



Dunmore Sand & Soil

Proposed Stage 5A and 5B operations Extracting the facts for our community

August 2020



With approved fine sand reserves nearing their end at our Tabbitta Road site, we are keen to continue to manufacture construction materials locally and ensure jobs are maintained in the local community.

Since early 2019 we've worked to gain approval for a new 'stage' of our existing operations. This stage, to be implemented in two parts (**5A** and **5B**), is proposed for private land between Riverside Drive and the Princes Highway.

An application was submitted to the **NSW Department of Planning, Industry and Environment (DPIE)** for assessment and has now been referred to the **NSW Independent Planning Commission (IPC)** for final determination.

Throughout the application process, many locals have made comments to us and aired concerns elsewhere about aspects of our plans.

As we move toward a decision, we recognise the need to again communicate how these concerns have been addressed in the project.

What you told us...

We don't want sand mined from the river

We are **not** going to and **never will** extract from the Minnamurra River.

Despite significant resources of sand existing closer to the river, we have reduced the proposed extraction area to preserve local habitat in the river corridor.

Stage 5A (Riverside Drive) is set back around **180 metres** from the river at its closest point and is isolated from it by both the road and railway infrastructure.

Stage 5B is even further from the river at around **370 metres** (almost **four** football fields). The proposed east and south boundaries were drawn back to ensure further separation.

We don't want the endangered rainforest damaged

As a locally founded business, we know the river is bounded by unique vegetation which is characteristic of the area. We too appreciate its environmental and social worth.

Although the Stage 5B sand resource underlies surrounding bushland, our proposal has been modified to only take in land mostly cleared years ago for agriculture.

This reconfiguration means the amount of trees to be removed from the proposed extraction area is minimal.

Importantly **none** of the littoral rainforest, swamp oak and grey mangrove forest, mangrove shrubland or saltmarsh separating the river from our proposed extraction area would be touched.

We don't want the White-bellied Sea-Eagle scared off

Our ecology studies accounted for the potential effect of our proposal on fauna. After locals provided us more information, we revisited these to more closely examine how our proposal might affect the resident **White-bellied Sea-Eagles** known to inhabit the region.

This involved more site visits and, after further direction from residents, the eagle's nesting area was found.

The nest is approximately **280 metres** to the south of the proposed Stage 5B extraction zone. It is separated from it by predominantly undisturbed bushland far exceeding the minimum distance recommended by the NSW Government.

This means any nesting eagle will be able to remain at the existing nesting site unaffected by the proposed activities, close to its existing foraging habitat and within sight of water.

We don't want the quality of the river water ruined

Since **2005**, we've operated DSS at the Tabbitta Road location which is positioned on tributaries (Rocklow Creek) of the Minnamurra River. It is therefore directly 'connected' to the river and theoretically able to influence river water quality.

Accordingly, our operations have always treated water with great care. Regardless of this, regular monitoring is undertaken to ensure water leaving the site is as good, if not better, than what is already in the river. Our publicly available data confirms this.

Our proposed Stage 5 areas are **not** located on any waterways which lead to the river and will therefore **not** be able to affect its water quality. All rainfall and run off will be contained within the operational areas.

We don't want the contamination beneath the old tip disturbed

We share the community's concern about the known leachate plume positioned below Kiama Council's Recycling Centre, opposite our proposed Stage 5A area, and the risk it presents to the Minnamurra River.

For this reason we have completed studies on surface and groundwater flows around the stage. More than three years of data was collected which demonstrated the groundwater beneath the proposed extraction area flows to the **north east (away from 5A toward the tip)**.

This means any leachate leakage **cannot** flow back toward 5A as our operation will not impact the groundwater flow or levels.

We don't want lots of trucks on our roads

As sand is extracted at both Stage 5A and 5B it will be transferred back to our existing operations in Tabbitta Road via a **pipeline**. This means we won't need to put trucks onto Riverside Drive as part of normal operations.

Trucks will be required to use Riverside Drive once 5A has been extracted and we start to fill the dredge pond. To do this, locals will see no more than **five** trucks per hour and we should be completed in less than a year.



1. Cover - A photomontage showing the proposed Stage 5B imposed on the existing landscape.
2. White-bellied Sea-Eagle. Source: Chris Tzaros, *Birds, Bush and Beyond*.
3. Sand is extracted at Dunmore Sand & Soil using a dredge.
4. Water is sampled for quality as it leaves Dunmore Sand & Soil.
5. Sand transfer pipeline from Stage 5A and 5B to our existing operations in Tabbitta Road.



Railway line
 Inferred groundwater flow direction
Proposed Modification 2
 Stage 5

0 100 200 300 400 m

Dimensions are approximate only

CAMBIUM GROUP

Source: LPI (2017), Nearmap (2019), Boral (2020), Cambium Group (2020).

What we'd like you to know...

Fine sand is a core component of building and construction materials such as concrete and asphalt. Without it, the ability to deliver the infrastructure we rely upon as a society becomes seriously challenged.

Alternatives to 'natural' fine sand have been raised in argument against our proposal. These do in fact exist, and did you know Boral is already one of the largest recyclers in NSW?

We understand the need to develop alternatives to natural raw materials for use in construction. For this reason our business is currently **recycling more than 10 million glass bottles** per month and converting them into sand. We plan to continue to grow this volume.

We use the sand produced from recycled glass bottles to replace some of our natural sand requirements. Additionally we have also commenced the recycling of excavation sand at Dunmore to further reduce the need for natural materials.

We will continue to maximise the use of these alternate sands in construction. However even if every bottle was recycled into sand, the **total demand** for sand still requires the extraction of natural materials.

At DSS, we've worked responsibly over many years to contribute to what the wider community needs, all while employing local people and successfully protecting the environment around us.

Our aim is to leave a positive legacy, socially and environmentally. Socially through the building and construction our products underpin, and environmentally through our rehabilitation and restoration efforts.

We encourage you to inspect our rehabilitated sites near Swamp Road which are abundant with bird and aquatic life.

We believe we've proven we can do what we do well and, with your support and better understanding about what we've proposed, look forward to delivering on this for years to come.

Why Dunmore for a sand quarry?

According to a **University of Wollongong** study (Switzer, Pucillo, Haredy, Jones and Bryant 2005), the extensive fine sand resources at Dunmore resulted from at least **two** separate **tsunamis** or **large storm events** which struck the coastline from the south-east.

From available evidence, it's thought these occurred during the **Holocene** period. They resulted in the ocean driving sand up to **3 kilometres** inland, creating 'sheets' which occupy about **7.4 square kilometres** reaching from the Minnamurra River estuary toward Rocklow Creek.

One of these sheets is dated between **4300 to 5300** years old. They mainly consist of marine quartz sand featuring small to medium fine grains.



The Dunmore Sand & Soil rehabilitation program has resulted in creation of a 'bird island' which attracts many species.

Keen to know more?

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