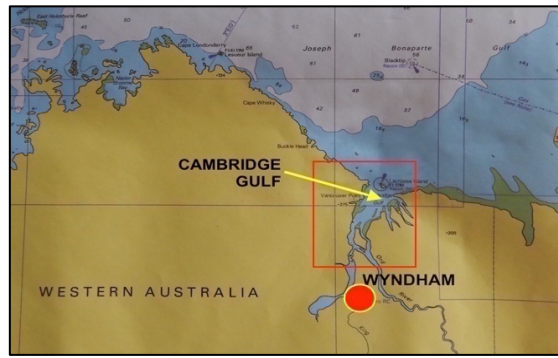
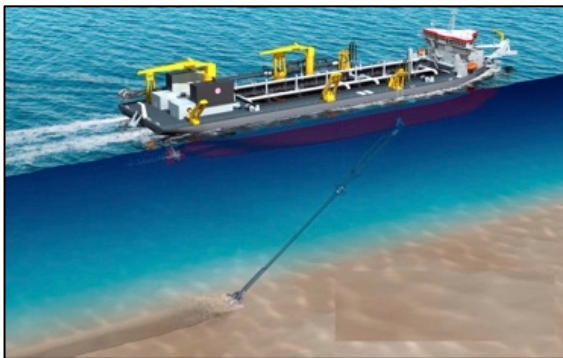
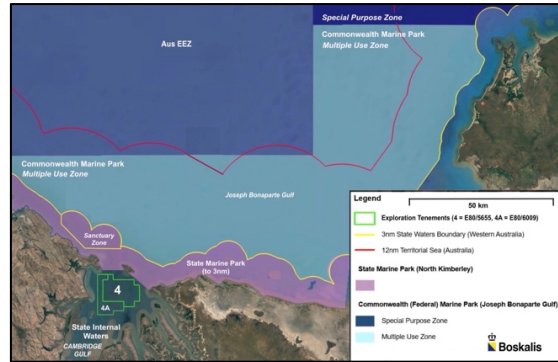


Referral Report No. 1

ENVIRONMENTAL REGULATORY FRAMEWORK

Boskalis Cambridge Gulf Marine Sand Proposal Western Australia



Prepared for Boskalis Australia Pty Ltd by EcoStrategic Consultants

For submission to:

- Western Australia Department of Water & Environmental Regulation
- Western Australia Environmental Protection Authority

In support of Project Referral under Section 38 of the Western Australia
Environmental Protection Act

AUGUST 2024



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FURTHER INFORMATION

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ACRONYMS

ACHIS	Aboriginal Cultural Heritage Inquiry System
AFS Convention	International Convention on the Control of Harmful Anti-fouling Systems on Ships
AH Act	Aboriginal Heritage Act
AMSA	Australian Maritime Safety Authority
BKA	Boskalis Australia Pty Ltd
BWM Convention	International Convention for the Control & Management of Ships' Ballast Water & Sediments
CALM Act	WA Conservation and Land Management Act
CG	Cambridge Gulf
CMS	Convention on Migratory Species
COLREGS	International Regulations for Preventing Collisions at Sea
DAFF	Commonwealth Department of Agriculture, Fisheries & Forestry
DBCA	WA Department of Biodiversity, Conservation & Attractions
DCCEEW	Commonwealth Department of Climate Change, Energy, the Environment & Water
DEMIRS	WA Department of Energy, Mines, Industry Regulation & Safety
DPLH	WA Department of Planning, Lands & Heritage
EIA	Environmental impact assessment
EGS	Environmental Group Site Details (required by DEMIRS under WA Mining Act)
EMP	Environmental Management Plan
EMS	Environmental Management System (required by DEMIRS under Mining Act)
EOPCMP	Environmental Outcomes, Performance Criteria & Monitoring Plan (required by DEMIRS under Mining Act)
EPA	WA Environmental Protection Authority
EP Act	WA Environmental Protection Act
EPBC Act	Commonwealth <i>Environment Protection & Biodiversity Conservation Act</i>
ERA	Environmental Risk Assessment (required by DEMIRS under Mining Act)
FRM Act	WA Fish Resources Management Act
GHG	Greenhouse gas
IMO	International Maritime Organization
IUCN	International Union for the Conservation of Nature
MARPOL	International Convention for the Prevention of Pollution from Ships
MNES	Matters of National Environmental Significance (under Commonwealth EPBC Act)
MO	Marine Order (of AMSA)
POW	Program of Work (under WA Mining Act)
PS(PPS) Act	Protection of the Sea (Prevention of Pollution from Ships) Act
PWONS Act	WA Pollution of Waters by Oil & Noxious Substances Act
Ramsar	Convention on Wetlands of International Importance
STCW	International Convention on Standards of Training, Certification & Watchkeeping for Seafarers
SOLAS	International Convention for the Safety of Life at Sea
SPV	Sand Production Vessel
SWEK	Shire of Wyndham & East Kimberley
TO	Traditional Owner
TSHD	Trailer Suction Hopper Dredger
UCH Act	Commonwealth Underwater Cultural Heritage Act
UNEP	United Nations Environment Programme
WA	Western Australia (State of)

REFERRAL DOCUMENTS

Report Citation: Boskalis Australia (BKA) (2024a), Cambridge Gulf Marine Sand Proposal - WA EP Act s38 - [Referral Report No. 1: Environmental Regulatory Framework](#).

This report is part of a larger set of documents submitted as part of Boskalis Australia's project Referral under section 38 of the Western Australia (WA) *Environmental Protection Act* (EP Act), as listed below.

Documents submitted as part of this Referral package (August 2024):	
Short Title	Full citation
EPA Form: <i>Referral of a Proposal under s38 of EP Act.</i>	EPA Form (2024): Referral of a Proposal under s38 of EP Act - Boskalis Cambridge Gulf Marine Sand Proposal.
EPA Template: <i>Proposal Content Document.</i>	EPA Template (2024): Proposal Content Document - Boskalis Cambridge Gulf Marine Sand Proposal.
Referral Report No. 1: <i>Environmental Regulatory Framework.</i>	Boskalis Australia (BKA) (2024a), Cambridge Gulf Marine Sand Proposal - WA EP Act s38 Referral Report No. 1: Environmental Regulatory Framework . THIS REPORT.
Referral Report No. 2: <i>Proposal Setting & Existing Environment Descriptions.</i>	Boskalis Australia (BKA) (2024b), Cambridge Gulf Marine Sand Proposal - WA EP Act s38 Referral Report No. 2: Proposal Setting & Existing Environment Descriptions . Annexes include: <ul style="list-style-type: none"> – Sand resource assessment report - Boskalis. – BCH mapping methods statement - MScience – Coastal LiDAR report - Sensorem. – Sediment contamination assessment report. – eDNA report - University of Canberra. – Turtle nesting report - EcoStrategic / DBCA.
Referral Report No. 3: <i>Traditional Owner Matters.</i>	Boskalis Australia (BKA) (2024c), Cambridge Gulf Marine Sand Proposal - WA EP Act s38 Referral Report No. 3: Traditional Owners, Native Title & Aboriginal Cultural Heritage . Annexes include: <ul style="list-style-type: none"> – Letters of support from the two TO groups.
Referral Report No. 4: <i>Impact Assessments.</i>	Boskalis Australia (BKA) (2024d), Cambridge Gulf Marine Sand Proposal - WA EP Act s38 Referral Report No. 4: Impact Assessments of Key Environmental Factors .
Referral Report No. 5: <i>Metcocean & Sediment Dynamics.</i>	Port & Coastal Solutions (PCS) (2024a), Cambridge Gulf Marine Sand Proposal - WA EP Act s38 Referral Report No. 5: Metcocean & Sediment Dynamics - System Understanding, Conceptual Model & Initial Modelling . <ul style="list-style-type: none"> – Annex 1: PCS (2024b) Supplementary Technical Note. – Annex 2: PCS (2024c) Factual Data Report.
Referral Report No. 6: <i>Consultation Report.</i>	Boskalis Australia (BKA) (2024e), Cambridge Gulf Marine Sand Proposal - WA EP Act s38 Referral Report No. 6: Stakeholder Engagement & Consultation .
Referral Report No. 7: <i>Commonwealth Matters.</i>	Boskalis Australia (BKA) (2024f), Cambridge Gulf Marine Sand Proposal - WA EP Act s38 Referral Report No. 7: Commonwealth Protected Matters .
Documents still being developed (to be submitted later).	
Referral Report No. 8: <i>Metcocean & Sediment Dynamics Full Modelling.</i>	Port & Coastal Solutions (PCS) (2024d), Cambridge Gulf Marine Sand Proposal - WA EP Act s38 Referral Report No. 8: Hydrodynamic, Coastal Processes & Sediment Plume Modelling .
Referral Report No. 9: <i>IMSA Package.</i>	Boskalis Australia (BKA) (2024g), Cambridge Gulf Marine Sand Proposal - WA EP Act s38 Referral Report No. 9: IMSA Metadata Package Statement .

PROJECT LOCATION

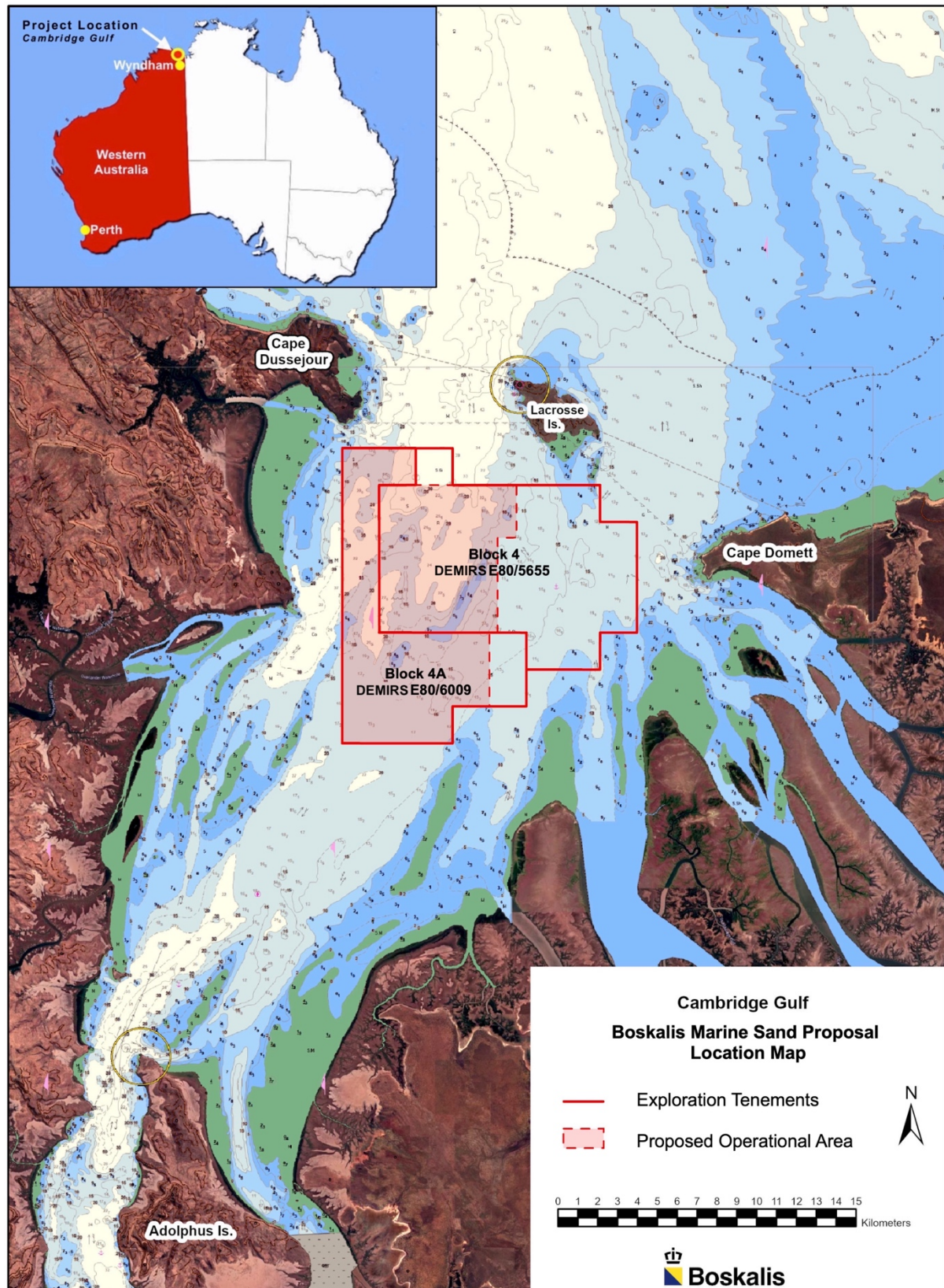


FIGURE 1: Location of the proposal in Cambridge Gulf near Wyndham in the northeast of Western Australia.

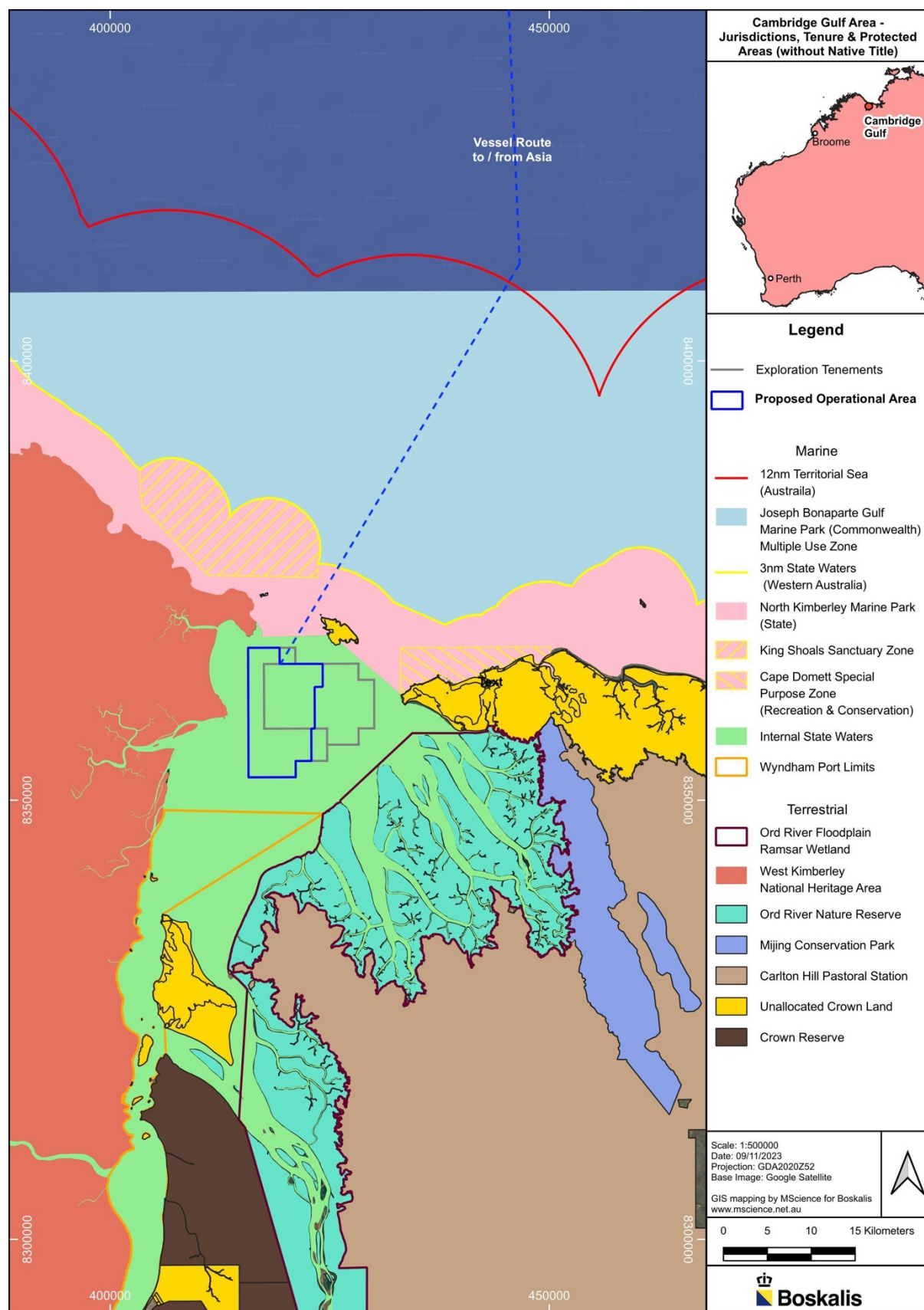


FIGURE 2: Jurisdictions & tenure in the vicinity of the proposed operational area and the indicative route for the Sand Production Vessel (SPV) to/from Asia.

EXECUTIVE SUMMARY

1. Boskalis Australia Pty Ltd (BKA) is assessing the feasibility of developing a marine sand-sourcing operation in Cambridge Gulf (CG) near Wyndham in the northeast of Western Australia (WA) (Figure 1). BKA currently holds two sand exploration tenements in CG under the WA *Mining Act*, as the basis for the proposal.
2. To support its assessment BKA has undertaken a wide range of comprehensive studies since 2018. These studies find that the proposal is feasible and viable and unlikely to cause significant environmental impacts, as defined under the WA *Environmental Protection Act* (EP Act) and the Commonwealth *Environmental Protection & Biodiversity Conservation Act* (EPBC Act).
3. Given these findings and the fact that the proposal is subject to the WA *Mining Act*, including the comprehensive environmental assessment and management framework under that Act, as well as a range of other environmental regulatory requirements as outlined in this report, BKA considers that the proposal may not require an assessment process under the WA EP Act or Commonwealth EPBC Act.
4. Never-the-less, as a responsible company with stringent environmental and social policies, BKA has committed to self-referring the proposal to the State and the Commonwealth under their respective Acts, for their determination of what further environmental assessments might be required, if any. If it is determined that assessment is required under both Acts, BKA will seek a joint process under the WA environmental assessment system, which is accredited by the Commonwealth.
5. The purpose of this report is to support BKA's self-referrals and regulatory approval applications by describing the State, Commonwealth and international environmental regulatory frameworks that apply to the proposal. The main findings of the report include, *inter alia*:
 - a) BKA's proposed operational area is located within the State Internal Waters of WA (landward of the Territorial Sea Baseline), and is thus subject to the full jurisdiction of the State of WA.
 - b) The area is also within the sovereign territory of Australia and subject to relevant Commonwealth laws.
 - c) There is no Native Title determination over marine waters within the main body of CG, including the proposed operational area. There is Native Title over areas to both to west and east of CG. The two relevant TO groups, Balanggarra and Miriwung-Gajerrong, have issued letters of support for the proposal.
 - d) Section 4 identifies the main relevant State environmental, natural resources, marine and related laws, their implications for the proposal and how BKA has and will address the requirements of each.
 - e) Section 5 identifies the main relevant Commonwealth environmental, natural resources, marine and related laws, their implications for the proposal and how BKA has and will address the requirements of each.
 - f) Section 6 identifies the main relevant international environmental, natural resources and marine treaties and conventions, their implications for the proposal and how BKA has and will address the requirements of each.
 - g) Because the proposal is a 100% marine-based operation that will utilize an international vessel, in addition to standard State and Commonwealth environmental laws it is also subject to the international maritime regulatory regime, as administered by the International Maritime Organization (IMO) and implemented in Australia through the Australian Maritime Safety Authority (AMSA).
6. Subject to the outcomes of the WA EP Act and Commonwealth EPBC Act referral processes, BKA plans to apply to the WA Department of Energy, Mines, Industry Regulation & Safety (DEMIRS) to convert part of the two Exploration Tenements to a single Mining Tenement, subject also to the environmental assessment and management framework under the WA *Mining Act*.

1. BACKGROUND & BRIEF DESCRIPTION OF THE PROPOSAL

Brief summary only - pls refer Proposal Content Document for details.

1. Boskalis Australia Pty Ltd (BKA) is assessing the feasibility of developing a marine sand sourcing operation in Cambridge Gulf (CG) near Wyndham in the northeast of Western Australia (WA) (Figure 1). The sand in CG is derived from natural terrestrial sources via river inputs. The sand would be exported to Asian markets for use in construction projects. In proposing CG, BKA has screened alternatives as outlined in Referral Report No. 4 - *Impact Assessments* (BKA 2024d).
2. The proposal is subject to the WA *Mining Act* including the comprehensive environmental assessment and management framework under that Act. BKA currently holds two exploration tenements in CG, E80/5655 (Block 4) and E80/6009 (Block 4A) (Figures 1 to 3). Based on sand distribution, the proposed operational area where BKA proposes to apply for a mining tenement is the western part of Block 4 and all of Block 4A (Figure 1 & 2). Key data relating to the proposal include:
 - a) Project lifespan: Up to 15 years from commencement of operations.
 - b) Zero coastal or land-based development: The proposal does not involve the construction and operation of any shore-based facilities and does not involve the alteration of the coastline in any way. It will be a 100% vessel-based operation.
 - c) Marine area: The proposed operational area is located in the central part of the main body of CG where there is a significant seabed sand resource, covering an area of ~100 km² as shown on Figures 1 and 2. Water depths within the area average -25 m MSL. The seabed within and around the proposed operational area comprises highly-dynamic sand-waves with very little biota and no significant benthic communities, due to the constantly moving substrate, strong tidal currents (>1.5 m/s), constantly high suspended sediments and permanent lack of benthic light.
 - d) Single vessel: The proposed operation will involve a Sand Production Vessel (SPV) based generally on the design of a large Trailer Suction Hopper Dredger (TSHD) (Figure 4). It will be an internationally-registered vessel subject to all relevant regulatory requirements of the International Maritime Organization (IMO) and the Australian Maritime Safety Authority (AMSA). While design is conceptual at this stage, indicative specifications are Length Overall (LoA) of ~350 m, draft of ~19 m, sand capacity 75K m³ to 125K m³ and crew of ~25.
 - e) Zero activity in CG for 86% of time: The SPV will self-load sand in CG for one to two days every two weeks. It will then sail to the sand delivery port in Asia and return to CG two weeks later to repeat the cycle. This means that the SPV will only operate in CG for 52 days per year, or 14% of the time. There will be zero operational activity in CG for 86% of the time during the project's lifespan of up to 15 years. There will be no refuelling or waste discharges in CG.
 - f) Sand volumes: Exploration surveys indicate that there is a minimum of 300 million m³ of sand in the proposed operational area and likely several times more. There are several orders of magnitude higher volumes of sand throughout CG overall. It is proposed to export up to 70 million m³ of sand. This is a maximum of only 23% of the minimum volume of 300 million m³ of sand estimated to occur in the proposed operational area, and a much smaller % of the volume of sand that occurs throughout CG overall.
 - g) Low footprint each loading cycle: During each one- to two-day sand loading cycle, the SPV will work over an area of ~0.5 km² within the proposed operational area, with a draghead width of ~6 m. The SPV will remove a layer of approximately 40 cm of sand from the seabed during each loading cycle.
 - h) End of project seabed condition: At the end of the 15-year project timeframe, if the proposed 70 million m³ of sand is exported, the area within the proposed operational area will be on average <1m deeper than the pre-project seabed. It will still comprise sand with similar seabed morphology, dynamics and habitat features as before sand sourcing.
 - i) No significant environmental impacts: Overall, due to the above factors and other factors as assessed in Referral Report No. 4 - *Impact Assessments* (BKA 2024d), and with the implementation of best-practice impact avoidance, prevention, minimization, mitigation, management and monitoring measures, the proposal is unlikely to cause significant environmental impacts. If the proposal proceeds, BKA will seek to support research and monitoring initiatives to improve environmental protection and biodiversity conservation in the area, in cooperation with relevant stakeholders including TOs (see Referral Report No. 4).
 - j) Economic benefits & TO support: The proposal will generate a range of economic benefits, including payment of State royalties, payment of voluntary royalties to TO groups, up to 40-50 local jobs, service contracts and business opportunities with priority focus on TOs, and support for local Indigenous Ranger groups and community development. Both TO groups in the area, Balanggarra and Miriwung-Gajerrong, have issued letters of support for the proposal (see Referral Report No. 3 - *Traditional Owner Matters*, BKA 2024c).

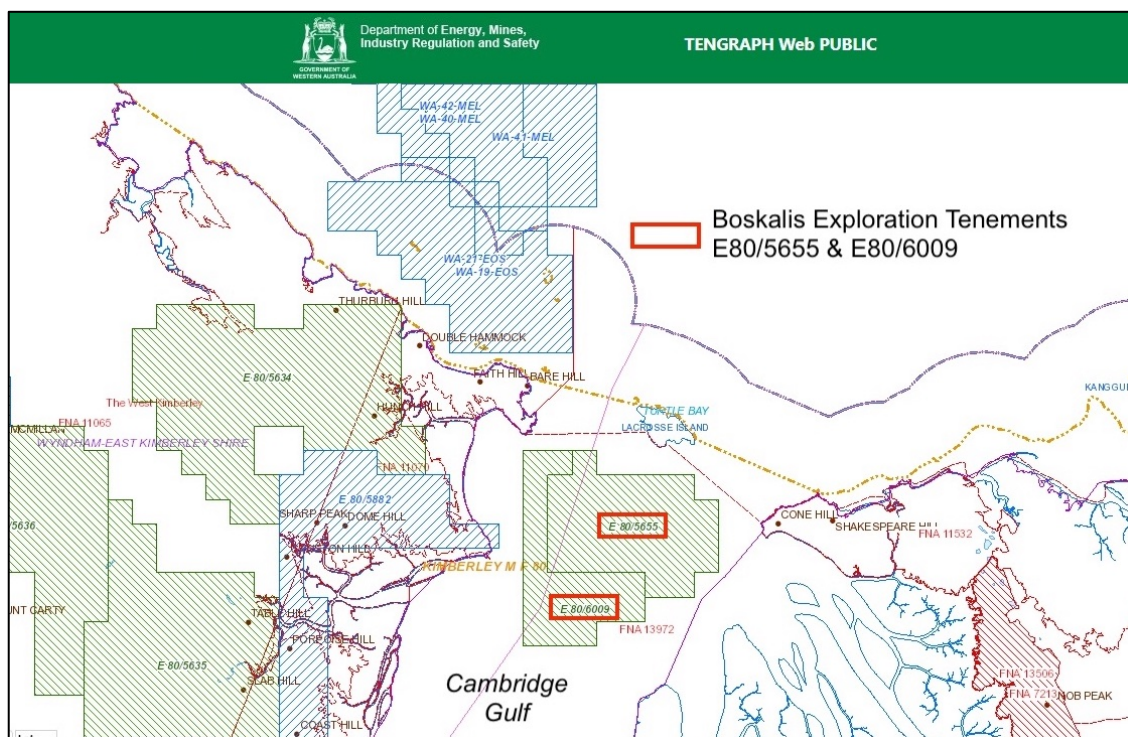


FIGURE 3: DEMIRS Tengraph map of BKA's two exploration tenements in Cambridge Gulf.

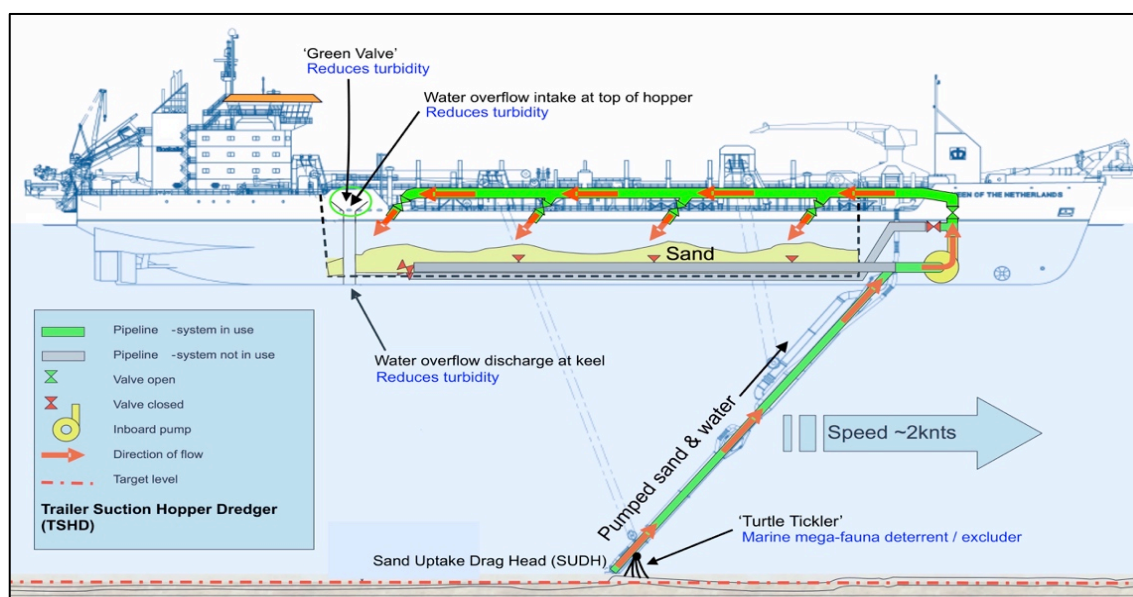


FIGURE 4: The proposed operation will involve a single Sand Production Vessel (SPV) based generally on the design of a large Trailer Suction Hopper Dredger (TSHD).

2. PURPOSE OF THIS REPORT

1. To support its assessment of the feasibility of the proposal BKA has undertaken a wide range of environmental, engineering, economic and other studies since 2018. These studies find that the proposal is feasible and viable and unlikely to cause significant environmental impacts, as defined under the WA *Environmental Protection Act* (EP Act) and the Commonwealth *Environmental Protection & Biodiversity Conservation Act* (EPBC Act). The findings of these studies in terms of State (WA) impact assessments are presented in Referral Report No. 4 - *Impact Assessments* (BKA 2024d).
2. Despite the low likelihood of significant environmental impacts, as a responsible company with stringent environmental and social policies, BKA has committed to self-referring the proposal to the WA Environmental Protection Authority (EPA) under section 38 of the EP Act, and to the Commonwealth under Part 7 of the EPBC Act, for their determination of what further environmental assessments might be required, if any. If it is determined that assessment is required under both Acts, BKA will seek a joint process under the WA environmental assessment system, which is accredited by the Commonwealth.
3. As outlined in section 1.1 the proposal is subject to the WA *Mining Act*, including the comprehensive environmental assessment and management framework under that Act. Subject to the outcome of the WA EP Act and Commonwealth EPBC Act referral processes, BKA plans to apply to the WA Department of Energy, Mines, Industry Regulation & Safety (DEMIRS) to convert the two Exploration Tenements to a single Mining Tenement, excluding the eastern half of Block 4 due to the lack of sand in that area, and covering the proposed operational area only, as shown on Figures 1 and 3.
4. The purpose of this report is to support BKA's self-referrals and regulatory approval applications by describing the State, Commonwealth and international environmental regulatory frameworks that apply to the proposal. This report only addresses environmental, biodiversity, cultural heritage, natural resources, marine pollution and related laws and regulations, and not the broader regulatory regime that might apply to the proposal such as business, taxation, industrial and employment laws etc.

3. OVERALL JURISDICTIONAL SETTING

1. As shown on Figures 2, 5 and 6, Cambridge Gulf (CG) and BKA's proposed operational area are located within the State Internal Waters of WA (landward of the Territorial Sea Baseline), and are thus subject to the full jurisdiction of the State of WA. The area is also within the sovereign territory of Australia and subject to relevant Commonwealth laws.
2. To seaward of CG is the State North Kimberly Marine Park, which extends from the Territorial Sea Baseline seaward to the 3 nm State limit, also within the jurisdiction of WA. Seaward of the 3 nm State limit are Commonwealth waters of the Commonwealth Joseph Bonaparte Gulf Marine Park.
3. The Port of Wyndham is located ~80 km upstream from the main body of CG and is under the jurisdiction of the Kimberley Ports Authority (KPA). The proposed operational area is not within the declared port area (the seaward extent of the port limits is shown on Figure 5).
4. As shown on Figure 6, the coast and hinterland on the western side of CG are Native Title lands of the Balanggarra peoples, which includes marine areas of the State Marine Park out to 3 nm. The coast and hinterland on the eastern side of CG are Native Title lands of the Mirriuwung-Gajerrong peoples, which includes marine areas within the 'False Mouths of the Ord River', which are part of the State Ord River Nature Reserve. There is no Native Title determination over marine waters within the main body of CG, including the proposed operational area (see also Referral Report No. 3 - *Traditional Owner Matters*) (BKA 2024c).
5. The local Government for the area is the Shire of Wyndham & East Kimberley (SWEK), with its main office in Kununurra.

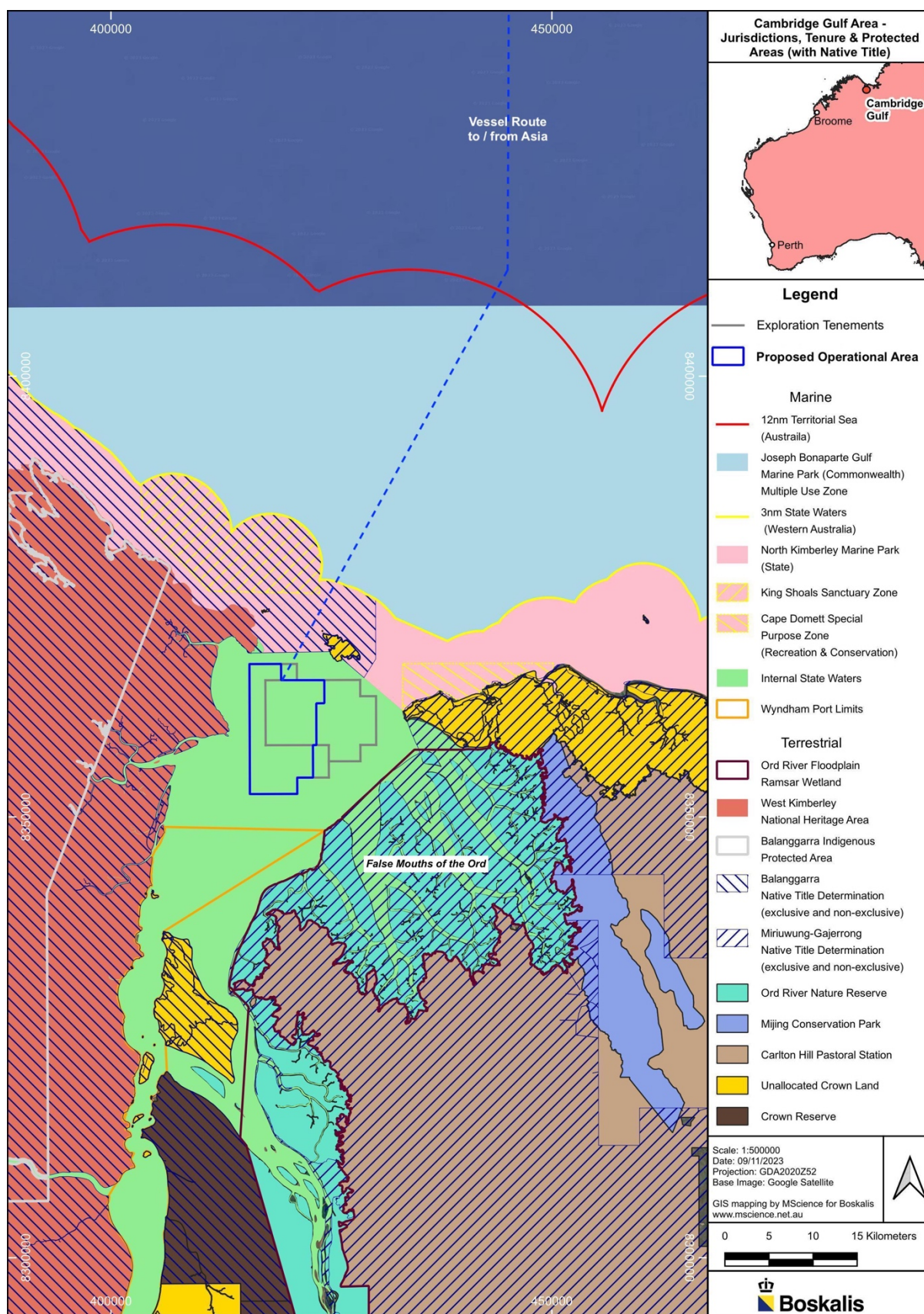


FIGURE 5: Jurisdictions and tenure in the area including Native Title.

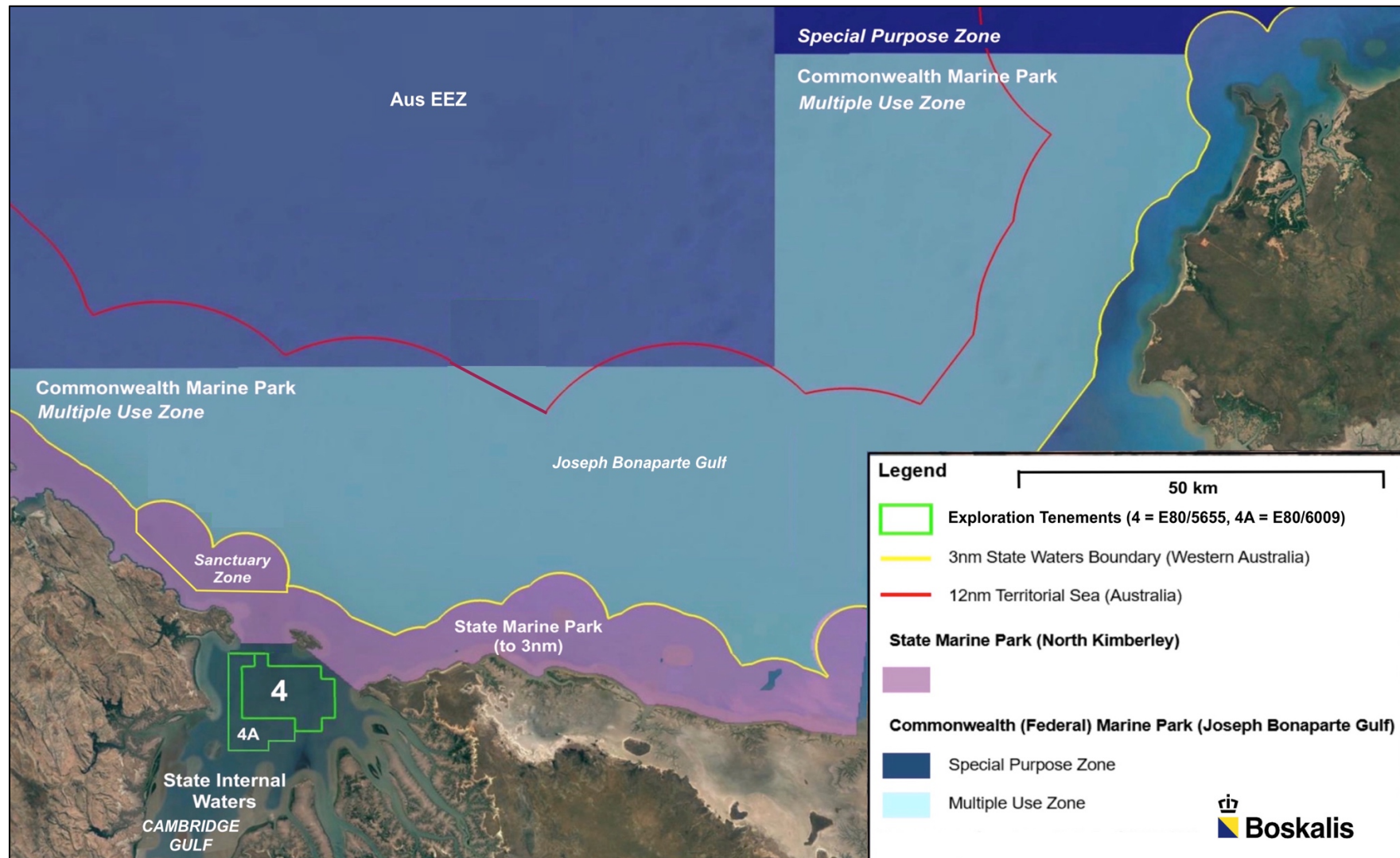


FIGURE 6: *Marine jurisdictions in and around CG.*

4. STATE REGULATORY FRAMEWORK

TABLE 1: *The main State environmental, natural resources, marine and associated laws that are applicable to the BKA proposal.*

WA Law & Regulatory Authority	Implications for the BKA proposal	How addressed by BKA
<p><i>Mining Act & Regulations</i></p> <p>Department of Energy, Mines, Industry Regulation & Safety (DEMIRS) - www.demirs.wa.gov.au</p>	<p><u>Sand exploration:</u></p> <ul style="list-style-type: none"> • Exploration Tenement / Licence is required to explore. <ul style="list-style-type: none"> – E80/5655 issued to BKA Aug 2022 (referred to by BKA as Block 4). – E80/6009 issued to BKA July 2024 (referred to by BKA as Block 4A). – Both have Endorsements and Conditions including need for Program of Work (PoW) and environmental requirements for exploration activities. <p><u>Sand sourcing:</u></p> <ul style="list-style-type: none"> • Mining Tenement / Licence is required to mine the sand. • Application to convert Exploration Tenement to Mining Tenement is subject to comprehensive environmental assessment process and must address, <i>inter alia</i>: <ul style="list-style-type: none"> – <i>Statutory Guidelines for Mining Proposals 2020</i>, – <i>Environmental Regulatory Strategy 2021</i>, – <i>Environmental Objectives Policy for Mining 2020</i>, – <i>Environmental Applications Administrative Procedures 2021</i>; and must include, <i>inter alia</i>: <ul style="list-style-type: none"> – <i>Environmental Group Site (EGS) Details Form</i>, – <i>Mining Proposal Checklist</i>, – <i>Stakeholder Engagement report</i>, – <i>Baseline Environmental Data report</i>, – <i>Environmental Risk Assessment (ERA)</i>, – <i>Environmental Outcomes, Performance Criteria & Monitoring Plan (EOPCMP)</i>(addressing DEMIRS Environmental Factors), – <i>Environmental Management System (EMS)</i>; and – <i>Mine Closure Plan (MCP)</i>. • Any issue of a Mining Tenement will include conditions relating to environmental management & monitoring. 	<ul style="list-style-type: none"> • BKA is consulting with DEMIRS. <p><u>Sand exploration:</u></p> <ul style="list-style-type: none"> • BKA developed PoW and Environmental Management Plan (EMP) for E80/5655, which was reviewed by relevant State agencies and approved by DEMIRS in Dec 2022. • BKA undertook exploration in E80/5655 in accordance with the PoW and EMP in Feb-Mar 2023. • BKA has not undertaken exploration in E80/6009 at August 2024. Endorsements and Conditions are the same as for E80/5655 and BKA will develop relevant PoW and EMP for State approval before any exploration activities are undertaken in E80/6009. <p><u>Sand sourcing:</u></p> <ul style="list-style-type: none"> • At an appropriate time, and subject to the outcomes of the WA EP Act and Commonwealth EPBC Act referral processes, BKA plans to apply to DEMIRS to convert the two Exploration Tenements to a single Mining Tenement, excluding the eastern half of Block 4 due to the lack of sand in that area, and covering the proposed operational area only, as shown on Figures 1 and 3. • The application will address all of the requirements listed in the column to immediate left, and will utilize the data and findings from BKA's comprehensive program of work undertaken to support the EP Act referral, including baseline data, impact assessments, stakeholder consultations and TO matters, as presented in BKA's full set of referral reports.

WA Law & Regulatory Authority	Implications for the BKA proposal	How addressed by BKA
<p><i>Environmental Protection Act & Regulation</i></p> <p>(EP Act & Reg)</p> <p>Supported by policies and Environmental Factor Guidelines and related Technical Guidance.</p> <p><i>Assessment & recommendations to Minister:</i> Environmental Protection Authority (EPA) www.epa.wa.gov.au</p> <p><i>Process support:</i> Department of Water & Environmental Regulation (DWER) www.dwer.wa.gov.au</p>	<p>The EP Act:</p> <ul style="list-style-type: none"> • provides the over-arching environmental law in WA, • sets penalties for causing <u>serious</u> and <u>material</u> environmental harm (which are defined), and controls pollution, emissions, discharge of waste and clearing of native vegetation; and • provides a framework for environmental impact assessment (EIA) of development proposals – with different assessment pathways potentially triggered if the proposal is likely to cause <u>significant</u> impacts on the environment, including on the following defined Environmental Factors: <ul style="list-style-type: none"> – <u>Marine</u>: <ul style="list-style-type: none"> – Benthic Communities & Habitats. – Coastal Processes. – Marine Environmental Quality. – Marine Fauna. – <u>Inland waters</u>: <ul style="list-style-type: none"> – Freshwater bodies, resources and values. – <u>Land</u>: <ul style="list-style-type: none"> – Flora and Vegetation. – Landforms. – Subterranean Fauna. – Terrestrial Environmental Quality. – Terrestrial Fauna. – <u>Air</u>: <ul style="list-style-type: none"> – Air Quality. – GHG Emissions. – <u>People</u>: <ul style="list-style-type: none"> – Social Surroundings. – Human Health. • If one of the environmental assessment pathways under the EP Act is triggered, completion of the assessment pathway will result in a recommendation to the State Environment Minister on whether or not to approve the proposal. Approvals usually have environmental conditions. 	<ul style="list-style-type: none"> • BKA is consulting with DWER. • As outlined in Referral Report No. 4 - <i>Impact Assessments</i> (BKA 2024d), it is assessed that none of the proposed activities will cause serious or material environmental harm, or cause pollution, emissions or discharge of waste in a manner that contravenes the provisions of the EP Act. • As also outlined in Referral Report No. 4, it is assessed that the Environmental Factors relating to Inland Waters, Land, GHG Emissions and Human health are not relevant to the proposal. • As further outlined in Referral Report No. 4, it is assessed that the proposal is unlikely to cause significant impacts on the relevant (key) Environmental Factors or on environmental resources and values overall. • Given this assessment, and the fact that the proposal is subject to the environmental assessment and management regime of the WA <i>Mining Act</i> and other environmental regulatory requirements described in this report, including the vessel regulatory regimes outlined in sections 5 and 6, BKA considers that the proposal may not require an assessment process under the WA EP Act. • Never-the-less, as a responsible company with stringent environmental and social policies, BKA has committed to self-referring the proposal under section 38 of the WA EP Act, and to the Commonwealth under Part 7 of the EPBC Act, for their determination of what further assessments might be required, if any. • BKA will continue to address and comply with all EP Act requirements moving forward.

WA Law & Regulatory Authority	Implications for the BKA proposal	How addressed by BKA
<p><i>Biodiversity Conservation Act & Regulations</i> (BC Act & Regs)</p> <p>Department of Biodiversity Conservation and Attractions (DBCA) - www.dba.wa.gov.au</p>	<ul style="list-style-type: none"> The BC Act and Regulations provide for the protection, conservation and management of the native flora and fauna of WA, including marine. With some exceptions, it is generally an offence to harm or kill all protected wildlife in WA, including turtles, dolphins, dugong, crocodiles, sharks and rays, plus various seabird species. 	<ul style="list-style-type: none"> BKA is consulting with DBCA. Referral Report No. 2 - <i>Environment Descriptions</i> (BKA 2024b) includes a description of protected marine fauna in CG, including the results of field surveys commissioned by BKA. Referral Report No. 4 - <i>Impact Assessments</i> (BKA 2024d), includes an assessment of potential impacts of the proposal on marine fauna in accordance with the EPA Environmental Factor Guideline for Marine Fauna. It was assessed that the proposal is unlikely to cause significant impacts on marine fauna, and best practice impact avoidance, minimization, management and monitoring measures are proposed in Referral Report No. 4.
<p><i>Conservation and Land Management Act & Regulations</i> (CALM Act & Regs)</p> <p>DBCA</p>	<ul style="list-style-type: none"> This CALM Act and Regulations provide for the use, protection and management of certain public lands and waters and the flora and fauna thereof, including the establishment and management of reserves and parks, including marine parks. The State North Kimberley Marine Park located to seaward of CG, is declared and managed under the CALM Act and Regulations, with an associated Marine Park Management Plan. The closest distance between the inner (shoreward) boundary of the Marine Park and the outer (seaward) boundary of the proposed operational area is ~1.5 km. Commercial vessels are expressly permitted to transit through the Marine Park in order to enter and depart CG. The State Ord River Nature Reserve, located on the eastern side of CG covering the False Mouths of the Ord, is also declared and managed under the CALM Act and Regulations. The closest distance between the western boundary of the Nature Reserve and the eastern boundary of the proposed operational area is ~9 km. 	<ul style="list-style-type: none"> BKA is consulting with DBCA. BKA obtained a licence from DBCA to take 'fauna' (invertebrates in benthic grab samples) from the North Kimberley Marine Park under the CALM Act (Licence No. BA27000873), as part of the environmental assessment studies reported in Referral Report No. 2 - <i>Environment Descriptions</i> (BKA 2024b). Referral Report No. 4 - <i>Impact Assessments</i> (BKA 2024d), includes an assessment of potential impacts of the proposal on the North Kimberley Marine Park and the Ord River Nature Reserve. It was assessed that the proposal is unlikely to cause significant impacts on these areas, and best practice impact avoidance, minimization, management and monitoring measures are proposed in Referral Report No. 4.

WA Law & Regulatory Authority	Implications for the BKA proposal	How addressed by BKA
<p>Aboriginal Heritage Act & Regulations (AH Act & Regs)</p> <p>Department of Planning, Lands & Heritage (DPLH) - www.dplh.wa.gov.au</p>	<ul style="list-style-type: none"> Protects Aboriginal cultural heritage in WA. There are significant land-based Aboriginal cultural heritage sites on the eastern side of CG, centred on Cape Domett, and on Lacrosse Island – listed on the WA <i>Aboriginal Cultural Heritage Inquiry System</i> (ACHIS) See Referral Report No. 3 - <i>Traditional Owner Matters</i> (BKA 2024c). 	<ul style="list-style-type: none"> BKA is consulting with both TO groups in the CG area (Balanggarra and Miriwung-Gagerrong). Both TO groups have issued letters of support for the proposal (attached as Annexes to Referral Report No. 3 - <i>Traditional Owner Matters</i>, BKA 2024c). The significant land-based Aboriginal cultural heritage sites on the eastern side of CG and on Lacrosse Island will be not affected by the proposal. BKA consulted with the TO groups about marine-based cultural heritage and undertook an extremely comprehensive survey for potential underwater Aboriginal cultural heritage, and found no indications. BKA has offered to work with TO groups to develop a Joint Aboriginal Cultural Heritage Management Plan for the area should the proposal proceed. See Referral Report No. 3 for details.
<p>Maritime Archaeology Act</p> <p>Western Australian Museum.</p>	<ul style="list-style-type: none"> The Maritime Archaeology Act protects the wrecks and artefacts of historic ships lost before 1900 and maritime archaeological sites associated with historic ships, in WA State waters. It also protects terrestrial maritime archaeological sites such as jetties and shipwreck survivor camps, vesting them in the Western Australian Museum. 	<ul style="list-style-type: none"> BKA searched the WA Historic Shipwreck Database and no historic shipwrecks were identified in the proposed operational area, although there are several in the general CG area. BKA undertook high-resolution multi-beam hydrographic surveys throughout the entire proposed operational area and a 1 km buffer around the boundary of the area in Feb-March 2024, with no evidence of shipwrecks or related material. See Referral Report No. 4 - <i>Impact Assessments</i> (BKA 2024d).
<p>Fish Resources Management Act & Regulations (FRM Act & Regs)</p> <p>Department of Primary Industries and Regional Development (DPIRD) – Fisheries Division - www.fish.wa.gov.au</p>	<ul style="list-style-type: none"> The primary purpose of the FRM Act and Regulations is the protection and management of fish resources in WA – with ‘fish’ being very broadly defined as <i>‘an aquatic organism of any species (whether alive or dead) and includes the eggs, spat, spawn, seeds, spores, fry, larva or other source of reproduction or offspring of an aquatic organism; and, but does not include aquatic mammals, aquatic reptiles, aquatic birds and amphibians . . .’</i> 	<ul style="list-style-type: none"> BKA is consulting with DPIRD Fisheries. BKA obtained a licence (Instrument of Exemption No. 251137723) from DPIRD to take ‘fish’ (invertebrates in benthic grab samples) from throughout CG, as part of the environmental assessment studies reported in Referral Report No. 2 - <i>Environment Descriptions</i> (BKA 2024b).

WA Law & Regulatory Authority	Implications for the BKA proposal	How addressed by BKA
	<ul style="list-style-type: none"> The Act provides for the declaration of Fish Habitat Protection Areas (FHPAs) – there are no declared FHPAs in the vicinity of the proposal. The Act includes controls on introductions of 'exotic' and 'noxious' fish into WA waters, which extends to vessel bio-fouling ('fish' meaning any aquatic species). 	<ul style="list-style-type: none"> Referral Report No. 4 - <i>Impact Assessments</i> (BKA 2024d), includes an assessment of potential impacts of the proposal on fish in accordance with the EPA Environmental Factor Guideline for Marine Fauna. It was assessed that the proposal is unlikely to cause significant impacts on fish, and best practice impact avoidance, minimization, management and monitoring measures are proposed in Referral Report No. 4. As outlined in Referral Report No. 4, the potential for introductions of exotic and noxious 'fish' into WA waters via vessel bio-fouling will be avoided and minimized through implementation of stringent bio-fouling management measures on the SPV, not only in accordance with the State FRM Act, but because the SPV will be an international vessel, also in accordance with the biofouling regulations under the Commonwealth <i>Biosecurity Act</i> and the <i>IMO Biofouling Guidelines 2023</i> (see also section 5, Table 2 below).
<p><i>Pollution of Waters by Oil & Noxious Substances Act</i> (PWONS Act)</p> <p>Department of Transport – Maritime Division (DoT Maritime)</p> <p>https://www.transport.wa.gov.au/imate/maritime-environmental-emergency-management-and-arrangements.asp</p>	<ul style="list-style-type: none"> Under this Act it is an offence to discharge oil, oily-water mixtures and noxious substances from vessels into WA waters. There is a legal obligation to report discharges and spills to DoT Maritime, and to respond to discharges and spills. Links to WA Maritime Environmental Emergencies response system which is part of the national system. Will apply to the BKA Sand Production Vessel (SPV) when in State waters. 	<ul style="list-style-type: none"> BKA is consulting with DoT Maritime. As an international vessel the SPV will comply with the maritime safety and marine pollution prevention regime of the International Maritime Organization (IMO) and the Australian Maritime Safety Authority (AMSA), including best practice measures to prevent discharges and respond to accidental discharges should they occur. It will thus also comply with the State Act. Referral Report No. 4 - <i>Impact Assessments</i> (BKA 2024d), includes a Shipping and Oil Spill Risk Assessment which outlines the best-practice measures. The SPV's pollution prevention, preparedness and response plans will integrate with the relevant port-, state- and national-level plans, and BKA will consult further with DoT Maritime and Kimberley Ports Authority on these matters should the proposal proceed.

5. COMMONWEALTH REGULATORY FRAMEWORK

TABLE 2: The main Commonwealth environmental, natural resources, marine and associated laws that are applicable to the BKA proposal.

Commonwealth Law & Regulatory Authority	Implications for the BKA proposal	How addressed by BKA
<p>Environment Protection & Biodiversity Conservation Act (EPBC Act)</p> <p>Department of Climate Change, Energy, the Environment and Water (DCCEEW) - www.dcceew.gov.au</p>	<ul style="list-style-type: none"> The EPBC Act protects, <i>inter alia</i>, a list of 10 defined <i>Matters of National Environmental Significance</i> (MNES). It is an offence to undertake any action that causes, will cause or is likely to cause significant impact on MNES, unless approved under the Act. Criteria for 'significant impact' for each MNES are laid out in guidelines. The 10 MNES and their relevance to the BKA proposal are as follows: <ol style="list-style-type: none"> <u>World Heritage</u> sites (not relevant to the proposal – none in area). <u>National Heritage</u> sites (indirectly relevant to the proposal, the West Kimberly National Heritage Place is located to the west of CG, but no overlap). <u>Wetlands of international importance</u> (Ramsar sites) (indirectly relevant to proposal, the Ord River Floodplain is on east coast of CG, but no overlap). Listed <u>threatened ecological communities</u> (not relevant to the proposal – none in area). Listed <u>threatened species</u> (relevant to the proposal – some in area). Listed <u>migratory species</u> (relevant to the proposal – some in area). <u>Nuclear</u> actions, including uranium mines (not relevant to proposal). <u>Commonwealth marine areas</u> (indirectly relevant to the proposal – no overlap but vessel will navigate through Commonwealth waters). The <u>Great Barrier Reef Marine Park</u> (not relevant to proposal). Protection of <u>water resources</u> from <u>coal seam gas</u> and <u>coal mining</u> (not relevant to the proposal). As can be seen from this list, five of the ten MNES are not relevant to the proposal, three are indirectly relevant (in general area but no overlap) and two are relevant. 	<ul style="list-style-type: none"> BKA is consulting with DCCEEW. As outlined in Referral Report No. 7 - <i>Commonwealth Matters</i> (BKA 2024f), supported by Referral Report No. 4 - <i>Impact Assessments</i> (BKA 2024d), BKA assessed potential impacts of the proposal on the five MNES that are directly and indirectly relevant to the proposal, following DCCEEW's significant impact guidelines for each MNES. These reports assess that the proposal is unlikely to cause significant impacts on MNES, as defined in the DCCEEW significant impact guidelines. Given this assessment, and the fact that the proposal is subject to the State environmental regulatory regime, as well as the IMO and AMSA vessel regulatory regimes outlined below, BKA considers that the proposal may not require an assessment process under the Commonwealth EPBC Act. Never-the-less, as a responsible company with stringent environmental and social policies, BKA has committed to self-referring the proposal under Part 7 of the EPBC Act, for determination by DCCEEW of what further assessments might be required, if any. Should the Commonwealth and State assessment processes be triggered, BKA will apply to have them undertaken jointly / in parallel through the Commonwealth-accredited State process.

Commonwealth Law & Regulatory Authority	Implications for the BKA proposal	How addressed by BKA
	<ul style="list-style-type: none"> Where there is a likelihood that a proposed development project could potentially cause significant impact(s) on one or more MNES, it should be referred to the Commonwealth via DCCEEW for initial assessment, when it becomes a 'proposed action' under the EPBC Act. The EPBC Act provides a framework for environmental assessment and regulatory approval / non approval of proposed actions – with different assessment pathways potentially triggered if the proposal is deemed by DCCEEW to be likely to cause <u>significant</u> impacts on MNES, based on the information submitted with the referral. If one of the environmental assessment pathways under the EPBC Act is triggered, the 'proposed action' becomes a 'controlled action' under the Act. Completion of the assessment pathway will result in a recommendation to the Commonwealth Environment Minister on whether or not to approve the proposal. Approvals usually have environmental conditions. The State EIA process in WA is accredited by the Commonwealth and it is possible to request a joint, parallel process. 	
<p><i>Underwater Cultural Heritage Act</i> (UCH Act)</p> <p>DCCEEW</p>	<ul style="list-style-type: none"> Protects historic shipwrecks and other types of underwater cultural heritage including Aboriginal and Torres Strait Islander underwater cultural heritage in Commonwealth waters. 	<ul style="list-style-type: none"> Not relevant as while the SPV will transit through Commonwealth waters enroute to and from CG, there will not be any activities in Commonwealth waters that could potentially impact on underwater cultural heritage.
<p><i>Protection of the Sea (Prevention of Pollution from Ships) Act</i> (PS(PPS) Act)</p> <p>Supported by Marine Orders (MOs) per MARPOL:</p> <ul style="list-style-type: none"> MO 91 - Oil. MO 93 - Noxious Liquid Substances. MO 94 - Harmful Packaged Substances. MO 95 - Garbage. MO 96 - Sewage. MO 97 - Air pollution. <p>Australian Maritime Safety Authority (AMSA) - www.amsa.gov.au</p>	<ul style="list-style-type: none"> The PS(PPS) Act and supporting Marine Orders (MOs) implement the <i>International Convention for the Prevention of Pollution from Ships</i> (MARPOL Convention) in Australia, including pollution discharge controls and other requirements under the following MARPOL Annexes: <ul style="list-style-type: none"> Annex I - Oil. Annex II - Noxious Liquid Substances. Annex III - Harmful Packaged Substances. Annex IV - Sewage. Annex V - Garbage. Annex VI - Air Emissions. The Sand Production Vessel (SPV) will need to comply in full except for Annexes II and III, as the SPV will not carry Noxious Liquid Substances or Harmful Packaged Substances as defined by those Annexes. 	<ul style="list-style-type: none"> As outlined in Referral Report No. 4 - <i>Impact Assessments</i> (BKA 2024d), as an international vessel the SPV will comply in full with all relevant requirements of the international maritime regulatory regime administered by the International maritime Organization (IMO), including the MARPOL Convention, as implemented in Australia through the PS(PPS) Act and supporting MOs. In addition to regulatory oversight by AMSA during operations in Australian waters, the SPV will be subject to Flag State Control, Classification Society surveys and Boskalis' internal vessel QA/QC procedures to ensure compliance.

Commonwealth Law & Regulatory Authority	Implications for the BKA proposal	How addressed by BKA
<p><i>Protection of the Sea (Harmful Anti-fouling Systems) Act</i> (AFS Act)</p> <ul style="list-style-type: none"> Supported by MO 98 - Anti-fouling Systems. <p>AMSA</p>	<ul style="list-style-type: none"> The AFS Act and supporting MO 98 implement the <i>International Convention on the Control of Harmful Anti-fouling Systems on Ships</i> (AFS Convention) in Australia. Prohibits anti-fouling systems (AFS) that contain organo-tin compounds and cybutryne compounds. 	<ul style="list-style-type: none"> As per PS(PPS) Act above. The SPV will not use an AFS system that is banned under the IMO AFS Convention and Australian AFS Act and MO 98.
<p><i>Navigation Act</i> + supporting Marine Orders (MOs)</p> <p>AMSA</p>	<ul style="list-style-type: none"> The Navigation Act regulates the safety of navigation of vessels and implements in Australia the: <ul style="list-style-type: none"> <i>International Regulations for Preventing Collisions at Sea</i> (COLREGS), <i>International Convention for the Safety of Life at Sea</i> (SOLAS Convention), <i>International Convention on Standards of Training, Certification and Watchkeeping for Seafarers</i> (STCW Convention); and related international maritime legal instruments in Australia. While these instruments are focussed on safety of navigation, they play an important role in marine environmental protection by preventing and minimizing maritime accidents that can result in marine pollution and other forms of environmental damage. 	<ul style="list-style-type: none"> As per PS(PPS) Act above. The SPV will comply in full with all relevant requirements of the international maritime regulatory regime administered by IMO, as implemented in Australia through AMSA' suite of legislation and MOs. In addition to regulatory oversight by AMSA during operations in Australian waters, the SPV will be subject to Flag State Control, Classification Society surveys and Boskalis' internal vessel QA/QC procedures to ensure compliance.
<p><i>Biosecurity Act & Regulations</i></p> <p>Department of Agriculture, Fisheries & Forestry (DAFF)</p> <p>www.biosecurity.gov.au www.marinepests.gov.au www.agriculture.gov.au</p>	<ul style="list-style-type: none"> For overseas vessel arrivals, the Biosecurity Act and Regs cover: <ul style="list-style-type: none"> Human Health - introduction of diseases by crew / passengers. <u>Dry</u> Pest species - terrestrial pests & diseases via: <ul style="list-style-type: none"> Pests or diseases aboard / within the vessel itself (defined as a 'conveyance' in the Act), including wood components which might host boring insects. Pests or diseases amongst personal effects, baggage, stores, provisions, equipment, containers or cargo (defined as 'goods' in the Act). Pests or diseases in/on plants & animals (including potentially the plants or animals themselves – if not native to Australia). Pests or diseases in food and organic material, including wastes. <u>Wet</u> Pest species - introduction of invasive marine species via ballast water and/or bio-fouling. 	<p>As outlined in Referral Report No. 4 - <i>Impact Assessments</i> (BKA 2024d), the potential introduction of marine pests will be avoided and minimized as follows:</p> <ul style="list-style-type: none"> The SPV will be equipped with an IMO-compliant ballast water treatment system consistent with the IMO <i>International Convention for the Control & Management of Ships' Ballast Water & Sediments</i>, and as required by the Commonwealth ballast water regulations under the Commonwealth <i>Biosecurity Act</i> and relevant amendments. The SPV will implement a biofouling management plan with stringent biofouling prevention, management, mitigation and monitoring measures, consistent with the IMO biofouling guidelines (IMO 2023) and as required by the Commonwealth biofouling regulations under the

Commonwealth Law & Regulatory Authority	Implications for the BKA proposal	How addressed by BKA
	<ul style="list-style-type: none"> The SPV will not call at the Port of Wyndham (it will be too large to enter Wyndham) or any other Australian Port (unless required in an emergency), will not carry passengers and will not place garbage ashore in Australia, so the human health and dry-pest species aspects of the Biosecurity Act are not fully applicable to the operation. In the unlikely event of a need to enter an Australian port or put people and/or material ashore in Australia, the Act will need to be complied with. Wet Pest species aspects are fully applicable as the SPV will carry ballast water and discharge this before entry to CG, and will pose a potential risk of bio-fouling introductions. 	<p>Commonwealth <i>Biosecurity Act</i> and relevant amendments.</p> <ul style="list-style-type: none"> Biofouling management measures will include, <i>inter alia</i>: <ul style="list-style-type: none"> Maintenance of a high-grade, IMO-compliant anti-fouling system on the SPV's wet hull. Regular in-water inspections and when necessary, cleaning in Singapore – with a priority focus on niche areas. Periodic dry docking, out-of-water hull cleaning and repainting / refresh of the anti-fouling system. Required reporting to Australian authorities including before each arrival in Australian waters, as per the Commonwealth ballast water and biofouling requirements. As the SPV will operate in CG which is within State Internal Waters, it will also comply with the WA Department of Primary Industries & Regional Development (DPIRD) (Fisheries) Vessel Check program (https://vessel-check.com/). Although the risk of marine pest introduction is low through implementation of the avoidance and prevention measures outlined above, potential impacts will be further minimized and mitigated through development and implementation of an <u>Introduced Marine Pests - Monitoring, Detection & Response Plan</u> (IMP-MRP), in consultation with relevant stakeholders.

6. INTERNATIONAL REGULATORY FRAMEWORK

TABLE 3: *The main international environmental, biodiversity, maritime and associated treaties and conventions that are applicable to the BKA proposal.*

Relevant International treaty or convention	Implications for the BKA proposal	How addressed by BKA
United Nations Environment Programme (UNEP) Convention on Migratory Species (CMS)	<ul style="list-style-type: none"> Implemented in Australia by DCCEEW through the Commonwealth EPBC Act which defines migratory species as MNES, including dolphin and marine turtle species found in the CG area. 	As per EPBC Act in Table 2.
International Union for the Conservation of Nature (IUCN) Convention on Wetlands of International Importance (Ramsar Convention)	<ul style="list-style-type: none"> Implemented in Australia by DCCEEW through the Commonwealth EPBC Act which defines wetlands of international importance as MNES, including the Ord River Floodplain Ramsar site to the east of CG. 	As per EPBC Act in Table 2.
International Maritime Organization (IMO) International Convention for the Prevention of Pollution from Ships (MARPOL Convention)	<ul style="list-style-type: none"> Implemented in Australia by AMSA through the Commonwealth PS(PPS) Act. SPV will need to comply. 	As per PS(PPS) Act in Table 2.
IMO International Convention on the Control of Harmful Anti-fouling Systems on Ships (AFS Convention)	<ul style="list-style-type: none"> Implemented in Australia by AMSA through the Commonwealth AFS Act. SPV will need to comply. 	As per AFS Act in Table 2.
IMO International Regulations for Preventing Collisions at Sea (COLREGS) International Convention for the Safety of Life at Sea (SOLAS Convention) International Convention on Standards of Training, Certification & Watchkeeping for Seafarers (STCW Convention)	<ul style="list-style-type: none"> Implemented in Australia by AMSA through the Commonwealth Navigation Act. SPV will need to comply. 	As per Navigation Act in Table 2.
IMO International Convention for the Control & Management of Ships' Ballast Water & Sediments (BWM Convention)	<ul style="list-style-type: none"> Implemented in Australia by DAFF through the Ballast Water Regulations of the Commonwealth Biosecurity Act. SPV will need to comply. 	As per Biosecurity Act in Table 2.