



NSW National Parks and Wildlife Service

Your ref: SSD-9099356
Our ref: DOC25/857829

Ms Allison Sharp
Team Leader Assessments - Energy and Resources Open Cut
Department of Planning, Housing and Infrastructure

Via Major Projects Portal and
by email: allison.sharp@planning.nsw.gov.au

Dear Ms Sharp

Thank you for your notification regarding the response to submissions (RTS) for the **Holcim Salt Ash Sand Operations (SSD-9099356)**. I appreciate the extension of time for the NSW National Parks and Wildlife Service (NPWS) to review that document, the amended proposal and the revised technical assessments.

NPWS is interested in this State significant development as the expanded sand operations are proposed to occur on land adjoining Worimi National Park (WNP). While the Board of Management for the Worimi Conservation Lands (WCL) is responsible for the care, control and management of this park, NPWS carries out the day-to-day operations in the park to support the Board's management of the WCL, including this park.

We acknowledge that most of the matters raised in our comments on the environmental impact statement (EIS) in 2023 have been addressed. In particular, we are pleased to see a cumulative impact assessment in the RTS and also the revised Aboriginal Cultural Heritage Assessment Report. However, two active sand extraction operations (including Holcim's Anna Bay operation and another sand quarry near Anna Bay) are missing from the cumulative assessments in both reports.

On review of the revised documents now available, NPWS still holds concerns regarding the effectiveness of the buffer to protect WNP from impacts arising from the proposed excavation of 10 million tonnes of sand from neighbouring land (at a rate of 550,000 tonnes per annum), and the associated drawdown of groundwater.

These and other matters are discussed in detail in Attachment A of this letter.

If you have any further questions about this issue, please contact Adam Faulkner, Principal Project Officer, Hunter Central Coast Branch, on 02 4927 3253 or at adam.faulkner@dcceew.nsw.gov.au.

Yours sincerely

Richard Colbourne
Manager, Hunter Coast Area
National Parks and Wildlife Service

20 October 2025

NPWS comments on Holcim Salt Ash Sand Operations (SSD-9099356) Response to submissions

NPWS highlights that the proposed development is located on land adjoining Worimi National Park (WNP) which is land reserved under Part 4A of the *National Parks and Wildlife Act 1974* (NPW Act).

In preparing this advice, NPWS has reviewed the following documents:

- Holcim Salt Ash Sand Operations Submissions Report, prepared by Element Environment, dated 26 August 2025 (**RTS**)
- Appendix I Salt Ash Sand Operations Rehabilitation Management Plan, prepared by Minesoils Pty Ltd, dated July 2025 (**Rehab Plan**)
- Appendix J Salt Ash Quarry – Geotechnical design assessment, prepared by Encompass Mining Solutions, dated 4 July 2025 (**GDA**)
- Appendix R Holcim Salt Ash Sand Quarry – Aboriginal Cultural Heritage Assessment Report, prepared by Artefact Heritage Services, dated 21 July 2025 (**ACHAR**)
- Holcim Salt Ash Sand Operations (SSD-9099356) – Request for Information, prepared by ENV Services Pty Ltd, dated 28 August 2025 (**RFI**)

Key assessment issues

NPWS Issue 1	Landform instability and edge effects in WNP
Summary of Response or Changes	The RTS states that the initial concept design which involved full sand extraction to a depth up to 35 metres below the water table has been modified due to several key geological and environmental risks. The amended proposal has a reduced total extraction footprint and, accordingly, less clearing of vegetation. The proposed extraction depth will still be to -28 metres AHD. The final landform will be a large, deep open pond. The revised designed slope and batter profile of the pond will be a stable landform and will not incur a risk of long-term instability or slumping of adjoining lands into the site. There is confirmed to be a 50-metre buffer to the adjacent WNP from any disturbance associated with the sand extraction operation. This area will be marked on the ground to prevent encroachment and managed for biodiversity conservation. When the perimeter road and its batter are considered, the actual offset between the dredging operation and the WNP boundary is 80 metres. Implementation of the Rehab Plan will assist in stabilising the final landform. It will focus on progressive revegetation and stabilisation of areas already excavated, and enhancing areas outside the area of operation including the boundary buffer zone. Lighting of night-time operations will be unchanged from that subject to the existing approval.
NPWS Comment	NPWS acknowledges that the buffer to WNP south of the dredge pond is substantially larger than the buffers to the neighbouring lands to the east and west. NPWS welcomes the commitment that this buffer area will be managed for biodiversity conservation to minimise the impacts of the operation on WNP. NPWS also welcomes the commitment that this area will be a focus of the Rehab Plan to increase its cover by vegetation. Contrary to the statement in the RTS, the GDA identifies there is a potential for bench instability or collapse to occur from virtually any location on the dredge

NPWS Issue 1	Landform instability and edge effects in WNP
	pond wall (though is greatest on the west-facing pond wall), and that this potential increases as the dredging operation progresses. While the GDA focuses on the safety implications for mine workers, it does mention the need for monitoring of the external boundary areas above the active face. This presumably includes areas in the southern buffer, adjacent to WNP. The Rehab Plan does not clearly or consistently describe the monitoring program. Table 6 and Table 13 of the Rehab Plan state different timeframes for monitoring (some elements are bi-annual in Table 6, and annual in Table 13). Table 13 commits to monitoring landform stability annually (including using high-resolution LiDAR) or opportunistically after 'significant' rainfall events. The term 'significant' is not defined in the Rehab Plan, or the RTS, GDA or RFI. It is unclear whether the design of lighting minimises undesirable illumination of areas outside the area of operations, consistent with current Australian standards.
Recommend	NPWS recommends: 1.1 the southern batter slope of the dredge pond, parallel with the park boundary, is prioritised for progressive rehabilitation as soon as is possible during the life of the quarry and monitoring during the life of the quarry to limit the potential for landform instability occurring in the buffer to the park 1.2 specific quantitative thresholds on what defines a 'significant' rainfall event 1.3 lighting of nighttime extraction be upgraded (if required) to comply with the current standard <i>AS/NZS 4282:2023 Control of the obtrusive effects of outdoor lighting</i>, which incorporates the National Light Pollution Guidelines for Wildlife.

NPWS Issue 2	Groundwater impacts in WNP remain a concern
Summary of Response or Changes	The project will extract increasing amounts of water from the Stockton Groundwater Source (SGS) during the project, starting with 367.4 ML per annum and peaking at 489 ML per annum during Stage 7. Post closure, there will be an ongoing extraction of 107.3 ML per annum. The GWMP established a framework of environmental controls and monitoring protocols designed to protect water quality and ensure regulatory compliance throughout the project's life. Groundwater drawdown at the boundary of WNP at completion of Stage 7 is predicted to be 0.5 metres, and 0.1 metres about 1 kilometre within WNP. This is less than predicted in the EIS and is within seasonal fluctuations. As the change will be incremental over the 30-year project timeframe and will still be within the root zone of the trees present in WNP, it is unlikely to have a significant impact as adaptation will be possible. Water extraction from the Hunter Water borefield is conceptualised as having a more significant influence on groundwater levels in the SGS, though it appears this extraction may not be realistic in the short to medium term. While water supply approvals for the SGS may not be granted for developments extracting more than 100 ML per annum within 800 m of land reserved under the NPW Act, this restriction is subject to Ministerial discretion. Further, a water supply work approval is not required for SSD. Hence, this restriction does not apply.

NPWS Issue 2	Groundwater impacts in WNP remain a concern
NPWS Comment	The reason for the restriction on water supply work approvals is undoubtedly to provide protection to the Worimi Conservation Lands. NPWS remains concerned at the level of groundwater extraction associated with the proposed sand extraction operations, and the possible impact this will have on the groundwater resource of WNP and its groundwater-dependent ecosystems, as well as other vegetation on the dunes. The nature of the topography and the unconsolidated nature of the ground throughout the dunes, mean that changes to groundwater that are likely to occur may pose a risk to WNP including vegetation communities in the park, and dune stability over time. NPWS note there is currently no other extraction operation involving dredging below groundwater level directly adjoining the WCL and associated landscape, and none that have been through a complete assessment process and been approved. NPWS acknowledges that the assessment has concluded that this impact is not likely to be 'significant' (again, a term that is not clearly defined). However, it is likely there will be an impact. Given the nature of the risk, the planning framework that would otherwise preclude this type of project in this location next to park, and the lack of contemporary examples from which to gauge the effectiveness of risk mitigation, a more precautionary approach to this risk is needed.
Recommend	NPWS recommends: 2.1 the likely potential impact on vegetation in WNP is acknowledged during the assessment of this proposal 2.2 monitoring under the Rehab Plan includes remote sensing of vegetation in WNP 2.3 consideration of increasing the buffer between extraction and the neighbouring WNP to reduce impacts to the park

NPWS Issue 3	Management of Aboriginal cultural heritage impacts
Summary of Response or Changes	The ACHAR recommends collecting objects associated with the following 4 sites before ground disturbance occurs: • Portions of SA1 within disturbance footprint • Portions of SA2 within disturbance footprint • SA3 • Portions of SA AS 01 within disturbance footprint. In contrast, the RTS consistently refers to disturbance of three sites as part of the proposal. The ACHAR flags that the long-term management of the objects recovered during community artefact collection or found during archaeological test excavations would be developed in consultation with RAPs for the project.
NPWS Comment	The WCL Board of Management may be interested in the management of Aboriginal objects from the site given its proximity to the WCL.

NPWS Issue 3	Management of Aboriginal cultural heritage impacts
	Holcim should contact the WCL Board of Management regarding its views on the management of these objects.
Recommend	NPWS recommends: 3.1 Worimi community involvement in the collection of any objects from the site and their future management. 3.2 Holcim contact the WCL Board of Management regarding its views on the management of Aboriginal objects from the site.

NPWS Issue 4	Management of land clearing and cleared vegetation
Summary of Response or Changes	The RTS identifies that the southern buffer area will be marked on the ground and protected from clearing. Fencing and/or highly visible rope or tape will be used to delineate the boundary of vegetation clearing at the edge of the proposed extraction area. Signposting and inductions will be used to inform site personnel and visitors that this area is being retained for conservation purposes. The RTS refers to salvaging organic material (such as felled trees and decomposing mulch) to use for topdressing enhancement, fauna habitat, and erosion and sediment control. The Rehab Plan states the mulching of vegetation to be cleared will continue to be utilised to enhance the surface organic layer. Logs and large woody debris will be used to provide wildlife habitat.
NPWS Comment	It is unclear whether the disposal of the debris from vegetation clearing will include burning of windrows or piles. It is also unclear from the Rehab Plan whether controlled or prescribed burns will be used to aid in the management of the areas subject to the plan. NPWS is responsible for responding to fires on lands reserved or acquired under the NPW Act. Further, as a firefighting authority, it may respond to bushfires in proximity to these lands.
Recommend	NPWS recommends: 4.1 notification to the NPWS Hunter Coast office (on 02 4984 8200) of any planned burns or unplanned fire on the land.