# **ASX RELEASE**

20<sup>th</sup> May 2022 ASX:PEC

# CORPORATE DIRECTORY

**Executive Chairman** Julian Babarczy

Managing Director Robert Benussi

Non-Executive Director Brett Grosvenor

Company Secretary Nicholas Katris

# PROJECTS

Beharra Silica Sands Arrowsmith West Sargon Hub Eneabba Hub

#### CONTACT

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We wish to acknowledge the Traditional Custodians of the land (Yamatji Southern Regional) on which we are developing the Beharra Project, and pay our respects to their Elders past, present and emerging.



# Beharra Project Environmental Submission Update

# **HIGHLIGHTS**:

- All desktop studies, field surveys and impact assessments supporting Beharra environmental permitting submissions now complete.
- Environmental approvals strategy now being reviewed and optimised in consultation with relevant government agencies and environmental consultants.
- Environmental approval submission documents entering final stages of preparation prior to submission.
- Shareholders to be updated once final submission has occurred.

**Perpetual Resources Limited (ASX: PEC,** "PEC", "Perpetual" or "the Company") is pleased to announce the completion of the various independent technical, field and desktop reports required to accompany the Beharra environmental approvals submissions, including all associated stakeholder impact assessments.

As was previously indicated and which was confirmed by the final detailed independent studies that have now been completed, no significant environmental constraints have been identified with regard to the Beharra high grade silica sand project.

A thorough review of the environmental approvals strategy is now underway with Perpetual's consultant team. Relevant government agencies have also been consulted with a view to optimising the approvals pathway.

Mr. Robert Benussi, Managing Director of Perpetual, commented, "The Beharra project is one of Western Australia's leading high grade silica sand projects, which shows potential to be a major new export industry for the State. We see Beharra as a key participant in the clean energy supply chain, with an ambition to suppling the fast-growing PV-solar cell cover glass market, an essential element in the required supply chain to decarbonise the world. In line with this strategy, it is pleasing to note no significant environmental constraints have been identified that would



increase the development complexity of our Beharra project, a statement supported by rigorous independent environmental studies that have now been completed. We look forward to updating shareholders shortly on the next steps toward full environmental permitting of this unique, large scale, long life project".

#### Update on Beharra Environmental Approval Related Workstreams

The following is a list of all key environmental approval related workstreams for Beharra, the reports for all of which have now been received by Perpetual. Pleasingly, all studies received have supported the view of the Beharra Project as affording a benign environmental risk and footprint.

- Flora & Vegetation: Level 2 field surveys completed and final reports received.
- Terrestrial Fauna: Level 2 field surveys completed and final reports received.
- Greenhouse Gas: Assessment confirming emissions are within target ranges received.
- **Noise:** Favorable Acoustic assessment completed with final report received.
- **Dust / Air Quality:** Air quality assessment report confirms compliance with adopted air quality criteria.
- **Heritage:** Aboriginal Heritage site avoidance survey completed with no isolated artefacts or previously unrecorded heritage sites recorded during the survey.
- Short-range endemic (SRE) invertebrate fauna: Level 1 study completed with final report received.
- Subterranean Fauna: Desktop assessment completed with final report received.
- **Hydrogeology**<sup>1</sup>: Water resource confirmed and conceptual hydrogeology model completed, preliminary desktop model and report received.
- Hydrology: Surface hydrology assessment completed with final report received.

# Next Steps

Comprehensive supporting documentation for the EP Act 1986 and EPBC Act 1999 permit applications are now in the final stages of completion with shareholders to be updated once final submission has taken place in June 2022.

<sup>&</sup>lt;sup>1</sup> Hydrogeology-related drilling is planned for 3QCY22, although is not required to be commenced prior to submission of relevant environmental permitting documentation.



# **About Perpetual Resources Limited**

Perpetual Resources Limited (**Perpetual**) is a focused explorer of silica sands, aiming to produce high purity silica for export to the high growth Asian markets.

Perpetual's flagship asset, the Beharra Project (**Beharra**) is located 300km north of Perth and is 96km south of the port town of Geraldton in Western Australia. Access to the Project from Geraldton (to the north) and Perth (to the South) is via the sealed Brand Highway, thence approximately 8.5km east on the Mt Adams unsealed road providing access to the center of the tenure.



Mt Adams Road which Intersects the Beharra Tenement (left) and Brand Highway Intersection with Mt Adams Rd (right)

The port of Geraldton is an established bulk material handling facility and is currently utilised for the export of bulk materials, minerals, grain and concentrates. Commodities currently exported via Geraldton Port include grains, copper concentrates, zinc concentrates, nickel concentrates, mineral sands, talc, and iron ore.



Geraldton Port - Operated by Mid-West Port Authority

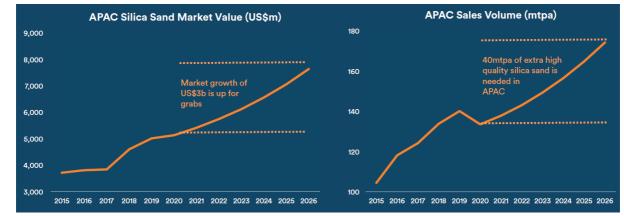


Beharra comprises a granted mining lease, M70/1406, covering an effective area of 10.4km<sup>2</sup>, and a granted exploration license, E70/5221, covering an effective land area of 56.8km<sup>2</sup>. Extensive heavy mineral sands mining occurs to the south of Beharra, lime sands mining to the west and natural gas production to the south of the project area.

Auger and air core drilling has confirmed the presence of extensive, high purity silica sands, with a maiden Mineral Resource Estimate completed in July 2020. A detailed Pre-Feasibility Study demonstrating compelling project economics for Beharra was released to the ASX in March 2021, along with a Maiden Ore Reserve. Subsequent rounds of bulk metallurgical testing have further improved the potential final product specifications at Beharra.

#### Silica Sands Market

Silica sands have an extensive range of uses, with lower purity (<99.5% SiO<sub>2</sub>) and lower priced applications including construction sand, proppant sand used in well fracturing, and foundry sand. With increasing purity (>99.5% SiO<sub>2</sub>) and price, uses include glass making including ultra-clear glass, with a main determinant of the sand's suitability for specific applications and pricing being the level of the key impurity iron oxide (Fe<sub>2</sub>O<sub>3</sub>). Significant expansion of solar PV cell manufacturing capacity globally is driving demand for silica sand with Fe<sub>2</sub>O<sub>3</sub> content of <200ppm and lower, which is a key focus market for Beharra.



Source: IMARC Group, Report Title: "Asia Pacific Silica Sand Market: Industry Trends, Share, Size, Growth, Opportunity and Forecast 2021-2026", Report Date: February 2021

Perpetual is targeting the high growth Asia Pacific silica sand markets, where independent market assessments have calculated a 40mtpa incremental market growth opportunity through to 2026.

This announcement has been approved for release by the Board of Perpetual.

#### For enquiries regarding this release please contact:

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#### Forward-looking statements

Certain statements contained in this document may be 'forward-looking' and may include, amongst other things, statements regarding production targets, economic analysis, resource trends, pricing, recovery costs, and capital expenditure. These 'forward–looking' statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Perpetual, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies and involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements.

Forward-looking statements are often, but not always, identified by the use of words such as 'believe', 'expect', 'anticipate', 'indicate', 'target', 'plan', 'intends', 'budget', 'estimate', 'may', 'will', 'schedule' and others of similar nature. Perpetual does not undertake any obligation to update forward-looking statements even if circumstances or management's estimates or opinions should change. Investors should not place undue reliance on forward-looking statements as they are not a guarantee of future performance.

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