The final version of the CBA data referred to as the "2024" CBA map was not available at the date of submission of the first draft Chapters, but was released into the public domain in July 2025. Future planning and project-level EIAs will need to take cognisance of the latest available data.
Louise Geldenhuys	94	Chapter 4	3		Figure S.1	The blue outline indicating the SEZ does not display at the correct location on the map.	Conservation Strategy Tactics & Insight: Fixed.
Samantha Ralston-Paton	95	Chapter 4	4-13	17-18		We recommend that the avifaunal specialist engages with the author of this chapter to discuss whether offsets/compensation are recommended and under what circumstances.	Conservation Strategy Tactics & Insight: My understanding from the specialist reports is that, apart from certain nesting seabirds (which are out of scope of this framework) it is not prudent to require offsets for the direct mortality on Bustards or Harriers as these highly mobile species don't lend themselves to it. Ecol compensation through retrofitting existing infrastructure is however possible and desirable, and is explored further in WP2, with several caveats. Discussions and confirmation with the avifauna specialists confirmed that Barlow's Lark and possibly others, are more philopatric habitat generalists (even range restricted) and would likely be adequately catered for in ecosystem offsets. This would need confirmation in project specific EIAs.
Natural Justice	96	Chapter 4	4-1 to 4-9	All		Premature reliance on offsets and lack of ecological baseline data Chapter 4 introduces what is termed a "Biodiversity Offset Framework", which the SEA describes as a conceptual tool to "guide future offset planning and implementation for the Boegoeberg Port and SEZ." However, this framework remains wholly conceptual—there are no quantifiable baseline datasets, no measurable equivalence ratios, and no mapping of the affected biodiversity features. The framework's description acknowledges that "the study area falls within the Succulent Karoo and Namaqualand Sandveld bioregions" but offers no specific delineation of the vegetation types or ecological conditions to be offset. This omission is material. The SEA's <i>Vegetation and Flora Appendices</i> (3e–3f) identify several vegetation units and threatened flora that would be directly affected by the proposed port platform, access roads, and SEZ footprint. These include: -Namaqualand Strandveld (LC) -Namaqualand Coastal Duneveld (VU) and -Namaqualand Sandveld (VU) The specialist report lists sensitive and endemic species such as <i>Pachypodium namaquanum</i> (Namaqua halftenns, listed as Protected under NEMBA), <i>Lithops complanata</i> , <i>Drosanthemum namibense</i> , and <i>Tylecodon wallichii</i> , which occur within or immediately adjacent to the proposed development envelope. None of these taxa are identified or discussed in Chapter. The absence of a quantitative ecological baseline renders the offset framework procedurally premature and contrary to s 240(1)(b) of the <i>National Environmental Management Act 107 of 1998 (NEMA)</i> , which requires that environmental authorisation decisions be based on "sufficient information." The inclusion of offsets at this strategic stage also conflates the SEA's planning role with project-level authorisation, undermining the precautionary principle in s 2(4)(a)(vi) NEMA. The precautionary principle dictates that a decision may not be taken "where there is a lack of adequate or certain information." "Where uncertainty exists, the duty of care compels avoidance rather than reliance on untested mitigation." (<i>Earthlife Africa Johannesburg v Minister of Environmental Affairs</i> 2017 (2) SA 519 (GP) para 104). The SEA's premature introduction of offsets, in the absence of quantified loss data or species-specific mapping, breaches this duty and creates the impression that biodiversity loss has already been accepted as inevitable.	Conservation Strategy Tactics & Insight: Contrary to the assertions here, good practice biodiversity offsets require upfront assessment and quantification, primarily to alert the development proponent of the likely challenges, cost and contingent liabilities that offset mitigation imposes on projects. Offsets are not a premature and untested mitigation, but rather an acknowledgement that there are certain areas with low biodiversity value that may be able to be developed, - without this, then environmental management ceases to play any useful regulatory function. While it is not easy to incorporate an offset framework in a SEA due to the paucity of explicit spatial and impact info, especially on species, some elements of a framework are possible to sketch out. These include: (1) the areas and features which are not offsettable and must be avoided, (2) , the expected ratios which would accompany any impact on more common or less sensitive features, (3) , the expected scale and thus implied cost of offset implementation, (4) the best candidate areas in which to locate offsets for different features. These also serve to inform development planning in the SEA and finer scale plans in projects within the SEZ. The sum of all this info provides upfront indications to proponents where to develop without incurring substantial offsets - and not a premature decision, especially one in absence of sufficient info, nor a subversion of duty-of-care. While it acknowledges that SOME loss may occur, it guides all parties to ensure that this loss is not unacceptable, and is counter-balanced elsewhere. CSIR: The SEA is not a decision-making process and the SEA does not result in a decision for any development proposals to proceed or not. The SEA aims to develop an integrated decision-making framework to guide the planning based on current knowledge and understanding. The lack of data for the area acknowledged in the SEA as a gap that needs to be filled. A key recommendation from the SEA WP1 is to initiate environmental monitoring early since the area is undersampled and isolated. Robust field surveys during project- and site specific assessments like EIAs will be required.
Natural Justice	97	Chapter 4	4-2 to 4-3		Table 4-1	Misapplication of the mitigation hierarchy Table 4-1 of the SEA sets out the so-called "mitigation hierarchy" but lists "offsets" alongside avoidance and minimisation as a co-equal step. The table is headed "Hierarchy of Measures to Address Biodiversity Impacts" and shows the following sequence: "Avoid – Minimise – Rehabilitate/Restore – Offset." However, the text beneath Table 4-1 states that these steps "may be applied concurrently," implying that offsetting can occur in parallel with avoidance and minimisation. This presentation is inconsistent with the legally binding mitigation hierarchy under s 214(a)(i)–(viii) of NEMA and the <i>Guideline on the Implementation of the Mitigation Hierarchy</i> (DEFF, 2015, at 5–6), which provides that offsets may only be considered "once all possible measures to avoid, minimise, and rehabilitate impacts have been exhausted." The DEA Draft National Biodiversity Offset Policy (2017, para 3.1) confirms that "offsets must not be used to justify developments that would otherwise be deemed unacceptable." By conflating these steps, the SEA implies that offsetting is a parallel or even interchangeable measure with avoidance. This legal and conceptual flow is compounded by the SEA's omission of site-specific avoidance options such as redesigning the port to less sensitive geomorphological zones identified in <i>Chapter 3 (Terrestrial Ecology)</i> and <i>Chapter 2 (Marine Ecology)</i> . From an ecological perspective, this misapplication of the hierarchy is also indefensible. The terrestrial ecology report identifies that the port footprint overlaps several high-sensitivity ecological zones, including dune hummocks containing <i>Drosanthemum namibense</i> and quartz plains supporting <i>Lithops complanata</i> . These habitats cannot be rehabilitated or offset because they depend on precise soil chemistry, fog precipitation, and microclimatic gradients that are non-replicable. Accordingly, the SEA's simultaneous treatment of "avoidance" and "offsetting" renders its framework irrational in the sense described in <i>BP Southern Africa (Pty) Ltd v MEC for Agriculture, Conservation, Environment and Land Affairs</i> 2004 (5) SA 124 (W) at 135D–E, where the Court held that administrative action must rest on "adequate, relevant and rational information."	Conservation Strategy Tactics & Insight: There is confusion in use of the word "applied". Offsets are not used concurrently in decision making - but rather in the assessment (by specialists and an EAP) within a particular authorisation process. The regulatory timeline does not allow for sequential application of the hierarchy, which forces prospective applicants to procure much assessment, mitigation development and exhaustion of the mitigation sequence in the pre-application stage. In practice it is always Iterative , and allows gradually approaching an acceptable development proposal. Thus Offsets are developed in parallel, but considered for authorisation only after the mitigation sequence has been followed. Offsetting is not an interchangeable measure with avoidance - they achieve completely different things. The findings of specialists in WP1 strongly support the relocation of the planned precinct into low sensitivity areas. Prior work suggested that Port Nolloth would be a more suitable location for multiple reasons, including biodiversity. Offset chapter concurs that restoration is effectively impossible. If the framework is irrational, then the DFFE 2023 Offset Guideline must be explained or withdrawn.
Natural Justice	98	Chapter 4	4-4 to 4-5	5-40		Ecological infeasibility and absence of equivalence The SEA's offset receiving areas are vaguely described as "areas of similar habitat that may be protected or restored to compensate for losses within the development footprint." However, there is no evidence of a habitat equivalence analysis, spatial offset mapping, or functional connectivity modelling. The affected vegetation units, Namaqualand Sandveld, Namaqualand Strandveld, and Succulent Karoo dwarf shrublands, are characterised by high levels of endemism and extremely slow recovery rates. <i>Mucina & Rutherford (2006 at 48–49)</i> note that post-disturbance recovery in these systems "may take centuries, if at all," due to low primary productivity and poor soil retention. The specialist report refers similarly cautions that "rehabilitation success in the Namaqualand arid region is severely limited due to the absence of organic soil horizons and the slow re-establishment of succulent vegetation." (<i>Appendix Vegetation & Flora A</i> , p. 54) This scientific evidence directly contradicts the SEA's suggestion that lost biodiversity can be offset "through the protection of similar habitats elsewhere." As Snyman (2020 PER 23(1) 17) writes: "Offsets in arid and semi-arid ecosystems are ecologically unsound because natural recovery processes occur on centennial timescales and species assemblages are spatially restricted." Furthermore, the SEA fails to consider the dependency of local faunal assemblages on these plant communities, particularly reptiles such as <i>Bitis cornuta cornuta</i> (Horned Adder) and <i>Bradypodion namaquensis</i> (Namaqua Dwarf Chameleon), both of which are micro-endemic to the Namaqualand coastal corridor. Their survival depends on the persistence of intact dune-succulent mosaics and rocky refugia, which cannot be replaced or translocated. This omission means the SEA does not satisfy s 240(1)(b) NEMA, which requires sufficient biodiversity information to inform sustainable decision-making, nor does it meet Target 3 of the <i>Post-2020 Global Biodiversity Framework (CBD COP15, 2022)</i> , which requires "effective conservation of at least 30% of terrestrial ecosystems, particularly areas of high biodiversity value."	Conservation Strategy Tactics & Insight: The premise of the DFFE Offsets Guideline (2023) is not one of Net Gain or No Net Loss, but is rather one of Target-based Ecological Compensation - wherein biodiversity loss is tolerated down to a specific threshold (the biodiversity target) of a specific feature. For pragmatic reasons in a hyperdiverse country like SA, the currency of equivalence is taken to be the vegetation type as a shorthand for Ecosystem. No loss should be tolerated for ecosystems listed as CR, only absolutely imperative loss should be tolerated for EN ecosystems, and then it should be compensated for through long term protection and management of the remaining area of that ecosystems, etc. Similarly, no loss of CR or even EN species should be authorised. While offsets for other species-level impacts are possible, they are much harder. A key assumption is that habitat generalist and widespread species are effectively catered for by ecosystem-based offsets. This is not possible to verify at a scale of analysis like WP1. Project level EIA Offset studies would need to cater for Horned Adder, Namaqua Chameleon, and the raft of other narrow endemics, to ensure sufficient habitat for viable populations is set aside and managed. CSIR: The SEA is not a decision-making process and the SEA does not result in a decision for any development proposals to proceed or not. The SEA aims to develop an integrated decision-making framework to guide the planning based on current knowledge and understanding. The fauna subcomponent of the Terrestrial and Aquatic Ecology Chapter (WP1, Chapter 3d) specifically describes fauna through a habitat tense. The lack of data for the area acknowledged in the SEA as a gap that needs to be filled. A key recommendation from the SEA WP1 is to initiate environmental monitoring early since the area is undersampled and isolated. Robust field surveys during project- and site specific assessments like EIAs will be required.
Natural Justice	99	Chapter 4	4-6 to 4-7			Procedural prematurity and failure to consider alternatives Offsets are introduced where avoidance and minimisation have been analysed. In direct conflict with the sequencing required by NEMA and the EIA Regulations 2014, Chapter 3 of the SEA itself identifies that the Boegoeberg headland and surrounding intertidal areas are "ecologically sensitive and support breeding populations of Bank Cormorant, African Black Oystercatcher, and a small Cape Fur Seal colony." Despite this acknowledgment, the SEA fails to propose any avoidance or realignment measures to reduce impacts on these species. Instead, it implies that impacts may be "mitigated through offsetting" once the port design is finalised. This approach not only inverts the mitigation hierarchy but also prejudices future Environmental Impact Assessments (EIAs). As noted in <i>Fuel Retailers Association v Director-General Environmental Management</i> 2007 (6) SA 4 (CC) para 75, "decision-makers must not assume that future processes will cure deficiencies present at the initial stage." The SEA's reliance on conceptual offsets therefore constitutes procedural irrationality under s 6(2)(f)(ii)(cc) PAIA and violates the precautionary principle in s 2(4)(a)(vi) NEMA. It also undermines the intergovernmental alignment duty in s 24K(2) NEMA, as there is no evidence of coordination with provincial conservation agencies (Northern Cape DENC) or SANBI in developing the offset concept.	Conservation Strategy Tactics & Insight: I concur with the issues of mitigation for marine ecosystems and species. The report notes that this is a key shortcoming, and must be addressed in the Marine chapter. It agrees that there is avoidance and minimisation - this misunderstands the nature of SEA and an Offset Framework and its recommendations. There are key roles for incorporating conservation authorities in negotiating offset metrics, location and proactive implementation - set out in both WP1 and WP2. SANBI is welcome to review the specific details, ratios, modality and receiving areas set out in WP1 and WP2. CSIR: WP1 of the SEA's method is framed as the "determination of receiving environment sensitivity with a view to practising avoidance (top of the mitigation hierarchy)" (see WP1 SPM, pg 1-14, Table 1-3). Key principles/actions for impact management from the SEA, e.g., summarised in WP1 SPM, Table 5, pg 45-48), recommendations for avoidance across prominently. Specifically, a recommendation from the SEA is that the port breakwater (and thus landside port infrastructure) should avoid, inter alia, the sensitive Boegoeberg headland and Twins. This is captured in Figure SPM7 (pg 37) (strategic spatial planning) showing a possible port area shifted elsewhere to avoid the Boegoeberg headland and seal colony. Future port and SEZ layout zoning and design should take into account these strategic spatial planning recommendations, as well as additional site-specific recommendations that may be revealed by future research and surveys.

Natural Justice	100	Chapter 4	4-8 to 4-9			The SEA record contains no evidence that the offset framework was subjected to public consultation, scientific peer review, or interdepartmental vetting. There is no indication SANBI, DFFE, or the Northern Cape Department of Nature and Environmental Conservation (DENC) were consulted in defining offset criteria, nor that local landowners or Nama communities were engaged in identifying potential offset receiving areas. Moreover, the framework fails to address ecosystem service values such as pollination, soil stabilisation, or carbon sequestration.	Conservation Strategy Tactics & Insight: The Offset Framework was explicitly contracted as a desktop exercise. It was circulated prior for independent technical review, and expressly in the SEA for public consultation. No resources or time for landowner consultation were available - and would have been premature. The Offset Receiving areas of WP1 were deliberately built on information submitted by local communities (and local expert input), as set out in the chapter and Figure 4-6. CSIR: DFFE, SANBI and DENC were represented in the SEA Working Group and have been consulted during the process at a level appropriate at strategic / SEA level. These stakeholders have also contributed through data provision and written submissions, as also captured in this comments and responses document. In-person public outreach sessions to share summarised draft SEA findings were held for WP1 (August 2025) and WP2 (planned for early 2026). A submission to the Working Group by the VVWT Namakwaland in November 2024 included a map with "Boegebege cluster of ten biosphere reserves" including sites such as the Boegebege Twins, Visagiesfonteinokop, Witbank, and Holgat. The information was made available to SEA authors and (as indicated above) considered specifically for early identification of Offset Receiving areas in WP1 Chapter 4. SEA chapters were peer reviewed - Chapter 4 specifically by Susie Brownlie, from deVilliers Brownlie Associated cc, who is internationally recognised for her work in biodiversity in impact assessment and biodiverse offsets.
Louise Geldenhuys	101	Chapter 5	2	39		Repetition of works	CSIR: It is unfortunately not clear what is meant by "repetition of works" in this context. No repetition of text was detected at the indicated page and line reference.
Walter Steenkamp	102	Chapter 5	Cultural Landscape: 22-39			Water usage and pollution, large scale hydrogen production through electrolysis requires significant amounts of water. If not properly managed, this could strain local water resources or lead to water pollution. Chemical contamination, the use of chemicals in hydrogen production or storage could potentially leak into coastal waters, harming marine life. Infrastructure impact, construction of hydrogen production facilities, pipelines or storage infrastructure near coastlines could disrupt marine habitats and ecosystems. Climate change contribution, while green hydrogen is considered a cleaner energy, its production still requires energy. It always move towards toxic gasses in the air that violates people's right to life because children are already sick before they are even born into this world. It could contribute to climate change, which has devastating impact on coastal communities. The pipe must go through sand, but the area has many different species such as lobsters and crabs in the bamboo areas along Boegebaai. The pipe will suck in small fish species, which is important for feeding future generations. The salt that is going to be discharge into the sea will kill all marine life.	CSIR: This comment does not relate to WP1 Chapter 5 on Heritage. Water use: producing 1 kg of hydrogen requires at minimum approximately 25 litres of water, in a water scarce country like South Africa, it is unlikely that water for hydrogen production will come from surface- or ground water. Water should rather come from desalinated seawater or treated waste water. The impacts emanating from desalination is well known and can be mitigated through good design and practice. Desalination facilities can also be oversized with surplus water made available to local communities, agriculture or other uses. This is explored more in WP2. Energy: The production of hydrogen does require energy, using renewable energy (i.e. wind and solar power) is what distinguished green hydrogen. Emissions and health: Hydrogen is not toxic, but is dangerous since it is flammable. Therefore strict health and safety measures (as for all flammable substances like petrol and diesel) are required. A shift to using green hydrogen from renewable energy aims to decarbonise various industries that usually require carbon-intensive energy (like coal) that have negative effects on air quality, human health and are exacerbating climate change. Anchor Environmental Consultants: The specific impacts on the marine environment from hydrogen production and associated infrastructure have been screened at the high level in the SEA but this process precedes the EIA phase. At the EIA phase specific impacts will be assessed and essential mitigation to avoid/minimise these impacts will be outlined. These extend to correct storage of potential contaminants, installation of pipes and rehabilitation of environment after construction, the brine discharges can be effectively mitigated and will be modelled and then assessed at the EIA phase. ASHA Consulting: While these are valid issues, they do not seem directly relevant to heritage. We can only assess the expected landscape change from the appearance of the proposed facilities and related infrastructure in the area. The ecological changes described here are addressed by various other specialists including Chapter 6 on Fisheries and Coastal Livelihoods.
Bronwyn van Neel	103	Chapter 5	Graves 5.4.4	5-20		As these are the only remains we have of our forefathers we expect them to be left to rest in peace, this is a special place for our communities. The National Heritage Resources Act 25 of 1999 states that graves of individuals of cultural, historical significance are protected. If a grave is found THEY SHOULD STOP WORK IMMEDIATELY! As stated in the assessment the people of the Richtersveld won't their ancestral land back, how/now? will they benefit from this with decisions are made for them? As stated in NEMA section 2(f) the participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation and participation by vulnerable and disadvantaged persons must be ensured! It has come to our attention that this process hasn't been meaningful as the Richtersvelders are indigenous people and Afrikaans is not their first language, printout was provided in technical Afrikaans that they couldn't understand. How are people suppose to comment on things that affect them if they don't understand the material that is provided for them? This comments should've been proposed to ensure that the Richtersveld get a fair chance to comment on this draft provided. This is our pride to be able to have land we can call our own as we have being suppressed since day one. The Green Hydrogen produced won't benefit them as they won't be able to access that land and also that money won't stay in the region and provide for their daily needs. We want down-up decisions where the people who know their land and oceans have the last say in development. Development that is sustainable and includes everyone not provide more poverty!	ASHA Consulting: Graves will have to be dealt with in accordance with legal requirements. The National Heritage Resources Act, No. 25 of 1999 (referred here as the NHRA), provides for the protection of burial grounds and graves in Section 36 of the Act. It is agreed that retaining them in situ is best, but it must be acknowledged that occasionally graves are found by accident during development. In such cases removing them to a safer location is best because development is already underway. Any intervention must be done in accordance with the provisions of 536 of the NHRA. This includes immediately ceasing work in the immediate area and protecting and reporting the finds. The remainder of the comment is noted but does not seem directly relevant to the heritage chapter. Karoo Development Foundation: Please see my comment earlier. The SEA is not the actual public participation process with communities. It is aimed primarily at scientists and policy-makers, in order to get all the facts on the table. However, issues such as ancestral graves are extremely important, and should be considered in any design of a potential port/green hydrogen project. An additional point: it is very difficult to generalise about the interests (or perceived interests) of any group of people. For example, protecting indigenous heritage may be very important to some people, but securing a job and income may be more important to other people. The purpose of a proper consultation process is to actually HEAR these different views, and then work collaboratively to identify actual conflicts between these views, and find potential synergies between different points of view. The ultimate goal is to strive for "win-win" solutions - keeping in mind that this is not always possible, but one should try. CSIR: Graves: A key recommendation from the WP1 SEA is that known grave sites (like those located at Boegebege South) should be avoided by new development, e.g. see Section 3.3 "Areas that should be considered off limits for major development", WP1 SPM pg 34, line 25. Public engagement: we acknowledge the concerns raised regarding the accessibility and inclusivity of the SEA process for the Boegebaai project. We understand that the SEA report is technical and extensive. To address this, a Summary for Policymakers document was prepared as part of the SEA outputs in both English and Afrikaans with the intention of making the content more accessible. Recognising that these summaries may still be difficult to interpret or access, in-person presentations in Afrikaans were undertaken within the communities where both written and verbal comments were invited and captured. The feedback received was shared with the authors of the relevant chapters for consideration. Comments and responses process: ideally structured comments that reference specific sections of the report are sought. This approach ensures clarity, accuracy and transparency in the review process, allowing authors to trace and address each comment, integrate new information in the correct context, and maintain a clear record of how feedback was considered and incorporated. However, this does not mean that general comments, or those not submitted using the comments template, are excluded or not accepted. All comments, whether general or specific, have been recorded in this comments and responses sheet, and have been responded to.
Natasha Higgitt	104	Chapter 5	5-4	1		SAHRA agrees with all provided recommendations in the Heritage Chapter	ASHA Consulting: Noted
Natasha Higgitt	105	Chapter 5	5-16	4		SAHRA to be consulted for the SAHRA Shipwreck database	ASHA Consulting: Noted. SAHRA data is included in the database used in this assessment and will be consulted as required during future assessments.
Natasha Higgitt	106	Chapter 5	5-40	25		Site is a Heritage Area: Site SAHRIS ID 2817CA1 (9/2/066/0052)	ASHA Consulting: Added to report.
Natasha Higgitt	107	Chapter 5	5-51	2		Any HIA conducted within the RCBL buffer zone will need to consider and assess impacts to the RCBL WHS OUV's, and provide detailed motivation for impacts to RCBL WHS.	ASHA Consulting: Noted, but the current study area falls just outside the buffer zone. VIA will still need to consider visual impacts to land within the buffer zone and the RCBL itself.
Shelton Nyalungu	108	Chapter 5	5.2, 5.3, 5.4			Development will not benefit the community. This is Europe exploitation of our ancestors land. This land is where African ancestors graves are. The zone is our heritage site as a nation . In terms of section 24(a)(b)(i) and section 31 of the constitution. This development goes against the supreme laws of our country .	ASHA Consulting: The area does have heritage significance, hence it is included in this SEA. To the best of our knowledge, legal requirements would be followed if any development actually occurred, but this is well beyond our control.
Natural Justice	109	Chapter 5	5-2	29-36		The SEA notes that "known graves are allocated very high sensitivity, but the rest of the area is not raised due to the impossibility of mapping unknown graves and the very low likelihood of occurrence." The graves identified at the foot of Boegebege fall within Zone 2, designated as a Conservation Area. Should the project proceed, this site of very high sensitivity would be located between the Port (Zone 1), Future Tank Farm (Zone 10), and Sasol HG2 (Zone 3). While the SEA recommends that a Heritage Impact Assessment (HIA) be conducted for every Environmental Impact Assessment (EIA), it fails to consider that the presence of graves with very high sensitivity within the broader project site should, in itself, warrant consideration of an alternative location. Limiting the requirement for an HIA to each EIA risks overlooking the cumulative impacts on the tangible and intangible cultural heritage of the Indigenous Nama community and fishing communities. As a result, the project's overall impact on both tangible and intangible heritage resources cannot be adequately addressed nor considered during site selection and impact on whether the project should go ahead or not.	ASHA Consulting: All graves are considered highly sensitive and graves could occur anywhere in South Africa. It is thus not feasible to rule out this area based on the possible presence of graves, and any other location would face the same issue since graves can occur anywhere. It is not possible to accurately assess overall impacts because we do not know where the proposed infrastructure would be located. The SEA is a very high level tool to determine whether it is even possible to accommodate the proposal in the area. More detailed impact assessment can only happen once locations are decided much later on. CSIR: A key recommendation from the WP1 SEA is that known grave sites (like those located at Boegebege South) should be avoided by new development, e.g. see Section 3.3 "Areas that should be considered off limits for major development", WP1 SPM pg 34, line 25.
Natural Justice	110	Chapter 5	5-11	1-26		The National Heritage Resources Act (NHRA) defines 'living heritage' as more than tangible cultural elements. The NHRA includes intangible aspects of inherited culture such as cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems; and the holistic approach to nature, society and social relationships. To fully understand the cultural significance of the landscape where the project is proposed, the SEA should take into account the overarching purpose of the Act which is to safeguard heritage resources of cultural significance or other special value for the present community and for future generations (Section 3(1)). Any development in the Port and SEZ must be assessment under the NHRA that considers the interests of affected communities, intangible cultural heritage holders and practitioners, as well as intergenerational equity, ensuring that the interests of current and future generations are protected. South Africa ratified the 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage, with ratification effective from 24 April 2025. Through this ratification, South Africa commits to uphold and implement the principles and obligations of the Convention. However, the SEA fails to consider this ratification and its implications for South Africa's evolving understanding and protection of heritage resources. Cultural Heritage is described by UNESCO as follows: <i>Cultural heritage does not end at monuments and collections of objects. It also includes traditions or living expressions inherited from our ancestors and passed on to our descendants, such as oral traditions, performing arts, social practices, rituals, festive events, knowledge and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts.</i>	ASHA Consulting: The comment is noted and, while intangible/living heritage is certainly important, it must be noted that such heritage cannot be destroyed and is thus not protected under the NHRA which guides the present assessment. PLACES associated with living heritage are protected and, because it is not feasible/practical to identify the entire country as a place associated with living heritage that needs to be protected, we chose to take the six communal areas as representative of important areas associated with living heritage. This applies more to WP2, but in the case of WP1 we still made areas of high sensitivity for living heritage around all the recent stock posts and medium sensitivity for all other land east of the R382 in recognition that much of this land has likely been used in recent times for the practice of living heritage in the form of small stock keeping.

Natural Justice	111	Chapter 5	5-15, 5-16	24-36		<p>The SEA acknowledges that the field study was limited and relied primarily on a desktop review to understand the living heritage practices of the wider Richtersveld area with no oral information gathered and supplemented only by observations of small-scale farmers.</p> <p>The SEA did not include consultations with the Indigenous Nama community or small-scale fishers to understand their tangible and intangible heritage associated with the area, nor the potential impacts the proposed development may have on these heritage resources. This is a fatal flaw.</p> <p>The SEA further relies on the 2000 Land Claims Court proceedings to interpret the heritage and practices of small-scale herders. Heritage is however dynamic and evolves over time. Therefore, the court case reported twenty-five years ago cannot adequately reflect the current realities, practices, and meanings attached to the land and seas by the community today.</p>	<p>ASHA Consulting: The SEA is only meant to be a high level study to determine the developability of the area. We have found significant constraints, including identifying land associated with living heritage practices. Yes, heritage is dynamic and "current" oral history will need to be taken at the time of any development and included in the relevant EIA at the time. Considerable effort was put into consulting historical and current aerial imagery in order to determine which areas were used over the last century for grazing purposes. These are the areas identified as of high sensitivity for their living heritage associations.</p>
Natural Justice	112	Chapter 5	5-11 and 5-35	33 – 39 31-34	Figure 5.5	<p>The description of widespread mining disturbance is used to describe a degraded environment, noting that there is very little visibility of pre-mining land surface. This suggests that further industrial development is, therefore, less consequential.</p> <p>Noting the <i>Alexkor v Richtersveld Community</i> successful land claim in 2007, this is not the reality. Following the land claim, Nama herders in communities like Swartbank and Witbank have returned. This demonstrates that the cultural and economic value persists despite the past damage by extractive activities.</p>	<p>ASHA Consulting: We do not agree that industrial development is less consequential in areas where the surface has been disturbed. Archaeology is the main resource type affected by disturbance, but archaeological resources can still be buried beneath the wind-blown sand originating in disturbed areas and fossils will also still occur in such areas.</p> <p>CSIR: Mining disturbance is more widespread and visible in the area west of the R382 road (e.g. refer to SPM, Figure 5, pg 22, and as mapped in Fig 7, pg 37). These are predominantly 'mined out' areas, desert-like where no surface vegetation exists anymore. The use of areas east of the R382 (e.g. Swartbank) by small scale herders is evident and currently practiced. A recommendation from the SEA is that, if development proceeds, areas that are already destroyed by mining be targeted by infrastructure development instead of transforming surrounding more 'natural' areas (see Table SPM4, pg 36) and that the areas east of the R382 road could be set aside (i.e. not developed) (see WPI Chapter 4, Figure 4-8, pg 4-28) to safeguard existing biodiversity and livelihood practices.</p>
Natural Justice	113	Chapter 5	5-16 – 5-17	1-2		<p>The methodological gaps are concerning. In respect to living heritage, the SEA admits that no oral information was collected from the herders as to their pastoral strategies. This fails to capture key information from heritage observers, whose activities and livelihoods may be significantly impacted.</p>	<p>ASHA Consulting: Oral information of land use patterns by small scale farmers in Zones 9 and 10 of the subject area will be required during the EIA process. This has been stated as a recommendation in Chapter 5.</p>
Natural Justice	114	Chapter 5	5-23 5-24 5-27, 28	38-39 11-1 9-14 1-14		<p>Despite mining disturbances noted on page 5-11 and 5-35, numerous archaeological sites in areas undisturbed were found during the survey for the SEA.</p> <p>The SEA records the presence of multiple heritage sites, including but not limited, many shell middens in Zone 1, the Planned Port, it identified a number of potential sites in Zone 2 around the Boegoeberg Twins, in Zone 3, the Sasol GH2 dense concentrations of Shell middens holding high local significance in Zone 7 as well as in Zone 8 and 9.</p> <p>The importance of these sites for heritage protection and their cultural significance must be fully considered when determining the site selection for the proposed project.</p>	<p>ASHA Consulting: Agreed. This will be addressed as part of the Archaeological Impact Assessment (AIA) which forms part of the HIA and the Environmental Impact Assessment. It will be the requirement of the archaeologist/s to identify the resources, assess their significance and potential impacts of the development, and recommend mitigation measures.</p>
Natural Justice	115	Chapter 5	5-32 5-45	 3-12	Table 5.5 Figure 5-27	<p>The SEA notes that unmarked, and therefore unmapped, graves 'can occur anywhere in the study area is ethically concerning'. While factually important, the term 'unmarked' should not imply that they are of a lesser concern. The NHRA affords all graves older than 60 years strict protection (section 36).</p> <p>Where graves are marked, they are recognised as having high local cultural significance. However, this value does not diminish when graves are unmarked. The likelihood of graves occurring within the project area, as highlighted in the SEA, must therefore be taken into account during site selection for the project.</p> <p>Proposed protective measures, such as fencing, cannot be regarded as sufficient to mitigate the potential disturbance by the project's overall development activities on the tangible and intangible heritage, including sense of place, that are associated with these highly significant sites.</p>	<p>ASHA Consulting: There is no such implication. ALL graves are equally significant. Unmarked simply means that we cannot map them. It is not feasible to exclude the whole region (or even the country) based on the fact that graves could theoretically occur anywhere.</p> <p>Appropriate protective measures will need to be recommended at the time of development depending on the potential impacts that might arise. Fencing was only suggested as a possible measure for the known graves which lie within the proposed conservancy area.</p>
Natural Justice	116	Chapter 5	5-35 5-50	27-33		<p>While historical patterns are well documented, the absence of the present community voice and perspective is noted. The significance of some of descriptions and selected artifacts in respect to the "transhumance" is not explored from the community perspective.</p> <p>As stated, "Despite the existing mining, development will irrevocably alter the sense of place of the region through the addition of industrial facilities". The SEA further finds that it will significantly disrupt the settlement patterns of small-scale pastoralists and prohibit access to the area. It is critical to understand from the impacted communities, during the SEA, how the selected site and project will impact on the tangible and intangible heritage, including sense of place of the herders, Indigenous Nama and small-scale fishers.</p>	<p>ASHA Consulting: Oral information of land use patterns by small scale farmers in Zones 9 and 10 of the subject area will be required during the EIA process. It is our opinion that we can reliably assess the potential impacts for the purposes of an SEA (i.e. not for development) without current oral history and, even without such testimony, we have rated the entire area used by pastoralists as medium to high sensitivity. In terms of fishing, the mine currently blocks access to the coastline. This situation could change and become a positive impact (benefit) with development).</p>
Natural Justice	117	Chapter 5	5.52	2-11		<p>The SEA acknowledges that the project will have significant impact on the sense of place and on the local community, including on the World Heritage Status of the RCBL. The impact on the World Heritage Status cannot only be assessed at EIA phase and must be assessed as part of the SEA as the findings could hold critical implications for the site selection.</p>	<p>ASHA Consulting: We have noted that various organisations should be consulted with regards to site selection. This is based on the presence of the RCBL in the region.</p>
Adeleen Cloete	118	Chapter 6	2-3/5	12/51		<p>As the Coastal Management Unit of the Provincial Department of Agriculture, we are responsible for coordinating the Provincial Coastal Committee (PCC) meetings. During the PCC meeting held on 31 July 2025, Aukotowa Fisheries Co-Operative raised a concern regarding the inefficiency of consultative processes. The decision taken at that meeting was that NCEDA should engage directly with the Aukotowa Fisheries Co-Operative prior to the next PCC meeting, which is tentatively scheduled for 29 October 2025.</p> <p>It is noted that line #51 in Chapter 6 indicates there have been interactions with the co-operative. However, as the administrators of the PCC platform, it is essential that this information is formally communicated and that an official response be provided to members of the platform.</p>	<p>Amethyst Independent Facilitation: The purpose of the stakeholder consultation undertaken in respect of the fisheries and coastal livelihoods study was not to usurp any other consultative processes running in parallel, but rather to understand who the stakeholders are that should be consulted in future EIA (and consultative) processes. i.e. the purpose here was to build an understanding of the system. Key stakeholders were approached in a semi-structured interview process to provide some details to build this understanding (related to who the stakeholders may be, their roles, relationships as well as the key livelihood activities in the area). Our key recommendation following the report is around the need for comprehensive stakeholder engagement in a cross-cutting EIA process (see p5, L 46-51; p6, L1-6), which consults widely with relevant stakeholders in a collaborative effort. We are unfortunately not involved in any processes around the PCC and cannot comment on that. Whilst we can confirm that some consultations did take place, we cannot divulge the details on such a public platform to ensure that we abide by ethical considerations around conducting this type of research.</p>
Adeleen Cloete	119	Chapter 6	13	6-2		<p>Conservation South Africa (CSA) has been promoting "blue economic development and conservation" along the Northern Cape coast, including conducting socio-economic baselines and skills audits. I noted that under Data Sources, organisations that provided information are not explicitly mentioned. Was CSA's data or work considered in this regard; maybe as part of the mentioned Conservation data source?</p>	<p>Amethyst Independent Facilitation: The CSA's data or work was not considered in the study as they did not emerge as a stakeholder, nor was the data in question made visible through the literature review. This is likely due to the fact that the CSA work in question is better aligned with the socio-economic chapter Work Package 2 (Atkinson et al., in press). In our chapter, we rather sought to (more qualitatively) understand the types of livelihoods and fishery activities and how these may be impacted by the proposed development. That said, this study should be read in conjunction with the socio-economic study.</p>
Adeleen Cloete	120	Chapter 6	27	24/25/26		<p>"The mining of minerals has played a central role in the historical development in the northern part of the west coast, where alluvial diamonds are extracted from the beaches and the sea between Alexander Bay and Port Nolloth". Are you suggesting that the northern part of the coastline is generally more developed than the southern part? This clarification may be useful since mining activities also occur south of Port Nolloth as indicated throughout the document and specifically in line # 31/32.</p>	<p>Amethyst Independent Facilitation: This sentence provides historical context to the activities that have taken place in the area of interest. It does not draw any comparison to the measure of development along the coastline in the Northern Cape. We take the point that the sentence may be misleading and have removed it from the report to clarify. The sentence in Line 23 (page 27) has been edited to read: "Mining activities are also prominent drivers of change along the coastline of the Northern Cape with alluvial diamonds extracted from the beaches and the sea between Alexander Bay and Port Nolloth (Britz et al., 2000; Municipalities of South Africa, 2024)."</p>
Adeleen Cloete	121	Chapter 6	41	26		<p>Mitigation approach: "Focus on protecting traditional coastal access, strengthening local skill sets, integrating affordable housing solutions, preserving cultural heritage, and safeguarding sensitive marine ecosystems".</p> <p>I would like to reiterate the importance of promoting coastal access along the Northern Cape coast. It is identified as the number one priority in the Northern Cape Coastal Management Programme, particularly given the historical restriction of access due to exclusive mining rights in the region.</p>	<p>Amethyst Independent Facilitation: We agree entirely with the need to protect traditional coastal access and use, given the historical displacement that has already taken place in the area. Our results show that traditional coastal users and fishers, in addition to already being squeezed out of many regions, face ever-increasing competition for space (so-called coastal squeeze).</p>
Adeleen Cloete	122	Chapter 6	42	6-10		<p>Consider the following documents, specifically as it relates to coastal access, in the recommendations: a) National Strategy for the facilitation of Coastal Access in South Africa b) Northern Cape Coastal Management Programme (specifically the recommendations related to the facilitation of coastal access).</p>	<p>Amethyst Independent Facilitation: Unfortunately, we were unable to source those two specific documents via a desktop search. We did however, consult the Draft National Coastal Management programme for 2025 that was gazetted in March 2025 and have ensured the recommendations we make are aligned with the Priority areas outlined there. We have updated Table 6-10 accordingly, paying particular attention to the issue of coastal access. The recommendation around coastal access now reads: "Include local farmers and fishers in SEZ planning; guarantee safe, equitable public access to coastal public property by designating and maintaining coastal access land and integrating access routes and points into municipal by-laws and zoning; secure all-weather access to landing and market points; protect ecosystems and coastal water quality; and consider alternative livelihood opportunities such as aquaculture."</p>
Adeleen Cloete	123	Chapter 6	43	10/11/12		<p>An aspect that has been discussed in the Coastal Management field is the bias towards the natural/environmental sciences. I would thus like to reiterate the importance of the mitigation approach: "communities should be included from the project design stage, where their needs must be specifically incorporated in planning processes".</p>	<p>Amethyst Independent Facilitation: We completely agree, and hope that our more 'people' people-forward contribution underscores that people-centred decision-making, underpinned by meaningful collaboration from the onset are not only in the best interests of communities, but also the environment and eventual success of any development action.</p> <p>Karoo Development Foundation: Work Package 2 (Socio-economic chapter) argues for a robust public participation process, where stakeholders' interests and perspectives can be captured in the planning process.</p>

Walter Steenkamp	124	Chapter 6	Page 3 & 4	30-35		These ecosystems are one of the most important ecosystems for the people on the west coast. As the fish comes from the north the impacts of the development will hold so much strain on the fish as they travel from Namibia to this side, meaning that there will be no more fish for fishers to sustain their livelihoods and as a result the next generation will never be able to experience this live and culture that goes hand in hand with it. As you know these species communicate through sound and the type of machinery that will be used for this development will damage the fish and can also lead to their deaths. It will interrupt the cycle of live as we as humans live through and from these species. Climate change and mining restrictions already have fishers in the positions of limiting options, as GHGs are becoming more and more and the sea days are becoming less for fishers to be able to meet targets and provide for their families. We are already experiencing a problem with the water quality as well as the availability of it, how is this not going to impact us in these affected communities? People already don't have the money to buy water how are they going to manage it if the water is not in a good condition to wash with it or to drink it. There are so many problems that goes with water pollution and degradation of water systems. Water is a constitutional right and so is the right of health as stated in Section 27 of the constitution, as well as children rights, the right to life, because these water pollutions and problems can lead to the death of our people that is already struggling with water especially the 4 towns in the Richtersveld. The loss in biodiversity means that our marine live and ecosystems are damaged and Section 24 indicates that we have a right to the environment that is not harmful we live in harmony with these ecosystems and the environment. We as the custodians of the oceans feel it is our pride and joy to defend our marine live and make sure that our coastal line thrive! As soon as all of these developments start, there will be a big strain on the existing community " this could risk raising poverty values and living costs, pricing out long-standing residents, and eroding traditional livelihoods." Social inequalities can become one of the most dangerous events in towns like Port Nolloth & Alexanderbay. Culture holds a very big part of our fishing communities, we as fishers have a bond with the ocean that only the locals can understand, "my body is full of sea water not blood". The relationship we as fishers share with the ocean creates a sense of pride and freedom to become one with the ocean when we go out to fish. We are generational fishers our fathers, grandfathers, great-grandfathers, uncles, aunts has always been part of the fishing community, we are a legacy and our kids are the generation of tomorrow. We are proud fishers! As you know the area between St Helena Bay and the Orange river is an important nursery ground and the main area for recruitment for all small pelagic species on the Southern Africa coastal shelf as well as the hake species. " The area north of Port Nolloth is also known to have a high average density of shallow water hake ", this indicate how rich these areas are in biodiversity and how this can impact these ecosystems we are trying to conserve.	<p>Karoo Development Foundation: There is always an inherent tension between different industries, e.g. building a shopping centre (retail) near a park (environmental greening), or a factory near a residential area. The only way to resolve this is by including all the potential stakeholders (e.g. fishers who want to continue their chosen livelihood, as well as unemployed people looking for training and a job). The challenge is to reconcile these different interests imaginatively and creatively. Step one is to actually listen to all these stakeholders. That is why Work Package 2 argues for a very robust public participation process. Spatial planning would be an important component to try to reconcile these interests.</p> <p>Amethyst Independent Facilitation: Agreed, a fisheries study at the scope that was required was beyond the purview of the current study. We have recommended that a specialist fisheries study must be undertaken to exactly understand the dynamics of the local (and potentially distant, but impacted) fisheries before any Environmental authorisation is provided (See p 5, 140-45).</p> <p>Anchor Environmental Consultants: The SEA is not a decision-making process, nor does it authorise any development to proceed. Its purpose is to provide an integrated, high-level decision-support framework based on the best available knowledge. As such, it does not replace or constitute a project-level Environmental Impact Assessment (EIA). The SEA is an upstream tool intended to identify key environmental sensitivities, potential risks, and topics requiring more detailed investigation during subsequent project-specific studies.</p> <p>Accordingly, the full assessment of construction phase impacts, such as underwater noise, vessel traffic, turbidity, and potential pollution effects, will be undertaken during the EIA phase, once detailed engineering designs and construction methodologies are available. At this stage, these issues, including underwater noise, water quality, and fish nursery sensitivities, have been considered at a broad, strategic level only.</p> <p>Similarly, we have evaluated the major fisheries operating in the area and outlined potential negative consequences; however, without detailed project information, it is not yet possible to quantify impacts or propose specific mitigation measures. These aspects will be addressed comprehensively in the next phase through project-level EIAs.</p> <p>CSIR: Water use: producing 1 kg of hydrogen requires at minimum approximately 25 litres of water, in a water scarce country like South Africa, it is unlikely that water for hydrogen production will come from surface- or ground water. Water should rather come from desalinated seawater or treated waste water. The impacts emanating from desalination is well known and can be mitigated through good design and practice. Desalination facilities can also be oversized with surplus water made available to local communities, agriculture or other uses. This is explored more in WP2.</p>
Bronwyn van Neel	125	Chapter 6	29	37-46		Section 24(b) of the Constitution states clearly: everyone has a right to have the environment protected, for the benefit of present and future generations, through reasonable legislative... " funny enough a few years ago there was people from Kimberly sent to study aboard was one of Port Nolloth/ Richtersveld children included in that? did we know about this? no so how before you even ask for permission from the community these things are already in place? how is it that the people who are most affected by these so called developments are always the last know but first to die? why are people constitutional rights being violated for profits? how is it that only some people have details and the community are in the dark? Section 32: access to information states that the community have the constitutional right to information!	<p>Karoo Development Foundation: In the past, large projects were implemented without SEAs or public participation. It is now expected that SEAs are conducted to collect all the relevant information, and then that a robust public consultation process is undertaken. This will only happen once the SEA is completed. The SEA does not argue for the proposed project. It only explores what the likely consequences will be if the projects are implemented. It therefore puts helpful facts on the table.</p> <p>Amethyst Independent Facilitation: The purpose of the SEA is not to do the stakeholder consultation process, rather to provide guidance to the detailed EIA process where stakeholder consultation is mandated. Unfortunately, we cannot account for any omissions around community engagement that has already occurred. We completely agree that meaningful stakeholder consultation is a crucial first step in any development planning process (see page 5), and that communities affected by developments must be viewed as collaborators who are consulted throughout any planning process to ensure that community interests are protected (see Chapter 6 p 6).</p> <p>CSIR: The SEA is not a decision-making process and the SEA does not result in a decision for any development proposals to proceed or not. The SEA aims to develop an integrated decision-making framework to guide the planning based on current knowledge and understanding. The SEA conclusions and recommendations, drawn from a credible and transparent SEA process, are recorded and published and is intended to provide a reference point of departure (information) for stakeholders (incl. e.g. Government, authorities, decision-makers, project proponents, assessment practitioners, and communities) involved in future policy planning, site- and project, specific planning and EIA.</p>
Bronwyn van Neel	126	Chapter 6	30	29-50		Section 27(c) states that everyone has the right to have access to social security, fishing is these fisheries social security it is how they are keep their children, which violates a whole another right. These are already struggling to put food on the table to be able to sent their children to school. All of these seismic surveys already has such a big impact on how the fishers income is, there was a whole season that the fishers couldn't caught fish because there was NOTHING. those people where struggling because there is no safety net for them, what do you think will happen when this development comes? where will that leave them? general workers? The inequalities will tear the community apart which has its own problems... and section 9 clearly states equality!	<p>Karoo Development Foundation: Work Package 2 (Socio-economic chapter) argues for a robust public participation process, where stakeholders' interests and perspectives can be captured in the planning process. One of the factors is whether the fishing industry is sustainable in the long term, and if so, how it can be protected. If it is not sustainable, it is important to consider other economic options such as the port and energy production.</p> <p>Amethyst Independent Facilitation: This Section 27-C refers to the responsibility of government to provide social security measures should the person/s be unable to support themselves... "social security, including, if they are unable to support themselves and their dependants, appropriate social assistance." We agree with this principle but compelling the government to act on its promises or to evaluate the government's ability to fulfil its mandate, is not within the scope of this study, despite the conflation of livelihood and social security in this comment.</p>
Bronwyn van Neel	127	Chapter 6	39		BOX SPM 25	The CPA is not suppose to talk for the people as the people didn't elect them, and also are fighting for them to get of the governance structure as they are not making decisions that benefits the communities of the Richtersveld they are not consulting communities on these decisions, and only makes decisions that benefits them and the government.	<p>CSIR: Box SPM 25 is not relevant to Chapter 6, but rather to Chapter 4 (Biodiversity Offset Framework), which refers to the important role of landowners (be it an individual, a community, the state or a company) in terms of designing and implementing biodiversity offsets (refer to WP1, Chapter 4 Section 4.4.6 "Institutional options for offset implementation", pg 4-27. It must be noted that the reference to the CPA in this context relates solely to its role as the landowner entity, to be consulted, together with other relevant community structures. The text has been revised and rephrased to clarify this distinction.</p> <p>Karoo Development Foundation: This is a very important and problematic consideration. The public participation process will need to engage people beyond simply talking to the CPA leaders. The method to do this will have to be discussed during the design of the public consultation process. That is why professional mediation services will need to be recruited for the process. Those specialists will need to be able to speak Afrikaans well.</p> <p>TPNA: Undertaking the SEA, all the affected communities of the Richtersveld were engaged during the public consultation.</p> <p>Amethyst Independent Facilitation: This box is in the summary to policymakers and is not related to the Chapter 6 study.</p>
Bronwyn van Neel	128	Chapter 6	41	12- 22		NEMA Biodiversity Act, 2024:section 2 PROVIDE FOR THE MANAGEMENT AND CONSERVATION OF SOUTH AFRICA'S BIODIVERSITY WITHIN THE FRAMEWORK OF THE NEMA ACT.	<p>Amethyst Independent Facilitation: Although the bill recognises the importance of biodiversity planning and decision-making as well as acknowledging the critical, biodiversity protections rooted in traditional, cultural and spiritual systems, it does not provide the necessary, defined legislative parameters for the protection of biodiversity, envisioned by section 24(b) of the constitution. The reasons being: 1. the vagueness of the parameters and timing of ministerial regulations; 2. it provides only a few circumstances which would oblige the minister to act, and 3. public participation requirements relating to administrative action taken by the executive are substantially weakened. As such the bill merely provides a framework for detailed regulations which may be issued by the minister in future.</p> <p>CSIR: The 2024 Biodiversity Bill is not yet promulgated in law. Once enacted, will repeal and replace the current NEM-Biodiversity Act 10 of 2004.</p>
Natural Justice	129	Chapter 6	6-1 to 6-5	10-45		<p>Unsubstantiated Portrayal of "Low Fishing Activity"</p> <p>The SEA acknowledges that "comprehensive data on local small-scale fisheries operating between Port Nolloth and the Orange River mouth are limited" (Ch 6 p. 6-3), yet proceeds to make generalised claims about low fishing activity near Boegoebaai. This assertion is unsupported by field data or engagement with recognised fishing cooperatives such as <i>Alexander Bay Small-Scale Fishers Cooperative</i>, <i>Port Nolloth Fishers Association</i>, and <i>Ekteerfontein Women Fishers Collective</i>. By failing to identify or quantify the number of active fishers, catch effort, gear type, or seasonality, the SEA contravenes s 240(1)(b) NEMA (requirement for sufficient information and s 240(c) NEMA, which mandates equitable access to environmental resources. This omission also violates s 7(2) of the <i>National Small-Scale Fisheries Policy 2012</i>, which requires participatory baseline assessments before decisions affecting livelihoods are made. The record thereby marginalises the very communities most dependent on the coastal commons.</p>	<p>Karoo Development Foundation: Note that the SEA is not a decision-making process. It is aimed at putting scientific data and possible causal impacts on the table, so that a consultation process can take place. On the basis of that process, decisions will be taken by a range of key stakeholders. That is the most inclusive manner that any developmental project can be undertaken.</p> <p>Amethyst Independent Facilitation: According to the Department of Forestry Fisheries and the Environment only two fishing cooperatives were registered for the Northern Cape coast, Aukotowa fishing cooperative and the Longtime Hondoklabaai fishing cooperative. We engaged with these cooperatives using semi-structured interview guidelines and some of the information mentioned in this comment is available in Ch 6, Table 64 on p 6-28. We can also provide information on the number of active fishers in each cooperative. We also drew on the latest information available from the National Biodiversity assessment. However, one of our key recommendations is that a specialist fisheries study must be commissioned as part of the EIA processes to fully understand local fishing dynamics (See p 5, 140-45). Another key recommendation is that an integrated assessment and governance mechanism for the proposed development include marine spatial planning that ensure access corridors for small-scale fishers and reduce encroachment by incompatible marine industries to guarantee spatial justice for small-scale fishers. (p 6, 131-34).</p>
Natural Justice	130	Chapter 6				<p>Loss of Access and Erosion of Customary Use</p> <p>The SEA notes that "no section of port and associated security zones may temporarily restrict access to certain coastal areas" (Ch 6 p 6-9) but fails to evaluate the permanent exclusion zones that will result from a fenced deep-water port, breakwater, and storage facilities. For fishers operating from small boats and shore-based collection points, even limited restrictions translate into loss of access to launching sites and customary harvesting zones.</p> <p>Under s 13(2) of the <i>Integrated Coastal Management Act 24 of 2008</i> (ICMA), coastal public property must remain accessible to all citizens, and any limitation requires a lawful and proportionate justification. No such justification or mitigation plan is provided. In <i>Kiogo Municipality v Beilgron</i> 2012 (2) SA 95 (SCA), the Court affirmed that exclusion from coastal property without due process constitutes an infringement of public-trust obligations. The SEA's silence on permanent exclusion zones therefore breaches both constitutional access rights (s 24 & s 33) and ICMA's public-trust principle.</p>	<p>Amethyst Independent Facilitation: We agree entirely with the need to protect traditional coastal access and use, given the historical displacement that has already taken place in the area. Our results show that traditional coastal access and fishers, in addition to already being squeezed out of many regions, face ever-increasing competition for space (so-called coastal squeeze). Also see our recommendation on p 6, 131-34 "Integrate ecosystem-based Marine Spatial Planning. Marine spatial planning linked to the SEZ should prioritise ecosystem function, fisheries nursery areas, and connectivity. Special attention must be given to ensuring spatial justice by maintaining or restoring access corridors for small scale fishers and reducing encroachment by incompatible marine industries."</p>
Natural Justice	131	Chapter 6				<p>Socio-Economic Marginalisation of Nama and Fishing Communities</p> <p>Table 6-1 lists employment opportunities but provides no disaggregated data on gender, traditional livelihoods, or local ownership. The SEA assumes that jobs generated by the SEZ will compensate for fisheries disruption, an assumption unsupported by socio-economic modelling. According to Appendix 6a p. 18, "most small scale fishers in Port Nolloth and Alexander Bay rely on seasonal line-fishing, crayfish collection, and informal seafood trade." These livelihoods are culturally embedded and inter-generational; they cannot be substituted by short-term construction labour.</p> <p>Section 24(d)(d) <i>NEMA</i> and s 196(1)(e) of the <i>Constitution</i> require decision-makers to promote social equity and redress past disadvantage. Failure to evaluate distributive impacts on historically marginalised Nama fishers perpetuates structural inequities, contravening the Just Transition principles in the <i>National Climate Change Response White Paper 2011</i> and <i>Just Transition Framework 2022</i>. The SEA thereby misrepresents the socio-economic trade-offs at stake.</p>	<p>Amethyst Independent Facilitation: It was not our intention to imply that the job opportunities created by the SEZ would compensate fishing disruption but simply that it would create opportunities for people currently unemployed in Port Nolloth and Alexander Bay. Our recommendation regarding job creation is that an agreement is reached to the effect that the local community would benefit from longterm jobs created by the SEZ (p 6, 126-30).</p> <p>Karoo Development Foundation: The socio-economic dimensions are discussed more fully in WP2. There are numerous livelihood-related issues at stake: Recruitment, training (or cumulative re-training and upward mobility), salary levels, and diversification of the local and regional economy.</p>

Natural Justice	132	Chapter 6				Gender and Informal Livelihoods Excluded from Analysis Appendix 6b notes in passing that “women occasionally participate in the harvesting of mussels and seaweed” (p. 11), but no further consideration is given to the gendered division of labour or the dependence of women on intertidal resources for food security and income. In many Nama coastal settlements, women lead informal micro-enterprises involving seaweed drying, bait collection, and coastal tourism. The SEA’s failure to map or quantify these contributions renders its socio-economic assessment incomplete and gender-blind, undermining the equality guarantee in s 9 of the Constitution.	Amethyst Independent Facilitation: The purview of this chapter is to establish how the coastal livelihoods of these communities will be affected by the SEZ and to identify relevant stakeholders to be included in the consultative process and stakeholder engagement. To this end one of our key recommendations is that: “A formal, cross-sectoral platform that is representative of all stakeholders should be created to facilitate early warning, spatial planning, conflict mediation,” (p5, 146), and that special effort should be made to include women, youth and previously marginalised members of the community (p5, 148).
Natural Justice	133	Chapter 6				Ignoring Cultural and Spiritual Dimensions Commons Neither the SEA nor its appendices address the customary marine tenure of Nama communities, whose identity and oral traditions are inseparable from the coast. Sites such as Boegoeberg se Baii and Alexander Bay feature in local cosmologies as ancestral fishing grounds. Failure to document or respect these associations contravenes s 30 and s 31 of the Constitution (cultural and language rights), JILRA 1996 (consent for deprivation of customary land use), and UNDRIP Art. 25, which recognises Indigenous peoples’ rights to maintain spiritual relationships with their coastal territories. An SEA that omits this dimension erases intangible heritage violating the NHRA and s 24(f)(i) NEMA , which requires recognition of community knowledge systems.	Amethyst Independent Facilitation: We agree entirely with the need to protect traditional coastal access and use, given the historical displacement that has already taken place in the area. Our results show that traditional coastal users and fishers, in addition to already being squeezed out of many regions, face ever-increasing competition for space (so-called coastal squeeze). ASHA Consulting: Our desktop review (which included extensive archaeological data from Namaqualand) has shown, perhaps surprisingly, that fish bones are very rare in archaeological sites, despite abundant terrestrial fauna. This suggests that the connection to fishing is relatively new and highlights the importance of oral history when full assessments take place. This has been reflected in the report.
Natural Justice	134	Chapter 7	7-2	8-9		The balance between economic growth, environmental protection and social progress for a long-term license to operate cannot be evaluated as no economic or social report are included. A license to operate should be based on principles of energy justice being 1. distributive, procedural, restorative, recognition and cosmopolitan. (See Helfton “Resolving energy policy failure: Introducing energy justice as a solution to achieve a just transition” https://www.sciencedirect.com/science/article/pii/S0301421524000624). To ensure energy justice is being achieved please see preliminary energy justice checklist, page 441, B Sovacool & M H Dworkin “Energy justice: Conceptual insights and practical applications” (2015) Applied Energy 142 435 – 444 437, https://el.stichting.nl/app/uploads/2022/08/Sovacool_Dworkin-AE-Justice20190902-14416-15urg3-with-cover-page-v2-1.pdf .	CSIR: Socio-economic risks and opportunities are explored systematically, and at great length, partly (over 33 00 ha) in Chapter 6 Work Package 1 (Gammage et al., 2025) and then fully (over 6 000 000 ha) in Chapter 7 Work Package 2 (Atkinson et al., in press). Karoo Development Foundation: These matters are addressed in WP2, although not particularly from a “natural justice” point of view. However, there are numerous ways in which natural justice issues could be included in a thorough public consultation process, particularly if facilitated by mediation professionals. This should entail the benefits, costs and trade-offs between various desiderata. At what point would people agree that a hard choice has to be made between two or three valuable things (e.g. jobs and environmental management)? Before we get to that choice, what innovative options can be identified to promote the simultaneous promotion of those values? Where values are indeed at odds with one another, how can the damage be limited, reduced or mitigated ? For example, if environmental damage is unavoidable in one location, can this be counteracted by adding to conservation areas in another location? This will require multi-sectoral and multi-institutional task teams to grapple with options - and these teams could work in parallel with a broader consultation process.
Natural Justice	135	Chapter 7	7-3 7-9	5-6	Table S-1	The key criteria for achieving sustainable outcomes for social dimension are lacking in consideration of community well-being, including SDG 6 and 7 which relate to water and energy. This is specific to access rights of communities, with South Africa needing to prioritise addressing issues of energy poverty and water access through development. For access to electricity, see report See “Ledger & M Rampell Hungry for Electricity (PARI, 2022) and for access to water see SS Tshona; S Lungisi; L Mgebeba Thirsting for solutions: Unpacking inadequate water provision in rural communities (2023) https://apsdpnr/index.php/apsdpnr/article/view/873/1727 . The image on page 1–4 in Figure 1–1 seems to indicate that local communities will be supplied with water supply but with no details in the reports on this. Excess power is only shown in the same image as going to grid or other users. Basic services for communities are a social good and should not be commodified - (See Natural Justice “Right to Sustainable Energy” https://naturaljustice.org/the-right-to-sustainable-energy/).	CSIR: WP1 SPH Fig 1-1 does indicate possible water supply to local communities. The rationale is that producing 1 kg of hydrogen requires at minimum approximately 25 litres of water, in a water scarce country like South Africa, it is unlikely that water for hydrogen production will come from surface- or ground water. Water should be sourced from desalinated seawater or treated waste water. The impacts emanating from desalination are well known and can be mitigated through good design and practice. Desalination facilities can also be oversized with surplus water made available to small and remote local communities or other uses. This is explored more in WP2 of the SEA. Karoo Development Foundation: These important infrastructural matters are discussed more fully in WP 2. The SEA aims at putting relevant facts on the table, as well as indicating potential causal chains. Desalination projects can be designed and oversized to provide usable fresh water to surrounding communities. However, there is a challenge of managing the by-product of desalination, i.e. a strong salty (brine) water. In many cases, this is discharged back into the ocean, but this can damage ecosystems on the ocean floor. There are various alternatives to the brine disposal problem, including surface water discharge and deep-well injection, and increasingly through advanced treatment technologies and resource recovery efforts to minimize environmental impact and achieve Zero Liquid Discharge (ZLD). The ultimate goal of modern brine management is to transform it from a hazardous waste product into a valuable resource, closing the loop on the desalination process and enhancing overall sustainability (Source: A Panagopoulos, K Haralambous and M Louizidou, Desalination brine disposal methods and treatment technologies – A Review, In Science of the Total Environment, vol. 693, Nov 2019, https://doi.org/10.1016/j.scitotenv.2019.07.351). GH2 is generally not considered a cost-effective or efficient option for household or community electricity supply. Direct renewable electricity (e.g. solar PV) or battery-based systems remain far more competitive for most domestic and small-scale applications. However, in special circumstances, such as very remote communities located far from grid access, hydrogen can form part of a hybrid off-grid system. In such cases, hydrogen storage and fuel cells may serve as a backup when solar energy is unavailable, although these solutions remain costly and are not widely deployed. A study in a rural Eastern Cape clinic, for example, found that hydrogen-based hybrid systems only became cost-competitive when the distance to the nearest grid connection exceeded approximately 9 km (TR Ayodele, TC Mosetsho, AA Yusuf and ASD Oganjuvigho, Off-grid hybrid renewable energy system with hydrogen storage for South African rural community clinic, International Journal of Hydrogen Energy, vol. 46, 2021, https://doi.org/10.1016/j.ijhydene.2021.03.140). Corporate Social Responsibility initiatives may also offer opportunities to pilot such hybrid systems in the vicinity of the Boegoebaai project, but these would represent exceptional cases rather than widely viable local applications of green hydrogen. CSIR Sustainable Port Planning Authors: SDG 6 and 7 was added to community well-being sustainability outcome (Social), and made more explicit in the key criteria. The purpose here was to provide high-level practical guidance on key criteria and best practice that should be considered and adhered to during future port planning, development and operations, should it go ahead, to claim sustainability.
Natural Justice	136	Chapter 7	7-4 7-9 7-20	5-6 3-4	Table S-4	This is one example of vague usage of the term “employment opportunities” with no clarity on what jobs and for who. Should a license to operate be needed (See “The Power of Energy Justice and the Social Contract” https://link.springer.com/book/10.1007/978-3-031-46282-5) there needs to be more clarity and transparency on this aspect. In previous projects, there have only been low skilled jobs made available to communities, which are short-term. In addition, communities are forced to share resources with movement of people who come for are brought for jobs. This aspect of social impact has not been considered, and no consideration has been given to whether services will be adequate as communities grow. Proper consultation and inclusion of communities is essential for a project’s success and if not done, could result in delays and higher costs. This not only includes social impacts but consideration of land issues and usage (See H Hussein “Land for Clean Energy Projects: For Community” https://www.researchgate.net/publication/376169499_Land_for_Clean_Energy_Projects_For_Community_Energy); https://www.ftps.org.za/images/Scaling_the_Just_Transition_for_community_based_and_community_placed_projects_Fumanani_Mtsheni_Knowledge_Pole.pdf ; P Khangirwe “Social impacts arising from road infrastructure projects in Sub-Saharan Africa: better management of social issues is needed in road construction, upgrading and rehabilitation” https://www.tandfonline.com/doi/full/10.1080/14615517.2024.2385877	Karoo Development Foundation: The economic impacts are discussed more fully in WP2; this includes patterns of in-migration, as well as possible return of many Namaqualanders who have left the region in search of work elsewhere. These impacts are likely to be complex and nuanced. CSIR Sustainable Port Planning Authors: This purpose of this report was not provide a detailed sustainability assessment of the Boegoebaai Development. Rather it provide high-level practical guidance on key criteria and best practice that should be considered and adhered to during future port planning, development and operations, should it go ahead, to claim sustainability. Should it be decided to proceed with this development, a detailed EIA process must be undertaken, including a detailed analysis of job opportunities, spanning various skills levels and including proper consultation and inclusion of communities. TNPA: It is important to note that the current SEA is a strategic-level assessment. Detailed socio-economic analysis, employment planning, service capacity evaluation, and land use considerations are typically undertaken during the business case development phase. This phase allows for deeper engagement with affected communities, identification of specific job types and skills requirements, and planning for infrastructure and service needs.
Natural Justice	137	Chapter 7	7-11		Table 7-1	To ensure that there is co-creation, communities require respect of the Constitutional right to access to information (As in the Promotion of Access to Information Act), including transparency.	CSIR Sustainable Port Planning Authors: Added Constitution and Promotion of Access to Information Act to Table 7-4.
Natural Justice	138	Chapter 7	7-12		Table 7-1	Avoidance of impacts should apply not only to the port, but the full project including the SEZ.	CSIR Sustainable Port Planning Authors: This report specifically addresses sustainability planning of the port. However, the high-level practical guidance on key criteria and best practice could easily also be applied to the full project including the SEZ
Natural Justice	139	Chapter 7	7-16		Table 7-4	Included should be the Constitution, specifically the following rights which needed to promoted and respected Section 2 Supremacy of the Constitution, Section 8: Application, Section 9: Equality, Section 10: Human Dignity, Section 11: Life, Section 12: Freedom of security of the person, Section 15: Freedom of religion, belief and opinion, Section 16: Freedom of expression, Section 17: Assembly, demonstration, picket and petition, Section 22: Freedom of Trade, occupation and profession, Section 24: Environment, Section 25: property, Section 26: Housing, Section 27: Health care, food, water and social security, Section 28: Children, Section 29: Education, Section 30: Language and culture, Section 31: Cultural, religious and linguistic communities, Section 32: Access to information, Section 33: Just administrative action, Section 34: Access to courts and section 152: Objects of local government.	CSIR Sustainable Port Planning Authors: Added Constitution and Promotion of Access to Information Act to Table 7-4.
Natural Justice	140	Chapter 7	7-20	12-17		For any source of finance to be sought, economic viability needs to be shown. However there is no report or section on this in respect of the port and SEZ.	CSIR Sustainable Port Planning Authors: This purpose of this report was not to provide a detailed sustainability assessment of the Boegoebaai Development. Rather it provides high-level practical guidance on key criteria and best practice that should be considered and adhered to during future port planning, development and operations, should it go ahead, to claim sustainability. Should it be decided to proceed with this development, a detailed EIA process must be undertaken, including detailed studies on finances and economic viability (Economic dimension).
Natural Justice	141	Chapter 7	7-24		Table 7 - 6	SDG 6 and 7 is omitted under “Social”.	CSIR Sustainable Port Planning Authors: SDG 6 and 7 was added to community well-being sustainability outcome under “Social”
Natural Justice	142	Chapter 7	7-30		Table 7 -11	Trade unions in respect of the just transition should be included in constructive dialogues between employer and employee. This is specific in respects of transitioning away from fossil fuel industries to green energy.	Karoo Development Foundation: This is an important point, which is not debated in Work Package 2 (although the interests of various stakeholder groups are considered). It is likely that employees in the Port or GH2 projects (if they were to proceed) will become unionized over time, which will increase their bargaining power. CSIR Sustainable Port Planning Authors: Added as a proposed activity to SDG 8 under “Social” TNPA: This is new port development , as such it is aimed at complementing and not replacing fossil fuels. Part of the development still includes fossil fuel base for the liquid bulk industries.

Natural Justice	143	Chapter 7	7-31		Table 7 -11	Under gender equality, there should be promotion of gender equality. Gender neutrality will not address the issue of gender equality. (See Natural Resource Governance Institute "Fostering Gender-Just Energy Transitions in Mineral and Fossil Fuel-Producing Countries" Spark_Partner_Publications_Fostering_Gender_Just_Energy_Transitions_Mineral_Fossil.pdf and Spark Website Spark	<p>CSIR Sustainable Port Planning Authors: Promotion of gender equality added under SDG 10 ("Social")</p> <p>Karoo Development Foundation: Job creation is more fully discussed in Work Package 2, although not much attention is paid to gender dynamics. This is largely because much of the modern economy is open to men, women and other gender communities, based on their level of technical and administrative skills. The real challenge is to maximise training opportunities for local people, so that they can enter on paths of career advancement.</p>
Natural Justice	144	Chapter 7	7-39		Appendix A	International obligations to include United Nations Declaration on the Rights of Indigenous Peoples and International Labour Organisation Convention, Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa, also known as the Maputo Protocol on Women's Rights, United Nations General Assembly Resolution The human right to a clean, healthy and sustainable environment (A/76/L.75). Under key national legislation should be the Constitution of South Africa and Promotion of Access to Information Act.	<p>CSIR Sustainable Port Planning Authors: Added to Appendices.</p>
Ann Friedberg on behalf of Alexander Bay Community	145					<p>2. About the Project and Who Benefits</p> <p>According to the information shared with us, the Boegoebaai development involves the use of approximately 40,000 hectares of restitution land for the construction of a port and infrastructure to produce green hydrogen. The main stakeholders include Transnet, Sasol, NCEDA, and the Richtersveld CPA committee. Although there is frequent talk of "job creation" and "development," the figures themselves show that most jobs will be temporary and low-paid, with only about 420 permanent positions, mostly for people with specialized skills from outside the region. Our people simply ask: Who benefits, and who pays the price?</p>	<p>Karoo Development Foundation: The matter is more fully discussed in Work Package 2. Significantly, the employment creation of the Port and GH2 project will be intensified by economic diversification, e.g. in the production of food for workers, providing accommodation, providing secretarial services, providing IT support, etc. The main challenge will be to encourage local enterprises to rise to the occasion and seize these new opportunities. This may require proactive funding, training and support.</p> <p>TNPA: It's important to note that the current SEA is a strategic-level assessment. Detailed socio-economic analysis, employment planning, service capacity evaluation, and land use considerations are typically undertaken during the business case development phase. This phase allows for deeper engagement with affected communities, identification of specific job types and skills requirements, and planning for infrastructure and service needs.</p>
Ann Friedberg on behalf of Alexander Bay Community	146	General				<p>3. Problems with the Consultation Process</p> <p>1. Language and Access: The report is available in English and mainly online. Many of us do not have access to the internet or computers, and meetings were often held virtually without local translations or summaries.</p> <p>2. Limited Engagement: The so-called public meetings were often small, unclear, and without real space for questions or objections. Representation: The CPA is presented as the voice of the community, but many members were not part of the decisions regarding the so-called "access agreement."</p> <p>3. Division: The process has created tension within communities and between towns. People feel decisions are being made in their name without their consent.</p> <p>4. No Consideration for Youth: There is no clear plan on how young people will be trained or involved, only vague references to possible training centers.</p>	<p>CSIR: Language, access and engagement: We acknowledge the concerns raised regarding the accessibility and inclusivity of the SEA process for the Boegoebaai project. We understand that the SEA report is technical and extensive. To address this, a Summary for Policymakers document was prepared as part of the SEA outputs in both English and Afrikaans with the intention of making the content more accessible. Recognising that these summaries may still be difficult to interpret or access, in-person presentations in Afrikaans were undertaken within the communities where both written and verbal comments were invited and captured. The feedback received was shared with the authors of the relevant chapters for consideration.</p> <p>Decision-making: The SEA is not a decision-making process and the SEA does not result in a decision for any development proposals to proceed or not. The SEA aims to develop an integrated decision-making framework to guide the planning based on current knowledge and understanding. The SEA conclusions and recommendations, drawn from a credible and transparent SEA process, are recorded and published and is intended to provide a reference point of departure (information) for stakeholders (incl. e.g. Government, authorities, decision-makers, project proponents, assessment practitioners, and communities) involved in future policy planning, site- and project, specific planning and EIA.</p> <p>Karoo Development Foundation: Work Package 2 argues for a robust and thorough consultation process, which should be largely in Afrikaans. This will take place after decision-makers have studied the SEA data, and we recommend that specialist mediators be tasked with the process of consultation.</p> <p>TNPA: It's important to note that the current SEA is a strategic-level assessment. As the project progresses into the business case and implementation phases, a proper and inclusive consultation process will be undertaken.</p>
Ann Friedberg on behalf of Alexander Bay Community	147	General				<p>4. Key Inputs and Concerns from the Community</p> <p>4.1. Illegal Land Leasing and Possible Expropriation</p> <p>The R3 per hectare mentioned as rental is unacceptable. It devalues land that generations have fought for. These transactions were made without proper consent from members, violating the principle of Free, Prior, and Informed Consent (FPIC).</p> <p>4.2. Environmental and Health Impact</p> <p>There is serious uncertainty about water usage, pollution, and possible radioactive or toxic waste. No clear plan is known for how waste will be handled or stored. The risks to humans, animals, and the sea are too great to ignore.</p> <p>4.3. Social and Cultural Effects</p> <p>The project threatens our heritage: graves, fishing spots, and cultural sites. These matters were not properly investigated or protected in the report.</p> <p>4.4. Unequal Economic Benefits</p> <p>The project promises development, but the pattern remains the same: big companies win, local people stay poor. There is no guarantee that income, infrastructure, or benefits will flow back to the community.</p> <p>4.5. Legislative Uncertainty</p> <p>The new CPA law and the Expropriation Act give too much power to the state and too little to restitution landowners. These changes could further weaken the community's rights.</p>	<p>CSIR: Environmental health and impact [water]: hydrogen production does require water. In a water scarce country like South Africa, it is unlikely that water for hydrogen production will come from surface- or ground water. Water should rather come from desalinated seawater or treated waste water. The impacts emanating from desalination is well known and can be mitigated through good design and practice. Desalination facilities can also be oversized with surplus water made available to local communities, agriculture or other uses. This is explored more in WP2 of the SEA.</p> <p>Environmental health and impact [waste]: The SEA considers potential risks relating to the marine, aquatic and terrestrial environments. WP1, Chapter 7 Sustainable Port Planning further highlights the requirement for good waste management practices (see SPM pg 42 line 22-38; and Chapter 7, Table S-2, Pg 7-3). Waste management plans are produced at project- and site specific stage when waste streams and quantities are known.</p> <p>Social and cultural effects: Refer to SEA WP1 Chapter 5 Heritage and Chapter 6 Fisheries and coastal livelihoods which investigates these issues.</p> <p>Karoo Development Foundation: The rental paid for land will need to be negotiated during a detailed consultation process, in the light of local land markets and the financial strength of the Boegoebaai project. It will need to balance factors such as the incongruence to the local community as well as the financial sustainability of the long-term arrangement.</p> <p>The distribution of benefits (and burdens) is often complex in industrial projects. Any development process can simultaneously undermine the position of some people, and promote the position of others, because of complex causal chains (linked partially, but not totally, to employment patterns; the employment question is discussed more fully below). In addition, there are other factors either promoting or reducing inequality. Inequality is promoted, for example, by people's different level of "uptake" of training and employment opportunities, linked to factors such as temperament, family circumstances, etc. Inequality is also promoted in property values: values will generally increase, and those who do not own property will thereafter find it more difficult to access the property market (unless they receive employment at high enough salary levels). Inequality can also be reduced by government and private sector interventions, such as corporate social responsibility (e.g. training, child-care, local energy options, transport subsidies from villages). This, in turn, requires Councilors, politicians and administrators to be proactive in identifying such opportunities; that, in turn, depends on community organisations making proposals and exerting political pressure to ensure that creative interventions are identified and implemented. Inequality is a challenge which can be addressed to ensure that "no one is left behind".</p> <p>The Expropriation Act does not necessarily imply state acquisition of land at no cost, or cost under market value. It is possible to determine the value of land in various ways: Productive use, environmental value (e.g. enabling transhumance practices), symbolic value, commercial land values of nearby privately-owned land, etc. These types of valuations must be discussed during the public consultation process. Land values need to be realistic (and preferably attractive) to both parties (buyers/renters and sellers/owners). There is a wide spectrum along which consensus can be reached, particularly if such processes are effectively facilitated by mediation professionals.</p> <p>TNPA: Land arrangements: The negotiations on the land transaction between parties has not commenced. The land valuation by professional land valuers is currently underway.</p>
Ann Friedberg on behalf of Alexander Bay Community	148	General				<p>5. Community Proposals and Alternatives</p> <p>1. Fix the Consultation Process: Hold accessible, multiple workshops in each town with translated summaries, visual aids, and time for questions.</p> <p>2. Strengthen Local Decision-Making: Decisions about land must be made at a General Annual Meeting (GAM) with a written resolution, not by a limited group of representatives.</p> <p>3. Capacity Building and Training: Start training programs immediately for local youth and women if there are any plans for future jobs.</p> <p>Independent Legal and Technical Support: The community must have access to independent advisors to understand the project's risks.</p> <p>4. Alternative Development: Build on what already exists — agriculture, livestock farming, small-scale fishing, and tourism — rather than alienating land for industrial use.</p>	<p>CSIR: Regarding SEA consultation: Outreach campaigns to share draft SEA outputs and receive inputs from local stakeholder were held in-person presentations in Afrikaans were undertaken within the communities where both written and verbal comments were invited and captured. Two-to-three hour sessions in Port Nolloth, Alexanderbay, Sanddrif, Kuppe, Lekkerbagg, Eksteenfontein, Springbok and Steinkopfer held 12-15 August 2025, the majority of the time being afforded for comments and questions from the audience. A summary for Policymakers document was prepared as part of the SEA outputs in both English and Afrikaans with the intention of making the content more accessible.</p> <p>Independent technical support: The SEA is coordinated by CSIR who is independent and by a team of experts who are also independent. The SEA conclusions and recommendations, drawn from a credible and transparent SEA process, are recorded and published and is intended to provide a reference point of departure (information) for stakeholders (incl. e.g. Government, authorities, decision-makers, project proponents, assessment practitioners, and communities) involved in future policy planning, site- and project, specific planning and EIA.</p> <p>Regarding longer term, broad based consultation processes that need to occur on masse, from now, decades into the future, please refer to guidance provided in Work Package 1 Chapter 6 and Work Package Section 2 Chapter 7.</p> <p>CSIR Sustainable Port Planning: Chapter 7 has incorporated capacity building and training as one of the considerations in the planning of a port (see p7-29). As indicated capacity development and training will relate to the implementation of sustainability criteria.</p> <p>Amethyst Independent Facilitation: The proposed development presents a clear opportunity to invest in local skills development, particularly for women, youth and other marginalised groups, to support livelihood diversification within and beyond the marine sector. The Fisheries and coastal livelihoods report (Chapter 6) explicitly recommends that a coastal livelihoods and fisheries capacity-building programme be developed in partnership with local institutions and delivered in flexible, localised formats to address existing barriers. In parallel, SEZ governance mechanisms should prioritise access to benefits for disadvantaged groups, including targeted access to training, employment and enterprise opportunities, with procurement and hiring policies that favour local co-operatives and small businesses.</p> <p>Karoo Development Foundation: The SEA process is a scientific endeavour. Proposals are made in WP2 for a proper consultation process, which should evolve into joint decision-making processes. Such a consultation process needs to be planned collaboratively between the project champions (e.g. NCEDA, Namaakwa DM, Nama Khoi and Richtersveld LMs, Transnet and the GH2 investors) and key representatives of local organisations (for example, communities, business, farming, churches). This would require "talks about talks", i.e. discussing how the process of public engagement should be conducted. Trade-offs will have to be made, e.g. in terms of time, cost and level of detail. For example, it is possible that some technical issues may be allocated to working groups for further examination, while community participation focuses mainly on the broad policy issues.</p>
Ann Friedberg on behalf of Alexander Bay Community	149	General				<p>6. Closing Statement</p> <p>We are not against development. We are against exploitation disguised as progress.</p> <p>The people of Alexander Bay say no to the Boegoebaai project as currently planned, and no to any decision made without our participation.</p> <p>We say yes to fair, community-based development that improves people's lives without losing their land, culture, or dignity.</p> <p>Respectfully, Alexander Bay Community On behalf of the residents of the Richtersveld</p>	<p>TNPA: The development of the port is not envisioned to exploit communities, it is aimed at boosting the local economy creating various opportunities across the value chain.</p>
Ann Friedberg on behalf of Sanddrif Community	150	General				<p>2. Nature of the Project</p> <p>According to shared information, the proposed development involves the use of approximately 40,000 hectares of land for the construction of a seaport, along with infrastructure for green hydrogen production and renewable energy. Transnet, Sasol, and the Northern Cape Economic Development Agency (NCEDA) have been identified as stakeholders in collaboration with the Richtersveld CPA committee.</p> <p>The scale of the project, as well as the lack of clarity regarding land use, environmental impacts, and future ownership, raises major concerns among residents.</p>	<p>CSIR: Environmental impacts: The purpose of the SEA is to assess, based on current knowledge, environmental and social sensitivities as well as the opportunities and risks associated with the proposed port, SEZ and green hydrogen-related development in the broader region (refer to SEA WP1 SPM pg12-16). It thus is an strategic processes towards identifying and clarifying concerns. The SEA conclusions and recommendations, drawn from a credible and transparent SEA process, are recorded and published and is intended to provide a reference point of departure (information) for stakeholders (incl. e.g. Government, authorities, decision-makers, project proponents, assessment practitioners, and communities) involved in future policy planning, site- and project, specific planning and EIA.</p> <p>TNPA: The land will be utilised to construct a port and SEZ with complimentary industries for beneficiation of products intended for local and export market.</p>

Ann Friedberg on behalf of Sanddrift Community	151	General				<p>3. Criticism of the Consultation and Participation Process</p> <p>Limited access to information: Most community members did not have access to the 1,000-page English document or the online meetings.</p> <p>Lack of transparency: Key information, such as the role of the Community Liaison Officer (CLO), the content of the access agreement, and financial arrangements with the CPA, was never clearly communicated to the community.</p> <p>Symbolic participation: Meetings are often presented as consultation, but decisions appear to have already been made.</p> <p>Division and mistrust: The process has sown division within the community, especially around the CPA and the legitimacy of existing agreements.</p>	<p>CSIR: Information: Concerns about the accessibility and inclusivity of the SEA process for the Boegoebaai project is acknowledged. We understand that the SEA report is technical and extensive. To address this, a Summary for Policymakers document was prepared as part of the SEA outputs in both English and Afrikaans with the intention of making the content more accessible. Recognising that these summaries may still be difficult to interpret or access, in-person presentations in Afrikaans were undertaken within the communities where both written and verbal comments were invited and captured. The feedback received was shared with the authors of the relevant chapters for consideration.</p> <p>Decisions: The SEA is not a decision-making process and the SEA does not result in a decision for any development proposals to proceed or not. The SEA aims to develop an integrated decision-making framework to guide the planning based on current knowledge and understanding. The SEA conclusions and recommendations, drawn from a credible and transparent SEA process, are recorded and published and is intended to provide a reference point of departure (information) for stakeholders (incl. e.g. Government, authorities, decision-makers, project proponents, assessment practitioners, and communities) involved in future policy planning, site- and project, specific planning and EIA.</p> <p>Karoo Development Foundation: These matters are discussed more fully in WP2. A significant challenge for public participation is that there are not currently organisational spokesmen for unemployed people, and so their interests tend to be underrepresented.</p> <p>TNPA: There is no decision been made pertaining to the project as it is still at a stage where viability is being assessed , the SEA aims at identifying the environmental impacts associated with the development to find mitigations.</p>
Ann Friedberg on behalf of Sanddrift Community	152	General				<p>4. Key Issues Raised by the Community</p> <p>4.1. Land Ownership and Expropriation</p> <p>The community believes that the proposed access agreement is illegal and that the project amounts to a form of re-expropriation of land already reclaimed by the Richtersveld community. The project benefits corporate interests, not the people who own the land.</p> <p>4.2. Unfair Compensation</p> <p>The proposed compensation of R3 per hectare is degrading and does not reflect the historical, cultural, or economic value of the land.</p> <p>4.3. Environmental and Health Risks</p> <p>There is great uncertainty about the impact of the project on water quality, radioactive and toxic waste, and the broader coastal ecosystem. There is no clear plan for waste management or protection of the sea and communities.</p> <p>4.4. Local Employment and Skills Development</p> <p>Experiences from other mining and construction projects show that local residents are not hired and that jobs go to outside workers. No real skills development plan for local people has been disclosed.</p> <p>4.5. Cultural and Social Impacts</p> <p>The project threatens graves, cultural sites, and heritage areas. There is no plan to protect this heritage or recognize community ownership.</p> <p>4.6. Political and Administrative Uncertainty</p> <p>The role of the CPA, the CLO, and the municipality is unclear and often contradictory. Community members do not know who truly has the mandate to speak on the behalf.</p> <p>4.7. Right to Self-Determination</p> <p>According to the FPIC principle (Free, Prior, and Informed Consent), the community has the right to decide what happens on their land. This right has not been respected in the current process.</p>	<p>CSIR: Environmental health and impact [water]: hydrogen production does require water. In a water scarce country like South Africa, it is unlikely that water for hydrogen production will come from surface- or ground water. Water should rather come from desalinated seawater or treated waste water. The impacts emanating from desalination is well known and can be mitigated through good design and practice. Desalination facilities can also be oversized with the surplus water made available to local communities, agriculture or other uses. This is explored more in WP2 of the SEA.</p> <p>Environmental health and impact [waste]: The SEA considers potential risks relating to the marine, aquatic and terrestrial environments. WP1, Chapter 7 Sustainable Port Planning further highlights the requirement for good waste management practices (see SPM pg 42 line 22-38; and Chapter 7, Table S-2, Pg 7-3). Waste management plans are produced at project- and site specific stage when waste streams and quantities are known.</p> <p>Social and cultural effects: Refer to SEA WP1 Chapter 5 Heritage and Chapter 6 Fisheries and coastal livelihoods which investigates these issues.</p> <p>Karoo Development Foundation: Inequality: These social issues are addressed extensively in WP2, as they impact the nearby Richtersveld communities, but also communities further afield, such as Port Nolloth, Springbok and other towns. Some comments regarding employment: These impacts are complex and diverse. The project can benefit local communities in various ways, particularly if local employment preference practices are emphasised (which can also be negotiated during the consultation process). Furthermore, the range of competencies for the Port and GH2 project will range from high-level technical skills (almost certainly imported from the cities or from other countries), at one extreme, to basic labourer tasks at the other extreme. Between these extremes will be a myriad functions of different levels of skill. Even within categories, there will be significant variation; for example, basic coal work could range from front-end labourers to supervisors and truck drivers. In addition, opportunities will be created in two ways: (a) By proactive technical and administrative training, whether provided by the company, TNET College or private trainers, as well as provision of financial aid to students; and (b) by jobs offered by secondary businesses (e.g. catering and transport). Unlike mining, industrial development has many diversification and multiplier impacts, which create a wide range of employment opportunities for different skills levels. However, there are always categories of people who will not benefit from employment, such as the elderly or people who are not temperamentally suited to training or industrial work. Nevertheless, with increasing employment in the new industries (at various wage levels), money will flow back to communities, which could stimulate local production (e.g. investment in agriculture) or local services (e.g. childcare). An important dimension would be the effort of the companies and government institutions to identify, fund and support potential training, internship and recruitment options for people in the district. We also need to distinguish between proactivetraining interventions (before the project is launched), short-term employment impacts (usually people with some skills already, such as electricians, but also labourers), medium-term employment impacts (school-leavers and employment people receive more training and internships, and then promotions), and long-term employment impacts (a wide range of employment opportunities at all levels, including companies providing support services).</p> <p>TNPA: The matters raised can be referred to the Department of Land Reform and Rural Development.</p> <p>Land arrangements: The negotiations on the land transaction between parties has not commenced. The land valuation by professional land valuers in currently underway.</p>
Ann Friedberg on behalf of Sanddrift Community	153	General				<p>5. Community Proposals</p> <p>1. Proper Consultation: That the CSIR and other stakeholders return to the community with accessible translations, short summaries, and visual aids so that people can truly understand.</p> <p>2. Public AGM (Annual General Meeting): To adopt a community resolution on participation or rejection of the project.</p> <p>3. Legal Advice: That the CPA obtain legal advice on the legality of the access agreement.</p> <p>4. Independent Monitoring: An independent body should monitor the consultation processes to ensure FPIC is upheld.</p> <p>5. Job Creation and Training: If any development is considered, local people must be prioritized for employment and training.</p> <p>6. Environmental Safety: No project should proceed without a clear waste management plan and independent environmental audits.</p>	<p>CSIR: SEA consultation: Outreach campaigns to share draft SEA outputs and receive inputs from local stakeholder were held in-person presentations in Afrikaans were undertaken within the communities where both written and verbal comments were invited and captured. Two-to-three hour sessions in Port Nolloth, Alexanderbay, Sanddrift, Kuboes, Lekkersig, Eksteenfontein, Springbok and Steinkopf wer held 12-15 August 2025, the majority of the time being afforded for comments and questions from the audience. A summary for Policymakers document was prepared as part of the SEA outputs in both English and Afrikaans with the intention of making the content more accessible.</p> <p>Karoo Development Foundation: FPIC and other consultation methodologies are discussed in more detail in WP2.</p>
Ann Friedberg on behalf of Sanddrift Community	154	General				<p>6. Conclusion</p> <p>The Sanddrift community says no to the current process and no to the Boegoebaai Port Development as it is currently presented. We say yes to development that is fair, transparent, inclusive, and ecologically accountable.</p> <p>We request that the CSIR take this input seriously and reopen the consultation process in a way that truly reflects what "community participation" ought to mean.</p> <p>With thanks, Sanddrift Community On behalf of the residents of the Richtersveld</p>	<p>TNPA: The development of the port is not envisioned to exploit communities, it is aimed at boosting the local economy creating various opportunities across the value chain.</p>
Johannes Steenkamp	155	General				<p>Boegoebaai project will have a big negative impact in our ocean and in our fishing communities in the northern Cape Port Nolloth. We say no for a project that will destroy our cultural live. The risk is to big for us and we consider global warming. And...</p>	<p>CSIR: The SEA explores aspects of the marine environment (see SEA WP1 Chapter 2), heritage and cultural heritage (see SEA WP1 Chapter 5) and fishing communities and coastal livelihoods (see SEA WP1 Chapter 6). Furthermore, WP2 will explore more broadly possible opportunities and risks of the proposed port, SEZ and green hydrogen-related development in the broader region, considering the existing climate change pressures.</p>
Louise Geldenhuys	156	General				<p>It is strongly recommended that all the conclusions and recommendations from the specialist studies be combined into a table in a summary document. This should ideally be discussed with the development planning structures to indicate how these recommendations will be implemented and taken forward in the planning process.</p>	<p>CSIR: The Summary for Policy Makers summarises all the conclusions and recommendations from all the specialist studies.</p>
Ina Basson	157	General				<p>CSIR: Kindly refer to SEA WP1 SPM, Table SPM5, pg 45, which presents a summary of the potential impacts and synthesises suggestions for management principles and actions which might mitigate negative impacts and enhance positive ones.</p>	<p>CSIR: Outreach campaigns to share draft SEA outputs of WP1 and receive inputs from local stakeholder were held in-person presentations in Afrikaans were undertaken within the communities where both written and verbal comments were invited and captured. Two-to-three hour sessions in Port Nolloth, Alexanderbay, Sanddrift, Kuboes, Lekkersig, Eksteenfontein, Springbok and Steinkopf wer held 12-15 August 2025 (WP1), the majority of the time being afforded for comments and questions from the audience. A summary for Policymakers document was prepared as part of the SEA outputs in both English and Afrikaans with the intention of making the content more accessible.</p> <p>WP2 outreach is planned to be held in early 2026 in Potladder (Khai-Ma), Garies (Kamiesberg), Port Nolloth (Richtersveld) and Springbok (Nama Khoi).</p>
Megan Cloete	158	General				<p>During last week's presentation, the Transnet representative neatly stepped into the trap.</p> <p>There is no justification for why the development of the harbour cannot happen at an existing port, where infrastructure already exists, and where there is supposedly no space for the necessary infrastructure for green hydrogen and ammonia.</p> <p>At existing ports, the land would be too expensive, and it would include land owned by white people.</p> <p>But here with us, Transnet assumes that communal land is cheap.</p> <p>This is not about shifting the breakwater a few hundred meters north or south.</p> <p>It's about the fact that it could shift a few hundred kilometers, and that other locations should also be considered.</p> <p>Why is communal community land always the first to be considered for development and expropriation?</p>	<p>CSIR: A TNPA presentation of the "Boegoebaai Port and Rail development site selection" was presented at the online Working Group meeting # 2 on 10 October 2024 and was made available here: https://www.csir.co.za/sites/default/files/2025-10/Appendix%20C_Overview%20of%20Boegoebaai%20Site%20Selection%20process.pdf</p> <p>The full report is available here: https://publishedtenders.blob.core.windows.net/publishedtenderscontainer/90837/Annexure%20D%20-%20Boegoebaai%20Case%20V21%2020.05.2020%20R01%20Final.pdf</p> <p>Karoo Development Foundation: The proposed Boegoebaai projects involve a strategic intersection between several sectors: Transport of mineral ore and the zinc mines at Aggenrys; a possible Strategic Economic Zone along this new route; and the possibility of a large South African GH2 investment, utilising a combination of sea water and reliable solar and wind renewable energy. This therefore involves a triad of mining, transport/shipping and industrial development. It is very difficult getting that combination in more developed areas, as surrounding land is already intensively developed. In the Boegoebaai case, there is also the possibility of an export facility for crop agriculture along the Orange River, which is a major growth point. It is doubtful if the price of land is a major consideration for the Boegoebaai proposition. The location of the site (along the coast, which also enables the export of GH2 and ore, where wind and solar energy can be generated, and the ease of planning a greenfield site) are likely factors that weighed much more heavily than land values. In addition, the Northern Cape Government has been looking for a major project to boost its economy, to diversify the province from mining, and to create employment at significant levels. Whether one agrees with these considerations or not, it is likely that they were much more significant than land values.</p>
Megan Cloete	159	General				<p>The whole of the 1014 pages constitute a good bio physical SEA but not a real SEA also addressing social and economic aspects of ecological impacts</p> <p>a SEA properly defined and as envisaged by the DEAT in 2004 should go much further. Below appears some of the defining characteristics of the sustainability SEA in the literature uniquely for South Africa strengthening project-specific EIA:</p> <ul style="list-style-type: none"> -addressing cumulative and large scale effects; and -incorporating sustainability considerations into the "inner circles" of decision-making in South Africa an approach to SEA, which is integrated into existing plan and programme processes is widely supported and has a focus uniquely different from international theory and practice. It concentrates on the opportunities and constraints that the environment places on PPPs development <p>SEA is undertaken at the strategic level of PPP for mutation, before specific project proposals are developed. The goal of SEA is the integration of social, biophysical and economic aspects into plans and programmes to promote sustainable development</p> <p>Boegoebaai green hydrogen development, South Africa Boegoebaai green hydrogen development, South Africa</p>	<p>CSIR: The purpose of the SEA is to assess, based on current knowledge, environmental and social sensitivities as well as the opportunities and risks associated with the proposed port, SEZ (WP1) and green hydrogen-related development in the broader region (WP2) (refer to SEA WP1 SPM pg12-16 for more on the two Work Packages constituting the SEA). In particular WP 2 looks more broadly at opportunities and risks, and cumulative impacts. The SEA conclusions and recommendations, drawn from a credible and transparent SEA process, are recorded and published and is intended to provide a reference point of departure (information) for stakeholders (incl. e.g. Government, authorities, decision-makers, project proponents, assessment practitioners, and communities) involved in future policy planning, site- and project, specific planning and EIA.</p>

Megan Cloete	160	General				Working Group Members alphabetically and affiliations MEMBER NAME AFFILIATION Who is Marthinus Fredericks, the king of the Richtersveld? The CSIR invents so-called indigenous leaders for itself and pretends that indigenous people are being acknowledged. The cheap trick by the CSIR and Mr. Marthinus Fredericks from Krasiafontein makes the entire study questionable. The study is therefore disrespectful toward the people of the Richtersveld and the community's history.	CSIR: The affiliation has been corrected.
Megan Cloete	161	Summary for Policymakers	10 of 56	23		"1. A new breakwater port and port area, approximately 1 km northwest of the distinctive Buchu or Boegoe Mountain Twins, in an area called "Boegoebergbaai", and hereafter, for the purposes of the SEA, referred to as "Boegoebergbaai". Why is it called Boegoebergbaai when the local name is Boegoebergbaai? The name for the purposes of the SEA and for the community is Boegoebergbaai. Why not use the local name Boegoebergbaai? It is a disregard for the community that the name used by the community for the place is not acknowledged. Boegoebergbaai was placed on the maps by the cartographers. We, the people of the Richtersveld, did not know the name Boegoebergbaai.	Karoo Development Foundation: This question could be included in the public consultation process. It is possible that certain communities feel strongly about the name, but other communities do not. It is also possible that another name be used for the project itself (e.g. the "Buchu Harbour"), which would be easier to use in public parlance, but that the name "Boegoebergbaai" be used for specific heritage aspects (e.g. the Mountain Twins as a botanical conservation site). It may also be possible to rename the Port and GH2 projects completely, e.g. the "Richtersveld" projects, or the "Namakwa Port". Such conversations, during the consultation process, may unlock other options.
Megan Cloete	162	Summary for Policymakers	all pages			Nowhere in the summary for users is there a needs assessment. Nowhere in the summary for users is there an economic feasibility study. Why was this not included in the study? This summary and SEA are essentially a biophysical strategic statement. It has nothing to do with economics, social relations, or culture.	TNPA: Project Economic feasibility is currently being assessed by Transnet and the relevant government agencies. Karoo Development Foundation: Work Package 2 deals to a large extent with these matters - i.e. the impacts on the Namaqualand region. However, the SEA is not at all addressing the question of whether any of the project components are economically viable. We only address the question of - if the project were to be constructed - what its impacts on the region would be. The matter of economic viability is determined by international market forces, as well as the supply-side factors (e.g. availability of capital). Political will of Government and investors are key. The SEA cannot address those matters. It is possible that these factors may change over time. The project may be regarded as viable now, but not in two years' time; or alternatively, may be more financially sustainable in two years' time. The SEA researchers do not engage with that question. A needs assessment on such a large scale (an entire economic region, with multiple communities) would be almost impossible to undertake, as different communities (as well as different individuals within communities) may have very divergent "felt needs". Typically, a needs assessment does rely on subjectively felt needs, as proposed solutions should be a response to such felt needs. At a regional scale, this becomes so complex as to be almost meaningless. There are two ways to address this question: (a) During the consultation process, a key component would be to ask about people's felt needs - however, those felt needs may well change during the course of consultation, as new options are put on the table; and (b) ultimately, political representatives (e.g. councillors) should also be spokespeople for local people's "felt needs". This raises the question of political capacity of democratic institutions in the area, which is also addressed in WP2. At the moment, the "felt needs" (i.e. subjective normative values) which are being heard are those of provincial and district government officials, who believe that the proposed project would benefit the needs of the communities (e.g. employment), the Namakwa region (economic growth) and the province as a whole (economic diversification). This proposition is open to debate, on two levels: (a) Will the project promote these goals effectively or not, and (b) Are there other values (e.g. pristine natural environments) that are as important, or more important, than the officials' goals? These are very legitimate debates, which should be aired during the consultation process. Note that a decision on the projects has not yet been made.
Megan Cloete	163	Summary for Policymakers	11	27-29		"The purpose of the SEA is to, in a transparent way, guide downstream planning and decision-making processes that may, or may not, occur over many years, if not several decades into the future." If the SEA truly wants to be a strategic planning instrument, then it must take into account the history and economic feasibility of the SIP and SEZ project. The needs of the people of the Richtersveld are important, and not just the needs of the politicians in Kimberley.	Karoo Development Foundation: Work Package 2 deals to a large extent with these matters - i.e. the impacts on the Namaqualand region. However, the SEA is not at all addressing the question of whether any of the project components are economically viable. We only address the question of - if the project were to be constructed - what its impacts on the region would be. The matter of economic viability is determined by international market forces, as well as the supply-side factors (e.g. availability of capital). Political will of Government and investors are key. The SEA cannot address those matters. It is possible that these factors may change over time. The project may be regarded as viable now, but not in two years' time; or alternatively, may be more financially sustainable in two years' time. The SEA researchers do not engage with that question. The SEA provides possible causal chains, so that a public consultation process, and subsequent political decision-making, can be grounded in as much scientific knowledge as possible. There will be several decision-making circles about these projects: (a) at intergovernmental forums (national, provincial, municipal); (b) within each government level; and (c) within the proposed public consultation process. The particular history of the Richtersveld (including the unfortunate experiences with diamond mining) makes this area extremely complex. This means that the public consultation process will be crucial - in fact, almost a "make or break" process, in order to get some level of "social licence to operate" for the project. This means that the proponents of the projects will have to get very effective and experienced facilitators to manage these discussions, in such a way that general consensus on the project is achieved. This, in turn, will require various public concerns and trade-offs to be examined. At a fundamental level, the process will need to be seen as fundamentally legitimate and inclusive. It is also possible that the project never sees the light of day, due to macro-economic factors.
Megan Cloete	164	Summary for Policymakers	11	34-41		"Given the multiscale scope of the SEA, its processes and outputs were split between two Work Packages (Schreiner et al., 2025). Please note that only the findings from Work Package 1 are reported in this SPM (Box SPM 2) publication. Another SEA report and SPM will be developed for Work Package 2, and made publicly available to all stakeholders, in early 2026." This is not only about different scales. The land in WP1 belongs to the Richtersveld community, which won a land restitution claim against Alexkor and the government of South Africa. Alexkor and the South African state fought the land claim tooth and nail. The restitution court order has still not been implemented by Alexkor and the state. Alexkor was required to prepare a resource statement before any new mining on land could take place. But Alexkor, Minister Gigaba, and Rafique Bagus began engaging in state capture and corruption before the resource statement was prepared. There is still no SANREC-compliant resource statement. All expenditures by the PSIV are unlawful. The community has been further impoverished by Alexkor and the South African government.	Karoo Development Foundation: The history of mining in the Richtersveld has left a destructive legacy, in terms of people's material conditions, as well as disillusionment with corporate and political processes. The proposed Boegoebergbaai projects will require a very robust public engagement process to re-establish confidence in public relationships and private investment. This is probably the largest challenge facing the proposed projects, and will need a well-funded process, driven by facilitation experts (not government or corporate staff). There will also need to be prior "talks about talks". It should be noted that the Department of Mineral Resources has been very lax in engaging local communities throughout South Africa. Mineral Resources is a national competency, which does not require provincial or municipal engagement, except in the DIP processes, and here the Department has not engaged effectively. In contrast, the proposed Boegoebergbaai project is driven by a provincial agency (NCEDA), and the Department of Transport (which is a national, provincial and municipal competency). The constitutional framework for public engagement, at various levels, therefore seems to be more hopeful.
Megan Cloete	165	Summary for Policymakers	11	43-46		"Work Package 1 focused on developing a local-scale SEA report concerned with assessing the social and ecological sensitivities of the receiving environment (Table SPM 1)"; misrepresentation. Nowhere in the 1041 pages of the SEA is there a study on social sensitivity. There is nothing about history or economics either. A community's connection to its land is not limited to land use by a few herders and small-scale farmers. The CSIR does not understand the Richtersveld community's social connection to our land.	CSIR: WP2 of the SEA, looking at the broader Namakwaland Richtersveld region, has a dedicated socio-economics chapter which delves into these issues.
Megan Cloete	166	Summary for Policymakers	12	3-16		"Within the 33 500 ha port and SEZ area (inclusive of a proposed conservancy area adjacent to the port 1 precinct), ten development zones have been proposed by policymakers, allocated as follows Figure SPM 2." Why can't CSIR, TRANSNET, and NCEDA just tell us why they want so much land? The land is not for sale. Community land is not for sale.	CSIR: Early conceptual SEZ layout zoning determined by NCEDA delineates a wide initial area. Within this preliminary SEZ delineation recommendations are made on areas that are highly sensitive and must be avoided by development (see WP1 SPM pg 34) and areas that have been destroyed by mining activities and must rather be targeted for infrastructure (see WP1 SPM pg 34). The estimated space that could likely be required for infrastructure associated with the port and SEZ development is smaller than the large SEZ area preliminarily delineated (see Fig SPM7).
Megan Cloete	167	Summary for Policymakers	13		Figure SPM1	The area between Port Nolloth and Alexander Bay, including the land west of the R382 where the port and SEZ are proposed, has been mined for diamonds for more than a century. Diamonds have been mined for a century, and diamond mining has made our community poorer. The SAD Alexkor project for poor white upliftment was a state project based on the exploitation of the Richtersveld community. Why does the CSIR not mention these things? They should be of importance to policymakers.	CSIR: Within the SEA WP1, the legacy of mining in the area is highlighted (see e.g. WP1 SPM, Box SPM12, pg24; pg30 lines 36-43; pg 43 lines 19-51). SEA WP2 also further explores the issue of mining in the broader region in the Socio-economics chapter. Additionally, WP2 considers the introduction of the port, SEZ and green-hydrogen related development in view of current trends in the area (e.g. climate change and mining that has had adverse environmental and social impacts).
Megan Cloete	168	Summary for Policymakers	14	12-13		"Zone 2 is a Conservancy area, approximately 1,170 ha, specifically designated for the protection of conservation priorities, including the Boegoeberg Twins, a Cape fur seal colony, and an archaeological site." The way the small conservation area has been planned by NCEDA and TRANSNET suggests that it is merely a token gesture for conservation-minded individuals and for greenwashing. TRANSNET, just like Alexkor in the past, is not genuinely interested in ensuring that Boegoeberg South is not completely buried under sand. The sand damage is the result of the unprecedented Rietfontein sluice dam. Over the past twenty years, environmental damage at Boegoeberg South has increased alarmingly, and the cost of rehabilitation has multiplied. Why does the CSIR not write about this too? These are important scientific facts for policymakers.	CSIR: Whilst the early SEZ layout zoning determined by NCEDA includes a conservancy area (zone 2) focussed primarily on the Boegoeberg Twins which is a well-known and culturally significant feature in the landscape, but not focussing on other important biodiversity or heritage features. From the SEA WP1, additional recommendations for areas that should 'conserved' include, e.g. that, if development proceeds, areas that are already destroyed by mining be targeted by infrastructure development instead of transforming surrounding more 'natural' areas (see Table SPM4, pg 36) and that the area east of the R382 road could be set aside (i.e. not developed) (see WP1 Chapter 4, Figure 4-8, pg 4-26) to safeguard existing biodiversity and livelihood practices. Future port and SEZ layout zoning and design should take into account these strategic spatial planning recommendations, as well as additional site-specific recommendations that may be revealed by future research and surveys. Furthermore, the issue of wind-blown sand in the area is identified as a critical risk for the area, and a key recommendation from the SEA WP1 is on the management of wind-blown sand - see WP1 SPM pg 33 including Box SPM21. TNPA: Transnet will follow the legislated processes for the development.
Megan Cloete	169	Summary for Policymakers	15	4-15		"Multi-author teams were assembled for Work Package 1 and asked to develop peer reviewed reports identifying the key sensitivities and impacts associated with development at the scales proposed. The summaries of these findings are communicated in Section 2 of this SPM. In addition to the multi-author teams (which, in part, function as a method of diversifying participation), wider participation was facilitated through a formally mandated SEA Working Group (Box SPM 5)." We see little of the teams' work. With the exception of Pieter van Wyk, the people writing about our land don't even live in the Richtersveld. There has been no attempt to incorporate local knowledge. A few workshops were held after the reports had already been compiled. (see nothing of the promise stated above. 7. Develop a comprehensive, transparent, and ongoing consultation plan, aimed at fair consultation and negotiation (including 'Free, Prior & Informed Consent (FPIC)' principles), and implement it from the earliest project planning and management phases.	CSIR: Local knowledge: The SEA incorporates local knowledge, where it has been provided, though the specialist assessments (e.g. see WP1 Chapter 3, Section 3.3.2.8 line 6; inputs from interviews held for WP1 Chapter 6 on Fisheries and Coastal Livelihoods), Working Group engagements (online, public outreach sessions (online and in-person) and through the public review process (i.e. the comments on WP1 captured here). Where relevant local knowledge was offered these were thus considered and incorporated in the SEA. FPIC: The SEA recognises the fundamental importance of the principles of FPIC and related participatory approaches in ensuring transparent and inclusive decision-making processes. The more detailed treatment of FPIC and consultation methodologies is provided in the Socio-economics Chapter of Work Package 2 which offers a framework and operational guidance for how such processes should be undertaken during subsequent project planning and authorisation phases. The WP2 draft reports (currently being peer reviewed), once available will be released for public comment in due course (public review period will be communicated accordingly). The SEA engagement process for WP2 will also include in-person and online public information and input sessions.

Samantha Ralston-Paton	170	Summary for Policymakers			Table SPM 4	The phrase "less suitable" implies that development may still be suitable, although not ideal. This is at odds with the recommendation that "No major development should be permitted east of the R382. This includes eastern portions of Zones 1, 2 and 2 (Port and Conservancy area (Box SPM 22) and Zones 9 and 10 (Future Expansion 02 and Future 3 Tank Farm)." While we respect that this is not a decision-making process, we suggest that it would be more useful and consistent to use another term - e.g. (likely) unsuitable.	CSIR: The preliminary development suitability zonation (Fig SPM7) is not prescriptive. It shows, based on current available spatial data and as refined by WP1 specialists, areas that could be more or less suitable for development. Within those two classes of recommendation, constraints will still exist in the "more suitable" areas and opportunities in the "less suitable areas". At this stage, one cannot assume a blanket status of "unsuitable" in the less suitable areas, and vice versa. Further project- and site specific EIAs will require robust field work to inform fine scale "no-go" areas.
Megan Cloete	171	Summary for Policymakers	15	4-6		The strategic issues covered in Work Package 2 include ecology, biodiversity and conservation planning (including biodiversity offsetting), water resources and aquatic ecology, heritage, infrastructure and planning, and socio-economic impacts. Socio-economic impacts are just as relevant to Work Package 1. In fact, the impacts at the WP1 scale are more intense, and will dramatically and permanently change the socio-economic community. The SEA WP1 will be used for decision-making processes even before WP2 is completed. It is highly inappropriate that social impacts are only being investigated in WP2. The table indicates that no fieldwork will be done regarding socio-economic impacts. The SEA is not worth the paper it's written on if it does not investigate on-the-ground impacts. The so-called experts don't even live or work in Namaqualand. It is clear that social and economic impacts will be limited to desktop studies.	CSIR: Socio-economics are included in WP2, which looks at the broader Namakwaland and Richtersveld, inclusive of the proposed port and SEZ site. The reason being that socio-economic issues are far reaching - i.e. development and activities in the port and SEZ will have impacts and affects (positive and negative) that are felt beyond the specific port and SEZ area. Both WP1 and WP2 collectively consist the SEA that aims to develop, as a whole, an integrated decision-making framework to guide future planning for the port, SEZ and broader region where impacts will occur. WP1 is published - December 2025, and WP2 follows shortly after (~April 2025).
Megan Cloete	172	Summary for Policymakers	16		Table SPM2		CSIR: The SEA aims to develop an integrated decision-making framework to guide the planning based on current knowledge and understanding. SEA is not a research project and very rarely includes field studies. However, given that access to the Port and SEZ area has historically been limited due to it being an active mining area, the SEA incorporated rapid field visits for key themes (e.g. marine ecology, vegetation, heritage) (WP1). Socio-economics are considered in WP2, which looks at the broader Namakwaland and Richtersveld, inclusive of the proposed port and SEZ site. The reason being that socio-economic issues are far reaching - i.e. development and activities in the port and SEZ will have impacts and affects (positive and negative) that are felt beyond the specific port and SEZ area. During site- and project specific EIAs in the future, field work will be required.
Megan Cloete	173	Summary for Policymakers	18		Box SPM9	Following cessation of mining and with proper rehabilitation, sandy beach faunal communities in the Boegoebaai area can recover to near-natural conditions, as shown in comparable sites north of the Orange River. Why don't the sixty CSIR experts write about the permanent damage caused by the diamond mining cofferdams? It is a disgrace what Alaskor did with the cofferdams. South of the Gariep River, there are far more rocks than north of the river. The assumption that it's the same in the south reflects the unscientific nature of this part of the report and the fact that the experts are sitting behind desks and have never been to Cliffs or the rocky coastline of the Richtersveld.	CSIR: Within the SEA WP1, the legacy of mining in the area is highlighted (see e.g. WP1 SPM, Box SPM12, pg24; pg30 lines 36-43; pg 43 lines 19-51). SEA WP2 also further explores the issue of mining in the broader region in the Socio-economics chapter. Additionally, WP2 considers the introduction of the port, SEZ and green-hydrogen related development in view of current trends in the area (e.g. climate change and mining that has had adverse environmental and social impacts).
Megan Cloete	174	Summary for Policymakers	21	0		Coastal Livelihoods (based on Gammage et al., 2025) The social environment around the proposed Boegoebaai harbour and SEZ is highly sensitive, mainly due to the deep historical and cultural connections of local communities to the land and sea, exacerbated by the ongoing impact of past injustices caused by industrial developments, especially diamond mining. Exacerbated by the ongoing impact of past injustices caused by industrial developments, especially diamond mining — This brief reference to a history of dispossession and exploitation does not do justice to the legal requirement under the principle of FPIC (Free, Prior and Informed Consent) that the invisible ownership and proprietary rights of First Peoples must be known and acknowledged. Our voices must be heard. This single sentence diminishes our voices.	CSIR: Within the SEA WP1, the legacy of mining in the area is highlighted (see e.g. WP1 SPM, Box SPM12, pg24; pg30 lines 36-43; pg 43 lines 19-51). The context cited in this comment relates specifically to coastal livelihoods and fisheries, focussed on the port and SEZ area. The SEA WP2, specifically the Socio-economic Chapter, delves deeper into the legacy of development in the region, social cohesion and the risks and opportunities the port, SEZ and green hydrogen-related development may pose. Karoo Development Foundation: The WP2 socio-economic report does not include the fisheries section. However, it will need to be included in the public consultation process. WP2 makes proposals for various approaches to public consultation, including FPIC.
Megan Cloete	175	Summary for Policymakers	24		Box SPM12	While mining once provided prosperity and jobs, its decline meant that communities faced economic hardship, deteriorating infrastructure, and rising unemployment. This simplistic view of mining history in the Richtersveld once again shows that this study does not acknowledge the people at all. Richtersveld residents were excluded from any work at Alexander Bay State Mines. Initially, only poor white people worked there, and later, people from Steinkopf were also allowed to work there. People from the Ciskei were brought in on contract to do the livestock work. Nama people from the Richtersveld were not allowed to work in Alexander Bay. A few women later got domestic work and farm work at Beaufort. The CSIR did not do its homework. Richtersveld residents did not benefit from the boom periods of mining. Some later got jobs at TransHex, but that is also now over.	CSIR: The text in Box SPM12 has been changed to "While mining once provided prosperity and employment, for some, its decline has left communities facing...". The SEA WP2, specifically the Socio-economic Chapter, delves deeper into the legacy of development in the region, social cohesion and the risks and opportunities the port, SEZ and green hydrogen-related development may pose. Karoo Development Foundation: The unfortunate history of diamond mining in the Richtersveld is not directly relevant to the proposed Boegoebaai project. What is important is (a) the level and type of skills of local people, who may find employment at the proposed Port and GH2 projects, and subsidiary businesses; and (b) the level of distrust in public engagement. Both of these matters will have to be addressed extensively in the proposed public consultation process.
Megan Cloete	176	Summary for Policymakers	24	29-32		Intensive consultation around consent, zoning, and mechanisms for coexistence between communities and industrial development is important. This statement is fully supported. But it is hidden halfway through the chapter. It deserves much more prominence.	CSIR: Also refer to Section 3.8 on "Equitable consultation and negotiations" (SEA WP1 SPM pg 43-44) which elaborates on this key recommendation from the SEA. The SEA WP2, specifically the Socio-economic Chapter, delves deeper into public engagement, including FPIC.
Megan Cloete	177	Summary for Policymakers	30		Box SPM13	Box SPM 13: Example of marine-based economic diversification Kleinsee, a former mining town, has transitioned toward aquaculture and seasonal tourism, with abalone and seaweed farming now being the primary employers. Its existing infrastructure and service delivery make it a pilot site for marine economic diversification. Tourism driven by wildflowers and birdwatching also contributes to livelihoods. This supports broader fisheries-linked economic resilience, though concerns remain about coastal pollution from vessel traffic. Stakeholder feedback reflects cautious optimism about the proposed Boegoebaai Port development's potential to boost local revenue. This optimistic picture of Kleinsee is not shared. Kleinsee is also a retirement town for disillusioned white racists and other opportunists who are really more interested in profiting from the illegal diamond trade. I'm not aware of any "broader fishery-linked economic resilience" in Kleinsee. The CSIR should save its honeyed brush when it comes to Kleinsee. De Beers has only left a headache for the municipality.	Amethyst Independent Facilitation: The opinions expressed in the report draw on the insights shared by some of the fishers and other stakeholders from Kleinsee who operate in the marine realm who will be impacted (see Chapter 6 and appendices). However, given this was not a comprehensive stakeholder consultation process, we recognise (and recommend) that some of the underlying issues around the proposed development must be ventilated in a comprehensive stakeholder engagements as part of a specialist fisheries study and cross-cutting project planning process (see Chapter 6 and appendices).
Megan Cloete	178	Summary for Policymakers	30-32			Coastal livelihood impacts Regarding this entire subsection on coastal livelihoods, CSIR now tries to suggest that Port Nolloth can be redeveloped with fisheries as a source and starting point for development. It is far-fetched to claim that Boegoebergbaai will now develop Port Nolloth as a fishing town. Saldanha did not develop Laaipek as a fishing town, either.	Amethyst Independent Facilitation: This section refers to potential benefits the proposed development could hold for fisheries in the area as spin-offs of the Boegoebaai development. Potential benefits are of course, subject to many caveats; outlined in detail in Chapter 6. It is our view, that with considered, proactive planning processes, that considers the needs of the local (and expanded) communities from the start some of the negative consequences of development seen in other regions on the coast can be avoided. It is also important to note that this report draws on opinions shared from a representative sample of stakeholder groups (in the context of coastal livelihoods and fisheries).
Megan Cloete	179	Summary for Policymakers	32	7-22		Perceptions from local stakeholders are that current governance arrangements and stakeholder engagement processes are dominated by government and private sector interests, with limited inclusion of small-scale fishers, Nama communities, women, and informal resource users. This reproduces a legacy of inadequate consultation linked to previous development efforts in the region, contributing to community frustration and mistrust. Moreover, current frameworks fail to recognise indirect and hidden stakeholders or the complexity of the marine and coastal socio-ecological systems, leading to poorly tailored interventions and reduced legitimacy. This comment is not limited to the coast and coastal livelihoods. The artificial attempt to confine social impacts to WP2 and coastal livelihoods to WP1 does not work. That is not how communities experience the impacts.	CSIR: Socio-economics are included in WP2, which looks at the broader Namakwaland and Richtersveld, inclusive of the proposed port and SEZ site. The reason being that socio-economic issues are far reaching - i.e. development and activities in the port and SEZ will have impacts and affects (positive and negative) that are felt beyond the specific port and SEZ area. Chapter 6 on Fisheries and coastal livelihoods was included in WP1 as the port and SEZ is likely to impact fisheries and coastal livelihoods in the direct vicinity. Chapter 6 does, however, take a broader view as it pertains to local-to-regional interconnections upon which coastal livelihoods on the West Coast rely (See WP1 Chapter 6 Section 6.1.1.1. "Area of Interest", pg 6-13"). Both WP1 and WP2 collectively consist the SEA that aims to develop, as a whole, an integrated decision-making framework to guide future planning for the port, SEZ and broader region where impacts will occur
Megan Cloete	180	Summary for Policymakers	33	1		The burden of proof rests on those who advocate for the project.	CSIR: Noted, although it is now known what exactly is meant in the context of the page and line cited (Pg 33 line 1) .
Megan Cloete	181	Summary for Policymakers	33	31		The position of the breakwater and port precinct This is the fundamental problem with SEA Work Package 1: the choice of the harbour at Boegoeberg is not justified. The location was compared with other existing harbours, namely Port Nolloth, Saldanha, Cape Town, Coega, and Lüderitz. There was no comparison with another greenfield harbour site.	TNPA: The project development planning is still underway and the alternatives are still being evaluated. What sets the location at Boegoebaai apart from the other sites is its natural depth making it more technically viable than the other sites which require extensive dredging. Project are developed considering environmental, socio-economic impacts, financial viability and technical viability. Thus a multi criteria approach is considered. CSIR: The concept port layout was provided by TNPA based on technical pre-feasibility studies they had undertaken. From a technical perspective, that location for the port is favourable due to the water being deep close to the coast, potentially requiring minimal dredging of the seabottom to reach the required depth. However the SEA reveals a key recommendation that the port breakwater (and thus landside port infrastructure) should avoid the seal colony and Boegoebergbaai rocky headland. This is captured in Figure SPM7 (strategic spatial planning) showing a possible port area shifted elsewhere to avoid the Boegoeberg headland and seal colony. Future port and SEZ layout zoning and design should take into account these strategic spatial planning recommendations, as well as additional site-specific recommendations that may be revealed by future research and surveys. A TNPA presentation of the "Boegoebaai Port and Rail development site selection" was presented at the online Working Group meeting # 2 on 10 October 2024 and was made available here: https://www.csir.co.za/sites/default/files/2025-10/Appendix%20C_Overview%20of%20Boegoebaai%20Site%20Selection%20process.pdf

Megan Cloete	182	Summary for Policymakers	33	44-51	Box SPM1	<p>Alternative port location</p> <p>A strategic opportunity exists to reconsider the location of the proposed port to reduce ecological risks.</p> <p>Preliminary analysis suggests that a site just north of Port Nolloth (outside the SEA Work Package 1 study area) may offer a more suitable alternative.</p> <p>This area is already been disturbed by historical mining, lies within 10 km of existing harbour, and lacks biodiversity features that would trigger exclusion thresholds. Areas to the south appear to carry fewer environmental constraints and offer more favourable offshore bathymetric conditions for breakeater construction.</p> <p>Although indicative, this guidance provides a reference point for steering development away from ecologically irreplaceable areas and should inform early-stage planning to derisk the development and support a more sustainable project outcome.</p> <p>WHERE ARE THE MAPS OF THIS PROPOSAL FOR A HARBOUR SOUTH OF HOUTGAT AND MUISVLAK, JUST NORTH OF PORT NOLLOTH??</p> <p>WHY IS THIS OPTION NOT RECEIVING MORE ATTENTION??</p> <p>IS IT WITHIN THE PORT NOLLOTH MUNICIPAL AREA??</p> <p>IS IT PART OF FARM 1 AND FARM 155, WHICH ARE ALSO COMMUNAL LAND??</p> <p>WHY ARE WE BEING KEPT IN THE DARK AGAIN??</p> <p>A site just north of Port Nolloth (outside the SEA Work Package 1 study area)</p>	<p>CSIR: The alternatives can be found in a TNPA presentation of the "Boegoebaai Port and Rail development site selection" that was presented at the online Working Group meeting # 2 on 10 October 2024 and made available here: https://www.csir.co.za/sites/default/files/2025-10/Appendix%20C_Overview%20of%20Boegoebaai%20Site%20Selection%20process.pdf.</p> <p>The full report is available here: https://publisheditenders.blob.core.windows.net/publisheditenderscontainer/9083/Annexure%20%20-%20Business%20Case%20V12%2020.05.2020%20R01%20Final.pdf</p> <p>Work Package 1 of the SEA process took it's point of departure from the aforementioned site selection process (which favoured Boegoebaai because of it's dewater access) and investigated, in a robust, scientific manner, the extent to which development at scale, would or would not be possible in this region, based on a wide array of social, cultural and ecological constraints. It revealed that some, if not most portions or the 33 000 ha around the proposed port and SEZ are undevelopable because they are too sensitive. While that is true, there is at least 5 000 ha of the proposed port and SEZ region that has been heavily degraded by mining, where sand movement is massively degrading the region of it's ecological and cultural integrity, and where viable development solutions need to be properly considered.</p>
Megan Cloete	183	Summary for Policymakers	34	1		3.2 Targeting degraded areas and managing wind-blown sand	CSIR: Noted, this is one of the key recommendations from WP1.
Megan Cloete	184	Summary for Policymakers	40	3-8		<p>3.6 Think strategically about biodiversity offsets</p> <p>Figure SPM 8: Prospective Offset receiving areas around the SEZ. Note the Possible set-aside within the SEZ East of 3 the R382 is also included in this figure, in line with the recommended areas where development is best avoided, as 4 outlined in Section 3.3 above. No attempt to reflect high priority sites West of the R382 as set-asides or to optimally redesign the "conservancy" zone as an Offset receiving area is made (see Box SPM 22; Section 3.3).</p> <p>The problem with Botha's offset area is that the total surface area is already covered by mining prospecting rights applications for critical minerals and rare minerals. The mining companies will not give up their paper rights without demanding enormous extortion money, just like Bagus and Vast Rare Minerals are now demanding to give up their prospecting rights on Farm No. 1.</p>	Conservation Strategy & Tactics: The figure was revised to include the smaller priority sure West of the R382, which are indeed valuable and must be set aside. Note that these are still technically set asides and thus do not count towards offset liabilities. Concern that the issuance of mining and prospecting rights over the entire area is hugely problematic. The state may have to pay most compensation if expropriated. And MPRDA section 48 and 49 should be used to sterilize the remaining offset receiving areas. The conservancy zone needs substantial realignment to protect the most important remaining biodiversity priorities.
Megan Cloete	185	Summary for Policymakers	43	19-20		3.8 Equitable consultation and negotiations (after Atkinson et al., 2025 & Gammage et al., 2025)	CSIR: Noted, this is one of the key recommendations from WP1.
Megan Cloete	186	Summary for Policymakers	54	1-3		<p>6. REFERENCES 1</p> <p>Atkinson, D., Gerber, H., Sanyaman, A., Borchardt, S. and Kirsten, S. (2025) Macro-economic, social and 2 institutional impacts of the Boegoebaai Port and Green Hydrogen complex. Report to CSIR.</p> <p>The integrity of the CSIR's report is compromised by the fact that the chapter by Atkinson et al. has not been made available.</p> <p>The chapter "Summary for Policymakers" refers to the Atkinson report, which addresses the core principle of FPIC (Free, Prior and Informed Consent).</p> <p>But the Atkinson report is withheld from public comment.</p> <p>It should have been part of Work Package 1.</p> <p>This is not good practice, and CSIR must take accountability.</p>	CSIR: Socio-economics are included in WP2, which looks at the broader Namakwaland and Richtersveld, inclusive of the proposed port and SEZ site. The reason being that socio-economic issues are far reaching - i.e. development and activities in the port and SEZ will have impacts and affects (positive and negative) that are felt beyond the specific port and SEZ area. Both WP1 and WP2 collectively consist the SEA that aims to develop, as a whole, an integrated decision-making framework to guide future planning for the port, SEZ and broader region where impacts will occur. WP1 is published - December 2025, and WP2 follows shortly after (~April 2025).
Megan Cloete	187	Summary for Policymakers	43	23		<p>The Richtersveld community, through the Richtersveld Communal Property Association (RCPA), reclaimed land rights in a landmark restitution case.</p> <p>The CSIR shows a lack of insight into the restitution and land claim process.</p> <p>The community claimed the land and won the court case in 2003.</p> <p>The RCPA is merely the land rights holder and formal owner on behalf of the community.</p> <p>The community is represented by a number of restitution entities in the development process for restitution.</p>	CSIR: The key recommendation from WP1 on "Equitable consultation and negotiations" further highlights the importance of respecting the land restitution history and communal governance structures (WP1 SPM, pg 44). In WP2 Socio-economics chapter, the issues land ownership in the Richtersveld is explored further.
Megan Cloete	188	Summary for Policymakers		25-28		<p>As such, the RCPA must be a central actor in any development and land-related negotiations.</p> <p>The RCPA would be crucial in facilitating community-level engagement by acting as intermediaries between external developers and local communities.</p> <p>The use of the plural 'intermediaries' and 'local communities' is unclear. Once again, this reflects a lack of understanding of the process and the institutional composition of the community's role.</p> <p>The CSIR did not read the court order of 9 October 2007.</p>	Karoo Development Foundation: The Socio-economic chapter of WP2 delves more deeply into the question of public consultation, by presenting different modalities of engagement. (There may be other approaches too, in this complex field). The RCPA will be an essential part of this process, as a key land owner and community organisation directly involved in the locality. The RCPA has a significant moral claim to being a central player. However, institutions such as the Richtersveld Local Municipality and the Namakwa District Municipality will also need to be central in the process. As a landowner, the RCPA will be in a position to rent or sell its land, if the offers are attractive enough and if the members agree. Government retains the right to expropriate land if this is defined for the public good, but expropriation is typically done according to agreed land values, which could be determined by many factors, including the local community's moral and historical attachment to the land.
Megan Cloete	189	Summary for Policymakers		34-38		Without meaningful engagement, there is a risk of repeating patterns of marginalisation and cultural erosion. A constructive and inclusive dialogue must go beyond conventional stakeholder consultation. It should be early in the project design stage, inclusive, culturally appropriate, continuous, collaborative, and communities be resourced to participate meaningfully. Bullseye!	CSIR: Noted, this is one of the key recommendations from WP1.
Megan Cloete	190	Summary for Policymakers		40-43		<p>The principle of Free, Prior and Informed Consent (FPIC) is a globally recognised standard for engaging Indigenous and local communities in decisions that affect their land, resources, and cultural heritage.</p> <p>The CSIR withholds from the reader the basic understanding that FPIC (Free, Prior and Informed Consent) is the principle accepted by South African courts in the cases of <i>Alexkor</i> [2003], <i>Malebo</i>, and <i>Balen</i> 1.</p> <p>It is the legal principle on which the Richtersveld community won the court case against <i>Alexkor</i> in 2003, and it is based on the customary law of the Richtersveld community.</p> <p>It is not derived from an international approach.</p> <p>Coincidentally, it aligns with the ILO standard that is accepted internationally and in the African Charter.</p>	<p>Karoo Development Foundation: The principle of FPIC must be a key platform of a future public engagement process, which must be handled by skilled and experienced mediation experts who will the historical background to the establishment of the RCPA. Ideally, a multi-faceted win-win approach can be reached where community priorities and the investment project can be accommodated (i.e. not a "zero-sum" stand-off between two incompatible sets of principles). For any future agreement which can be termed "free, prior and informed", an intensive process of discussions will be required, to identify various development alternatives, probably requiring subsidiary task teams and several iterations at various levels. For example, the required information for a meaningful process may take several engagements to identify and obtain (e.g. how many blue- or white-collar workers, at what levels, will be required for different levels of investment, and how can local communities benefit from such opportunities?) It is also important that the local participants (RCPA, municipalities and other stakeholders) should feel that they give "free consent", i.e. do not feel dragged into a premature agreement; this would require options to be workshopped, preliminary solutions identified, and then the solutions should be "stress-tested" in subsequent discussions. The requirement of "prior" consent will inevitably involve several iterations of draft proposals, which are gradually narrowed down as consensus is obtained. Empathically, such engagement processes will require professional facilitators and not project proponents. The discussions should be led by a neutral party with the right skills.</p> <p>CSIR: The SEA recognises the fundamental importance of the principles of FPIC and related participatory approaches in ensuring transparent and inclusive decision-making processes. The more detailed treatment of FPIC and consultation methodologies is provided in the Socio-economics Chapter of Work Package 2 which offers a framework and operational guidance for how such processes should be undertaken during subsequent project planning and authorisation phases. The WP2 draft reports (currently being peer reviewed), once available will be released for public comment in due course (public review period will be communicated accordingly). The SEA engagement process for WP2 will also include in-person and online public information and input sessions.</p>
Megan Cloete	191	Summary for Policymakers		43		<p>The 'Initiative for Responsible Mining Assurance' (IRMA) outlines that FPIC is not merely a one-off engagement tool, but a comprehensive principle grounded in Indigenous peoples' rights to self-determination, land, culture, development, and a healthy environment. As a right based on self-determination.</p> <p>The framework sets out practical steps to ensure constructive and inclusive engagement with Indigenous peoples during consultation processes.</p> <p>The IRMA interpretation of FPIC is a weak reflection of the rich customary and constitutional legal regime in South African law.</p> <p>It is an insult to the Richtersveld community to use the IRMA interpretation as a reference.</p>	<p>Karoo Development Foundation: FPIC refers to "prior" consent, i.e. a negotiation process which takes place before the implementation of a project.</p> <p>However, building an effective FPIC process should (and probably will) build relationships between the project administrators and a variety of social groups, including of course indigenous groups. The project should remain embedded in multi-lateral institutions and forums, at municipal level (and even ward level), town level (e.g. local chambers of commerce), and sectoral level (e.g. agriculture, including communal farmers). A particular focus will be relationships with organisations representing indigenous people, which would span a range of topics, such as cultural heritage, employment, and training).</p> <p>Emphatically, the FPIC process (and other associated consultation methodologies) would require professional facilitation experts, to initiate and design such ongoing consultative relationships.</p> <p>Significantly, this dense web of institutional collaboration is precisely what Government legislation on Integrated Development Plans and spatial plans had in mind, although it has often been poorly implemented thus far. It would therefore be possible to use the 1995 Local Government White Paper and Municipal Systems Act of 2000 to justify and promote the creation of such ongoing multi-lateral consultative networks.</p>
Megan Cloete	192	Summary for Policymakers		50	1-4	<p>5.2 Integrating lender considerations</p> <p>Large-scale development projects often rely, fully or partially, on financing from third party banks, lenders and investors who may subscribe to the Equator Principles and International Finance Corporation (IFC) 23 Performance Standards (PS) (Table SPM 6).</p> <p>The CSIR places great emphasis on the 2012 IFIC performance standards but fails to mention and define PS7.</p> <p>PS7 relates to the principles applicable to indigenous groups such as the Richtersveld and other Namaqualand communities, including FPIC.</p> <p>It is fair to ask: why does the CSIR fail to quote PS7?</p> <p>Is it because the CSIR's clients namely NCEDA and Transnet refuse to engage in meaningful and substantive dialogue and negotiations with the Richtersveld?</p> <p>Is it because NCEDA and Transnet continue to negotiate only with the RCPA committee's chairperson, deputy chairperson, and (Name removed for the purpose of this document), and thereafter merely hold confirmatory town meetings without genuine community participation?</p> <p>So far, there has been no real or true FPIC in the Richtersveld.</p> <p>That is why people are sceptical that FPIC is now being raised so late and referenced so superficially, as if IRMA is the basis for it.</p>	<p>CSIR: The following text was added to Table SPM6:</p> <p><i>"PS7 emphasises safeguarding Indigenous Peoples' rights when projects affect their lands, resources, or cultural heritage. It requires companies to engage in meaningful, culturally appropriate dialogue and negotiation throughout the project lifecycle, ensuring informed consultation and participation rather than token engagement. Where impacts are significant—such as relocation or loss of livelihoods—PS7 mandates Free, Prior, and Informed Consent (FPIC), aligning with constitutional protections and customary rights recognized under South African law. This approach aims to foster trust, mitigate conflict, and promote equitable development outcomes by embedding respect for identity, dignity, and traditional governance structures into project planning and decision-making"</i></p> <p>Karoo Development Foundation: The public engagement process will need to test whether stakeholder leaders actually do speak for their purported members. There are ways to include a variety of stakeholders that cut across conventional leadership structures. For example, a focus on economic sectors (e.g. communal or commercial agricultural producers or tourism entrepreneurs) tend to "cut across" political parties or community organisations. Religious institutions also cut across other cleavages. Consequently, professional facilitators can create various thematic "spaces" where different voices can be heard. This will help to reduce the power of gate-keepers and elites. In "talks about talks", such procedures can be discussed and refined before the actual consultations are launched.</p>

Megan Cloete	193	Summary for Policymakers		51	1-7	<p>5.3 Adequate consideration of alternatives</p> <p>Alternatives are defined as different means of meeting the general purpose and requirements of the 2 activity (Table SPM 7). Alternatives that maximise resource use efficiency (e.g., land, energy and water-use efficiency) and minimise waste production must be sought by the EAP. Although alternatives are to be considered as early as possible in the process, the necessity to consider modifications and changes, to prevent and/or mitigate impacts identified during the assessment process, may also arise.</p> <p>Firstly: why was the Boegoeberg Bay location not compared with other Greenfield locations?</p> <p>This is racially discriminatory and goes against FPIC, and reflects the approach taken by NCEDA and Transnet.</p> <p>Secondly: why did CSIR not further describe the alternative location between Port Nolloth and Muisvlakte?</p> <p>Nowhere else in the 1014 pages can we read more about this place. It only appears in block OBH19 on page 33 of this document for policymakers.</p>	<p>TNPA: The project development planning is still underway and the alternatives are still being evaluated. What sets the location at Boegoebaai apart from the other sites is its natural depth making it more technically viable than the other sites which require extensive dredging. Project are developed considering environmental, socio economic impacts, financial viability and technical viability. Thus a multi criteria approach is considered.</p> <p>CSIR: The concept port layout was provided by TNPA based on technical pre-feasibility studies they had undertaken. From a technical perspective, that location for the port is favourable due to the water being deep close to the coast, potentially requiring minimal dredging of the seabottom to reach the required depth. However the SEA reveals a key recommendation that the port breakerwater (and thus landslide port infrastructure) should avoid the seal colony and Boegoebergbaai rocky headland. This is captured in Figure SPM7 (strategic spatial planning) showing a possible port area shifted elsewhere to avoid the Boegoeberg headland and seal colony. Future port and SEZ layout zoning and design should take into account these strategic spatial planning recommendations, as well as additional site-specific recommendations that may be revealed by future research and surveys.</p> <p>A TNPA presentation of the "Boegoebaai Port and Rail development site selection" was presented at the online Working Group meeting # 2 on 10 October 2024 and was made available here: https://www.csir.co.za/sites/default/files/2025-10/Appendix%20C_Overview%20of%20Boegoebaai%20Site%20Selection%20process.pdf</p>
Natural Justice (on behalf of Community representatives from Port Nolloth, Alexander Bay, Hondeklop Bay, Kammissberg, Kharkams, Nababeep and Springbok)	194	General				<p>These submissions are made by community partners, who have a joint interest and are affected parties in the abovementioned project, in response to the Strategic Environmental Assessment (SEA) published by the Council for Scientific and Industrial Research (CSIR) on behalf of the Department of Trade, Industry and Competition (the DTIC) for the proposed Boegoebaai Port and Special Economic Zone (SEZ) located north of Port Nolloth in the Northern Cape Province.</p> <p>We, the Community Partners, including the communities of Port Nolloth, Alexander Bay, Hondeklop Bay, Kammissberg and Springbok, had an opportunity to come together to discuss this project. This opportunity has been made possible by Natural Justice, a non-profit organisation specialising in environmental and human rights law in Africa, with a focus on advancing social and environmental justice for local and indigenous communities.</p> <p>Our right to Environmental Justice is enshrined in the Constitution, guaranteeing us the right to an environment that is not harmful to our health or wellbeing. We want to bring to your attention the principle that affected communities must be informed, consulted, and capacitated to participate meaningfully in decisions that may impact their environment, livelihoods, and cultural heritage.</p> <p>These comments are submitted in opposition to the proposed Boegoebaai Port and SEZ, in the public interest and in the interest of communities, ecosystems, and cultural landscapes that stand to be adversely affected by the proposed development.</p>	<p>CSIR: The comment is noted.</p>
Natural Justice (on behalf of Community representatives from Port Nolloth, Alexander Bay, Hondeklop Bay, Kammissberg, Kharkams, Nababeep and Springbok)	195	General				<p>The public participation process carried out for the SEA has excluded majority of the towns in the Northern Cape. In-person meetings have been limited to the four Richtersveld towns, however, the impacts of the project will be felt by surrounding towns such as Alexander Bay, Port Nolloth and Hondeklop Bay. These meetings should not only focus on the landowners, but the Northern Cape as a whole given the significance of the project. Further, online platforms are inaccessible to our communities and do not provide us with sufficient opportunity to understand the project. We understand that there is no clear guideline for public participation in SEAs, however, there is sufficient guidance provided through NEMA, international law and case law to ensure that directly and indirectly impacted communities are adequately consulted from the start of a project.</p>	<p>CSIR: Outreach campaigns to share draft SEA outputs of WP1 and receive inputs from local stakeholder were held in-person presentations in Afrikaans were undertaken within the communities where both written and verbal comments were invited and captured. Two-to-three hour sessions in Port Nolloth, Alexander Bay, Sanddrift, Kuboes, Lekkersing, Eksteenfontein, Springbok and Steinkopf were held 12-15 August 2025 (WP1), the majority of the time being afforded for comments and questions from the audience. A summary for Policymakers document was prepared as part of the SEA outputs in both English and Afrikaans with the intention of making the content more accessible.</p> <p>Outreach to share draft outcomes of WP2, which focusses on the regional opportunities and risks of the proposed Port, SEZ and green hydrogen-related development, is planned to be held in early 2026 in Potadder (Khai-Mai), Garies (Kamiesberg), Port Nolloth (Richtersveld) and Springbok (Nama Khoi).</p> <p>Karoo Development Foundation: In the past, large projects were implemented without SEAs or public participation. It is now expected that SEAs are conducted to collect all the relevant information, and then that a robust public consultation process is undertaken. This will only happen once the SEA is completed. The SEA does not argue for the proposed project. It only explores what the likely consequences will be if the projects are implemented. It therefore puts helpful facts on the table.</p>
Natural Justice (on behalf of Community representatives from Port Nolloth, Alexander Bay, Hondeklop Bay)	196	General				<p>The project documents are produced in English, and no Afrikaans versions were provided for us to consider, despite the fact that Northern Cape residents are primarily Afrikaans-speaking</p>	<p>CSIR: We acknowledge the concerns raised regarding the accessibility and inclusivity of the SEA process for the Boegoebaai project. We understand that the SEA report is technical and extensive. To address this, a Summary for Policymakers document was prepared as part of the SEA outputs in both English and Afrikaans with the intention of making the content more accessible. Recognising that these summaries may still be difficult to interpret or access, in-person presentations in Afrikaans were undertaken within the communities where both written and verbal comments were invited and captured. The feedback received was shared with the authors of the relevant chapters for consideration.</p>
Natural Justice (on behalf of Community representatives from Port Nolloth, Alexander Bay, Hondeklop Bay, Kammissberg, Kharkams, Nababeep and Springbok)	197	General				<p>Given that we have been unable to participate in the meetings, we are not fully informed and have not been capacitated to meaningfully participate in a project which will impact our environment, livelihoods and cultural heritage. Our lack of involvement is further emphasised through the late submission of our joint comment as we were unaware of the opportunity to comment, until after the comment period had closed. We request that in-person meetings are held in surrounding towns to help our communities understand the project and the impacts thereof, and to have our concerns addressed.</p>	<p>CSIR: Outreach campaigns to share draft SEA outputs of WP1 and receive inputs from local stakeholder were held in-person presentations in Afrikaans were undertaken within the communities where both written and verbal comments were invited and captured. Two-to-three hour sessions in Port Nolloth, Alexander Bay, Sanddrift, Kuboes, Lekkersing, Eksteenfontein, Springbok and Steinkopf were held 12-15 August 2025 (WP1), the majority of the time being afforded for comments and questions from the audience. A summary for Policymakers document was prepared as part of the SEA outputs in both English and Afrikaans with the intention of making the content more accessible.</p> <p>Outreach to share draft outcomes of WP2, which focusses on the regional opportunities and risks of the proposed Port, SEZ and green hydrogen-related development, is planned to be held in early 2026 in Potadder (Khai-Mai), Garies (Kamiesberg), Port Nolloth (Richtersveld) and Springbok (Nama Khoi).</p>
Natural Justice (on behalf of Community representatives from Port Nolloth, Alexander Bay, Hondeklop Bay, Kammissberg, Kharkams, Nababeep and Springbok)	198	General				<p>We are concerned about the loss of ownership of the land and the cultural heritage connected to the land. This land was previously taken from the Nama people and eventually returned through a successful land claim. This project threatens to repeat history by displacing the community, causing a loss to cultural sites and preventing access to the land for the benefit of State bodies. We are not willing to sell or lease our land to any organ of the State or any other body. Land is an integral part of the existence of communities, and this project threatens that existence. Our connection to the land holds our cultural heritage and traditions. They are part of who we are, and we are the people that live on the land, "where the waters took the old man". We are connected to the waves of the sea and by the waters that flow into our lands.</p>	<p>CSIR: The SEA explores aspects of the marine environment (see SEA WP1 Chapter 2), heritage and cultural heritage (see SEA WP1 Chapter 5) and fishing communities and coastal livelihoods (see SEA WP1 Chapter 6). Furthermore, WP2 will explore more broadly possible opportunities and risks of the proposed port, SEZ and green hydrogen-related development in the broader region, considering the existing climate change pressures.</p> <p>Furthermore, within the SEA WP1, the legacy of mining in the area is highlighted (see e.g. WP1 SPM, Box SPM12, pg24; pg30 lines 36-43; pg 43 lines 19-51). The SEA WP2, specifically the Socio-economic Chapter, delves deeper into the legacy of development in the region, social cohesion and the risks and opportunities the port, SEZ and green hydrogen-related development may pose.</p> <p>TNPA: Land arrangements: The negotiations on the land transaction between parties has not commenced. The land valuation by professional land valuers is currently underway.</p>
Natural Justice (on behalf of Community representatives from Port Nolloth, Alexander Bay, Hondeklop Bay, Kammissberg, Kharkams, Nababeep and Springbok)	199	General				<p>Although the decision on how the land is to be utilised is communicated by the CPA, the decision itself needs to be made in consultation with all the communities considered to be the landowners. Only a few people have been consulted on this project by the CPA, and this does not constitute a valid mandate. We desire transparent consultation from the CPA and all departments and companies connected to the project. This will ensure that our right to Free Prior Informed Consent (FPIC) is respected and upheld, and our equal decision-making power, fully acknowledged.</p>	<p>CSIR: The SEA recognises the fundamental importance of the principles of FPIC and related participatory approaches in ensuring transparent and inclusive decision-making processes. The more detailed treatment of FPIC and consultation methodologies is provided in the Socio-economics Chapter of Work Package 2 which offers a framework and operational guidance for how such processes should be undertaken during subsequent project planning and authorisation phases.</p> <p>Karoo Development Foundation: The very important matter of public participation, decision-making and meaningful input is discussed in the Socio-economic Chapter of Work Package 2. This includes FPIC, as well as other participatory methodologies. We argue that the consultation process will require specialists in mediation to design a process which will be generally acceptable and legitimate. The public participation process will need to engage people beyond simply talking to the CPA leaders. The method to do this will have to be discussed during the design of the public consultation process. That is why professional mediation services will need to be recruited for the process.</p>
Natural Justice (on behalf of Community representatives from Port Nolloth, Alexander Bay, Hondeklop Bay, Kammissberg, Kharkams, Nababeep and Springbok)	200	General				<p>The establishment of a port will impact the patterns of fish coming from the north as well as kelp and West Coast Rock Lobster. The noise impacts will cause fish to go further out to sea thereby making them inaccessible to small-scale fishers who are already struggling to maintain their livelihoods and the livelihoods of their communities. This impact will not only be felt by fishers but by the ocean ecosystem and environment as a whole. We know that this project will have an impact on the environment. Instead of projects which cause harm, we desire environmental protection with an adequate consideration of the climate change impacts of the project.</p>	<p>CSIR: Marine ecosystems and fisheries: The WP1 SEA highlights the potential impacts of the port to the marine environment (Chapter 2) and coastal livelihoods and fisheries (Chapter 6). Recommendations to reduce impacts include avoidance of sensitive areas (see Table SPM5; Chapter 2, Table 2-5.1, pg 2-113) and to "prioritise access to benefits for disadvantaged and historically marginalised groups" (see Chapter 6, pg 6-6 line 26-30).</p> <p>Climate change: The SEA summarises current knowledge on macro-climatic trends and its potential impact to various social and ecological aspects (e.g. on the marine environment see WP1 Chapter 2, pg 2-30-31; on terrestrial and aquatic ecology see WP1 Chapter 3, pg 3-32; on aquatic ecosystems see Chapter 3e, pg 14-15; on terrestrial, see WP1 Chapter 3d, pg 26-31; 40, on vegetation see WP1 Chapter 3e, pg 26-37; 38, on fisheries and coastal livelihoods see WP1 Chapter 6 pg 6-4; 10; 15; 37; 39). Furthermore, WP2 will explore more broadly possible opportunities and risks of the proposed port, SEZ and green hydrogen-related development in the broader region, considering the existing climate change pressures.</p>
Natural Justice (on behalf of Community representatives from Port Nolloth, Alexander Bay, Hondeklop Bay, Kammissberg, Kharkams, Nababeep and Springbok)	201	General				<p>Our communities have suffered from project waste being brought into our communities. For example, the nuclear waste from Koeberg Power Station is brought into the Kamiesberg to be buried. It is unclear what will happen with the waste generated from this project and what the impacts on the surrounding communities will be. We request that an adequate assessment is done to identify how waste will be disposed and how far the impacts will stretch.</p>	<p>CSIR: WP1, Chapter 7 Sustainable Port Planning, highlights the requirement for good waste management practices (see SPM pg 42 line 22-38; and Chapter 7, Table 5-2, Pg 7-3). Waste management plans are produced at project- and site specific stage when waste streams and quantities are known. Hydrogen itself is not toxic, but is dangerous since it is flammable. Therefore strict health and safety measures (as for all flammable substances like petrol and diesel) are required. A shift to using green hydrogen from renewable energy aims to decarbonise various industries that usually requires carbon-intensive energy (like coal) that have negative effects on air quality, human health and are exacerbating climate change.</p>

Natural Justice (on behalf of Community representatives from Port Nolloth, Alexander Bay, Hondeklop Bay, Kammissberg, Kharkams, Nababeep and Springbok)	202	General				We understand that this project is going to be expensive. No assessment has been provided to identify what the costs will be and where the funds are coming from. It is also unclear what the economic benefits will be locally, nationally and regionally. It is concerning that there are already many green hydrogen producers with a limited demand for the energy source which indicates that this project does not make economic sense.	<p>TNPA: Project Economic feasibility is currently being assed by Transnet and the relevant government agencies.</p> <p>Karoo Development Foundation: The SEA is not at addressing the question of whether any of the project components are economically viable. We only address the question of - if the project were to be constructed - what its impacts on the region would be. The matter of economic viability is determined by international market forces, as well as the supply-side factors (e.g. availability of capital). Political will of Government and investors are key. The SEA cannot address those matters. It is possible that these factors may change over time. The project may be regarded as viable now, but not in two years' time; or alternatively, may be more financially sustainable in two years' time. The SEA researchers do not engage with that question.</p>
Natural Justice (on behalf of Community representatives from Port Nolloth, Alexander Bay, Hondeklop Bay, Kammissberg, Kharkams, Nababeep and Springbok)	203	General				We request that a comprehensive economic assessment is done to identify the source of the funds, the costs incurred, the demand for the energy source and the flow of economic benefits to local communities specifically.	<p>CSIR: WP2 of the SEA, looking at the broader Namakwalad and Richtersveld region, has a dedicated socio-economics chapter which delves into these issues. The economic feasibility of the proposed port and SEZ are not a topic that is determined or addressed by the SEA.</p> <p>TNPA: Project Economic feasibility is currently being assed by Transnet and the relevant government agencies.</p>
Natural Justice (on behalf of Community representatives from Port Nolloth, Alexander Bay, Hondeklop Bay, Kammissberg, Kharkams, Nababeep and Springbok)	204	General				Given that it is unclear how communities will benefit from this project, we demand that sustainable forms of development and energy be pursued. We want wind and solar projects to be pursued which provides energy directly to surrounding communities. We want development which upskills our communities, provides long-term jobs and which improves infrastructure within our communities. Our lands should be used for agroecology, and our oceans remain untouched for the benefit of our small-scale fishers.	<p>CSIR: The Fisheries and Coastal Livelihoods Chapter (6) of the SEA WP 1 makes recommendation on the importance of skills development and just transition support (see Chapter 6, pg 6-6 line 12-16). WP2 of the SEA contain a Chapter on socio-economics which delves into the education, skills and training.</p> <p>Karoo Development Foundation: The SEA aims at putting relevant facts on the table, as well as indicating potential causal chains. The Green Energy process is likely to generate water (H2O) supply as a side-product; and it will also make Green Energy available to local communities in appropriate usable formats. These are part of important trade-offs of benefits and harms to different sectors of the communities; it is also likely that the same members of the community may benefit in some ways and be harmed in others. The impacts of development projects are seldom uni-linear or uni-dimensional.</p>
Natural Justice (on behalf of Community representatives from Port Nolloth, Alexander Bay, Hondeklop Bay, Kammissberg, Kharkams, Nababeep and Springbok)	205	General				As communities of the Northern Cape Province, we want our mineral and natural resources to be protected and conserved for the generations to come. We don't want our children to listen to stories about the fishers or indigenous communities, we want them to carry these traditions forward and live them out. We collectively say no to this development.	<p>CSIR: The comment is noted.</p>