



AUSTRALIAN PORTS

Trade, scale and the capital pipeline

Selected major ports, clockwise from Fremantle, with throughput, cargo trade value, marine structure type and project status.

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How to read this deck

● Sequence

Clockwise from Fremantle: north up the WA coast, east across the Top End, south down Queensland and NSW, west through Victoria and South Australia, then back along the WA south coast to Cockburn Sound.

● Throughput

Reporting periods are not aligned across port authorities. FY26 for the Pilbara and Fremantle containers, FY25 for Queensland and most others, CY2025 for Newcastle. Each figure carries its own period, and some slides carry more than one.

● Value metric

Cargo trade value wherever the port publishes it. Two exceptions name themselves on the slide: export value for the Pilbara group, and program funding for the defence yards. Contribution-to-GSP measures are not comparable port to port and are not used.

● Engineering note

Marine structure type and the principal design considerations for that port, written for a structural and marine audience rather than a logistics one.

● Project status

Funding, approvals and final investment decision are separate gates and are reported separately. Committed money is not an FID.

The national picture

Australian ports move about 99% of the country's international trade by volume.

1.6bn

tonnes of international trade moved through Australian ports each year

A\$650bn

annual cargo trade value across the port network

804.1 Mt

Pilbara Ports FY26 across four facilities, the world's largest bulk port group

~31,000

vessel calls a year across the national network

Iron ore and coal dominate the tonnage. Pilbara Ports moved 804.1 Mt in FY26 across four facilities, Port Hedland (580.4 Mt), Dampier (178.3 Mt), Ashburton (45.2 Mt) and Varanus Island, which is around half the national total on an order-of-magnitude basis, since the 1.6bn tonne denominator is Ports Australia's 2022-23 data and the Pilbara figure is FY26. The engineering consequence is that Australia's port asset base is overwhelmingly bulk export infrastructure: long piled jetties, shiploaders and dredged channels, much of it now 40 to 60 years old. Exposure varies widely, so design drivers are specific to each site rather than uniform.

Sources: Ports Australia State of Trade; Pilbara Ports FY26 release. Ports Australia's published commodity shares are not reproduced here because they do not reconcile with port-level tonnages.

WESTERN AUSTRALIA

Starting at Fremantle

The state's main general cargo gateway, and the port whose container constraint is driving a proposed A\$7.2 billion replacement.

Port of Fremantle

WA

Fremantle Ports (WA Government Trading Enterprise)

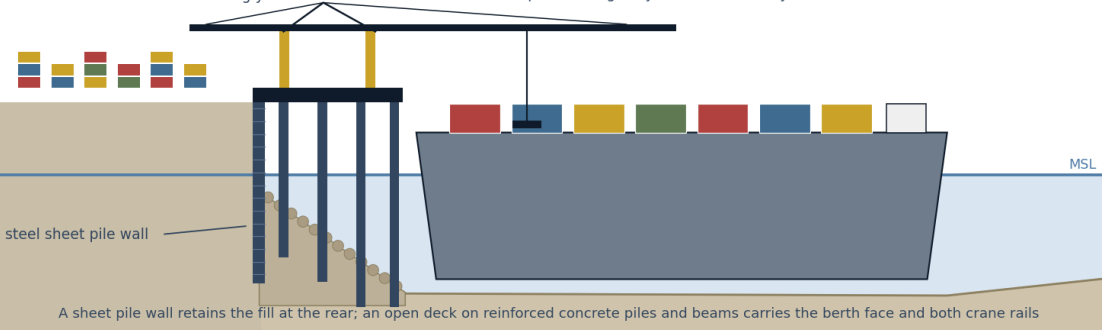


● Main usage	Containers, motor vehicles, grain, refined petroleum, fertiliser, livestock, cruise, naval visits
● Throughput	Record 920,521 TEU (FY26), up 3.7% on 887,514 in FY25 29.7 Mt mass tonnes (FY24, latest published)
● Berths	Inner Harbour: 4 container berths (CT1 to CT4), plus 4 common-user at North Quay and 6 at Victoria Quay Westport count not published
● Value metric	Cargo trade value: A\$45.2bn (FY24, Fremantle Ports)

Engineering note

- Inner Harbour berths are a piled relieving deck, not a continuous quay wall: a reinforced concrete deck on concrete piles and beams, with a steel sheet pile wall spanning the rear of the wharf
- North Quay berths date from the 1960s and 1970s and are under an active concrete remediation program. Non-cyclonic with a low tidal range, so chloride-induced corrosion of the deck, beams and piles is the principal durability driver
- Outer Harbour at Kwinana: piled bulk jetties (KBT, KBJ) plus Alcoa, BP and CBH private facilities
- 26.4% of Inner Harbour container freight moved by rail in FY26, over 240,000 TEU. Capacity is constrained by depth and available land, not by crane rate

Container berth: piled relieving deck over a sheet pile wall
reclaimed backlands and stacking yard ship-to-shore gantry on rails carried by the deck



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status Westport is the proposed successor container port. Bill before Parliament at second reading; FID pending.

WESTERN AUSTRALIA

North from Fremantle

The Pilbara alone moved 804.1 Mt in FY26, the heaviest concentration of bulk export marine infrastructure anywhere in the world.

Port of Geraldton

WA

Mid West Ports Authority

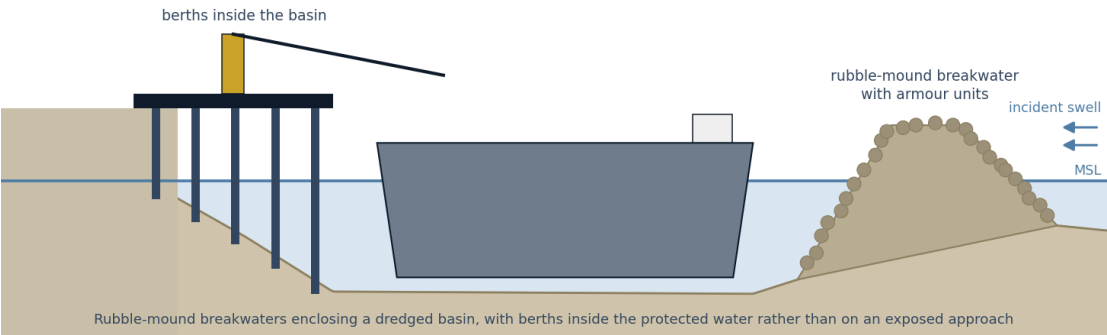


● Main usage	Iron ore, grain, mineral sands, talc; imports fertiliser, bulk liquids, general cargo
● Throughput	Record 19.1 Mt (FY25), roughly 10% above FY24
● Berths	7 berths, 5 in regular use; 1 and 2 are restricted to small vessels and layup Planned under PMaxP: rebuilt Berth 1, Berth 6 extension, future Berths 8 and 9
● Value metric	Cargo trade value: about A\$8.6bn (FY25, Mid West Ports)

Engineering note

- Artificial harbour behind rubble-mound breakwaters, berths 1 to 7 inside the basin
- Port Maximisation Project: a rebuilt Berth 1, a Berth 6 extension and future Berths 8 and 9. Funds were redirected in 2023 to long period wave mitigation and a relocated tug harbour
- Outside AS/NZS 1170.2 Region D, though Severe Tropical Cyclone Seroja reached this coast in 2021. Swell penetration into the basin, and the berth downtime that follows, is a principal operability consideration

Breakwater-protected harbour basin



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status A\$347M State asset investment program FY25 to FY28.

Port of Ashburton

WA

Pilbara Ports; Wheatstone Marine Terminal operated by Chevron

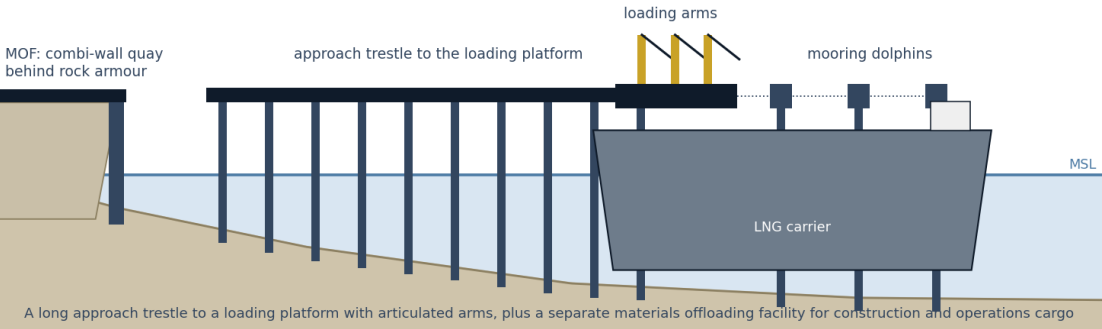


● Main usage	Wheatstone LNG, condensate and domestic gas (Chevron-operated); Onslow Iron transhipment; fuel and project cargo
● Throughput	45.2 Mt (FY26)
● Berths	Not published
● Value metric	Within Pilbara Ports' estimated A\$150bn FY26 export total

Engineering note

- The Wheatstone Marine Terminal is the anchor facility and the reason the port exists: export jetty, loading platform, materials offloading facility, dredged channel and turning basin
- Two LNG trains at 8.9 Mtpa combined plus a 200 TJ/day domestic gas plant. Sanctioned in 2011 at around A\$29bn, with first cargo in October 2017. Reported outturn cost was materially higher
- Onslow Iron operates separately in the same port, using a shallow-water berth with barges and offshore transhipment rather than a deep-draught ore berth
- Severe cyclone exposure. Mooring restraint, fendering and downtime allowances are central to both facilities

LNG loading jetty with materials offloading facility



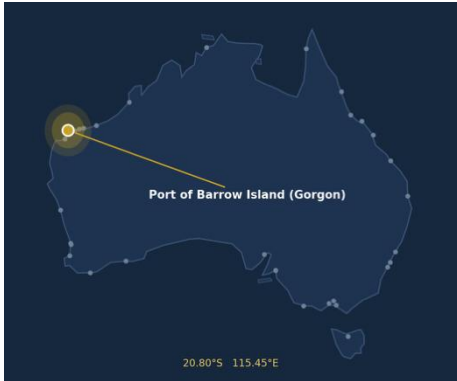
Generic LNG jetty arrangement of approach trestle, loading platform and MOF. Substructure at Wheatstone is not stated here. Onslow Iron uses a separate shallow-water berth and offshore transhipment.

Project status	Wheatstone operating since 2017, with approval to expand. Onslow Iron ramping up. The adjacent Port of Onslow shares a common boundary and is a separate port.
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Port of Barrow Island (Gorgon)

WA

Chevron Australia (Shipping and Pilotage Act port)



● **Main usage** LNG and condensate export, domestic gas; construction and operations materials import

● **Throughput** Gorgon plant capacity 15.6 Mtpa LNG across three trains (plant capacity, not port throughput)

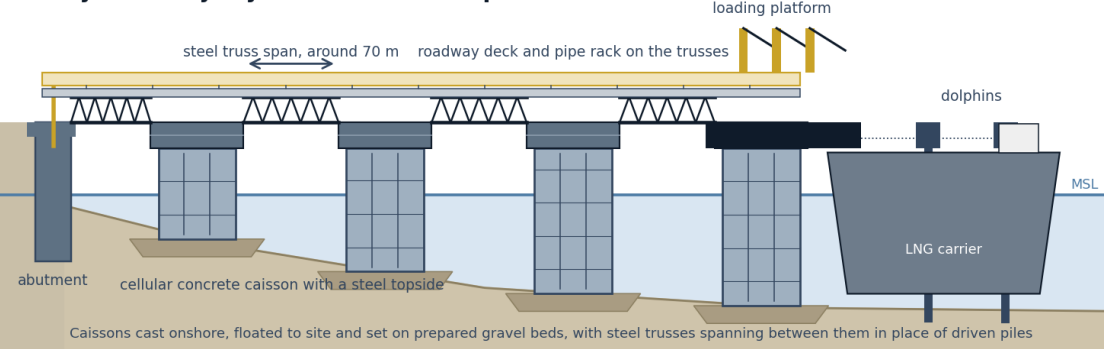
● **Berths** 2 LNG loading berths, plus the materials offloading facility

● **Value metric** Not separately published

Engineering note

- The 2.1 km LNG jetty sits on 56 support structures, each a concrete gravity caisson with a steel topside, weighing over 3,000 t and cast at the Australian Marine Complex at Henderson, floated to site and set on screeded gravel beds. They carry the jetty roadway trestles and pipe racks, with steel truss spans of about 70 m between them
- Caissons were selected specifically to avoid driving hundreds of steel piles, cutting construction duration and removing the noise and vibration of piling in a Class A Nature Reserve
- A further 23 caissons form the Marine Heavy Lift Facility wharf face and the tug pen breakwater

Gravity caisson jetty with steel truss spans



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status

FID September 2009 at AU\$43bn for the first phase; first cargo March 2016. Gorgon Stage 3 took FID in December 2025, around A\$3bn, tying the Geryon and Eurytion fields into the existing Barrow Island facilities.

Cape Preston

WA



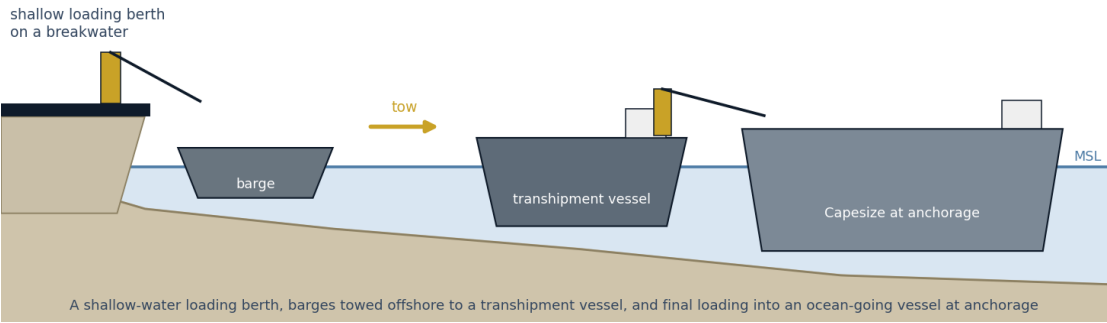
CITIC Pacific Mining / Cape Preston Port Company

- **Main usage** Magnetite concentrate export (Sino Iron)
- **Throughput** Rated loading capability up to 100,000 t/day. Actual annual throughput not published
- **Berths** Not published (private port)
- **Value metric** Not published (private port)

Engineering note

- The Pilbara's first greenfield port in over 40 years, and WA's first transhipment iron ore port
- Shallow berth on a breakwater; barges and purpose-built transhipment vessels serve 12 outer and 5 inner anchorages
- The design case is a marine logistics chain, not a single wharf. Availability is set by weather windows on the tow route

Transhipment export chain: shallow berth, barge, ocean-going vessel



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status Built and operating. Cape Preston West is a separate Pilbara Ports port to the west, with the Mardie project inside it.

Port of Dampier

WA

Pilbara Ports



● **Main usage** Iron ore (Rio Tinto), LNG (North West Shelf), salt, ammonia, general and project cargo

● **Throughput** 178.3 Mt (FY26)

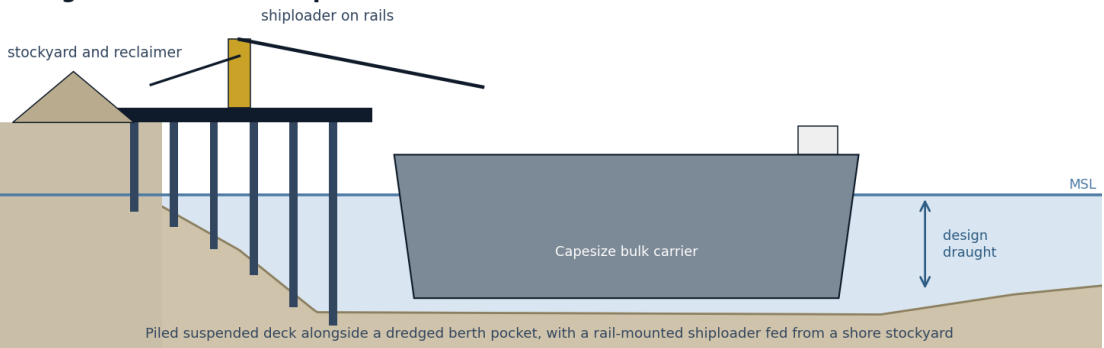
● **Berths** Not published

● **Value metric** Within Pilbara Ports' estimated A\$150bn FY26 export total

Engineering note

- Multi-user port: Parker Point and East Intercourse Island ore berths, the NWS LNG jetties, and the Dampier Cargo Wharf
- Piled trestle approaches to island berths with long conveyor galleries, where the structural interface with dynamic shiploader loads warrants close attention
- Large tidal range plus Region D cyclonic wind. Deck soffit elevation, wave uplift on the soffit and scour around the piles are the live cyclonic considerations

Dredged-channel bulk export berth



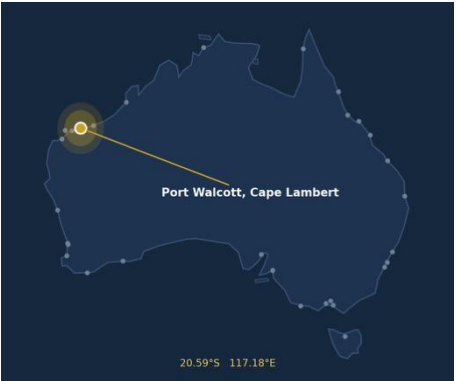
Generic bulk berth. Dampier is multi-facility: island ore berths on piled trestle approaches with conveyor galleries, the NWS LNG jetties and the Dampier Cargo Wharf.

Project status A\$115M Dampier allocation within the A\$565M Pilbara Ports Capacity Upgrade, alongside A\$450M for Lumsden Point. In delivery.

Port Walcott, Cape Lambert

WA

Rio Tinto (Shipping and Pilotage Act port)



● **Main usage** Iron ore export only (Rio Tinto)

● **Throughput** Not published on a comparable basis. Volumes are derivable from Rio Tinto quarterly reports

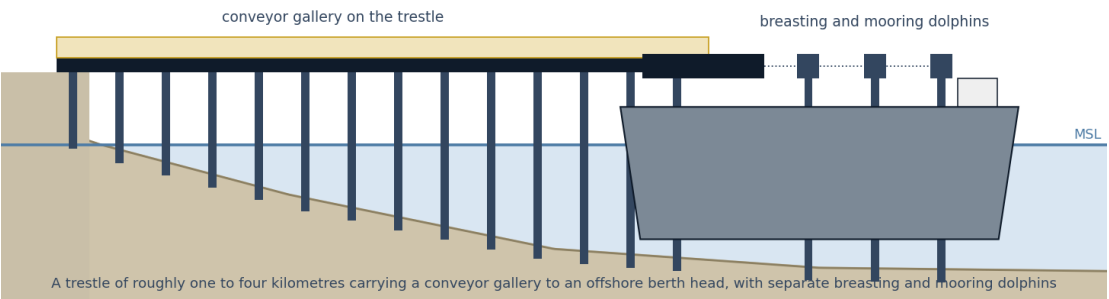
● **Berths** Not published

● **Value metric** Not separately published (private terminal)

Engineering note

- Two facilities: Cape Lambert Port A, approved to 105 Mtpa, and Port B, approved to a further capacity of up to 130 Mtpa. These are approval ceilings, not throughput
- Long piled trestle approaches to offshore berths. Deep offshore water reduces dredging but does not remove it: Port B required berth, turning basin and channel dredging
- On a trestle of this length, thermal movement, expansion joints and conveyor alignment tolerance are significant considerations, alongside the extreme cyclonic event case

Long offshore trestle jetty to natural deep water



Generic diagram of this structure type. Both Port A and Port B required capital dredging for berth pockets, turning basins, and channels, though offshore depth reduces the total dredging footprint.

Project status No public new-build FID. Sustaining capital only.

Port of Port Hedland

WA

Pilbara Ports

● **Main usage** Iron ore (~99% of tonnage), salt, lithium concentrate, manganese, fuel, general cargo

● **Throughput** 580.4 Mt (FY26), the world's largest bulk export port

● **Berths** 19 berths (Pilbara Ports) | Planned: 2 common-user berths at Lumsden Point

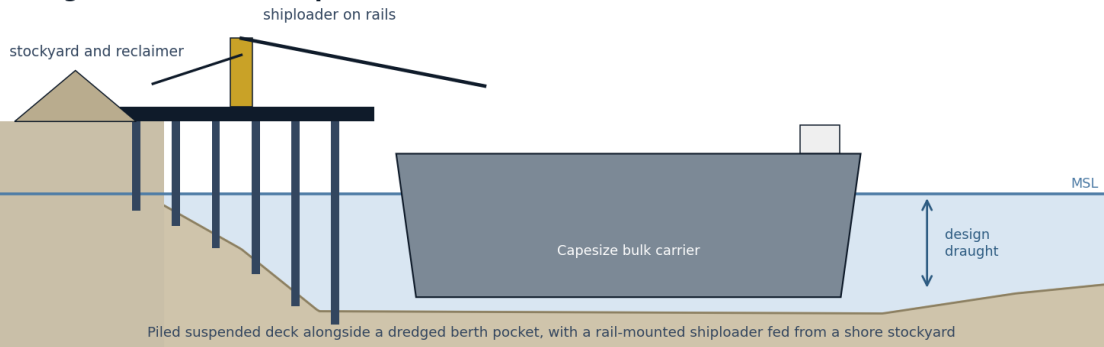
● **Value metric** Within Pilbara Ports' estimated A\$150bn FY26 export total



Engineering note

- Roughly 19 berths on a narrow dredged tidal channel. Departures are tide-gated, so channel transit windows, not berth count alone, shape practical throughput
- Large spring tidal range with strong reversing currents. Berthing energy and mooring line loads are unusually demanding
- Lumsden Point is a separate multi-user facility; the Zone 5 bypass channel adds capacity without widening the existing transit. Both are built around uninterrupted iron ore operations

Dredged-channel bulk export berth



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

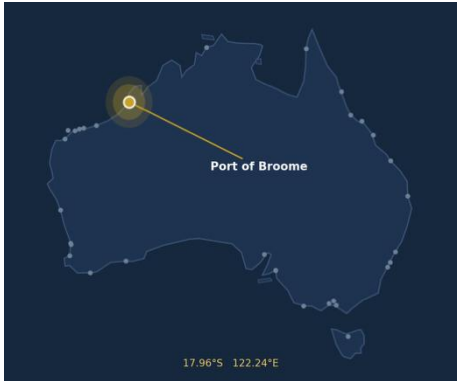
Project status

Lumsden Point under construction, with wharf works advanced. Operating date not yet publicly confirmed.

Port of Broome

WA

Kimberley Ports Authority

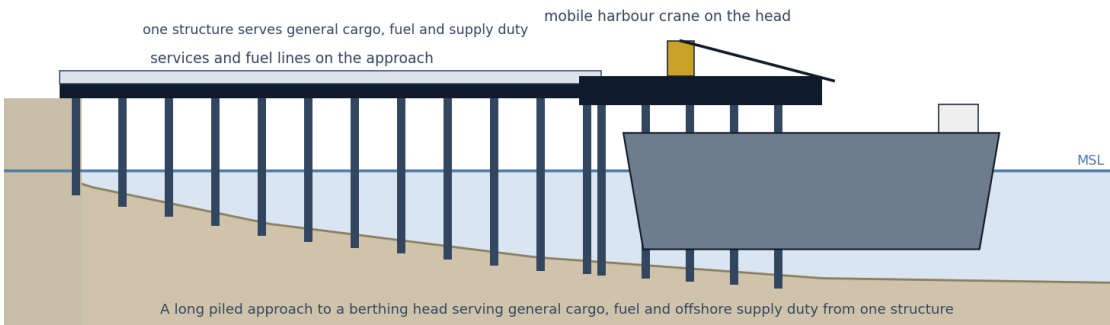


● Main usage	Oil and gas supply base, live cattle, fuel, general cargo, pearling, cruise
● Throughput	Not separately published
● Berths	One jetty structure serving every function; berth positions not published as a count
● Value metric	Not published

Engineering note

- A single long piled jetty into Roebuck Bay serving every function off one structure
- One of the largest tidal ranges of any working Australian port, a principal input to fender geometry, gangway reach and berthing windows
- Cyclonic region, and the tidal regime governs access windows. Kimberley Ports material also identifies a second, privately operated terminal, which bears on any single-point-of-failure assessment

Multi-purpose jetty with a berthing head



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status A\$56M State asset investment program FY25 to FY28.

NORTHERN TERRITORY

Across the Top End

Small tonnages, high strategic weight: defence, live export and the Territory's largest marine construction project in decades.

Port of Darwin (East Arm)

NT

Landbridge (99-year lease, contested); NT Government infrastructure

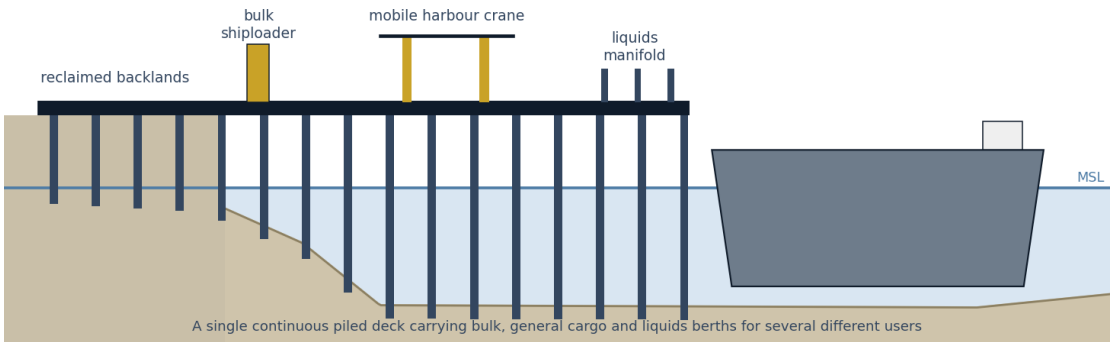


● Main usage	Live cattle, containers, fuel, manganese and other minerals, defence, cruise
● Throughput	Around 2 Mt/yr through East Arm (indicative; no current published series)
● Berths	5 berths across 4 wharves. East Arm takes Panamax vessels to 274 m LOA and 80,000 DWT
● Value metric	Not published

Engineering note

- East Arm Wharf: a long continuous piled deck carrying bulk, container and liquids berths on one structure, in a large tidal range and cyclone-exposed setting
- Ship lift: 103 m long, 26 m wide, 6 m deep, 5,500 t capacity, with wet berths and 16 ha of hardstand per NAIF, inside the 246 ha Northern Marine Complex. The Port's existing common-user hardstand of about 10 ha is separate
- Ownership is contested. The Commonwealth intends to return the port to Australian hands and Landbridge lodged an ICSID arbitration claim in late April 2026, so the timing is open

Multi-user common-user wharf: several cargo duties on one deck



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status Ship lift in delivery, around A\$820M. Middle Arm in approvals with A\$1.5bn Commonwealth equity committed for common-user infrastructure.

QUEENSLAND

Cape York to the Gold Coast

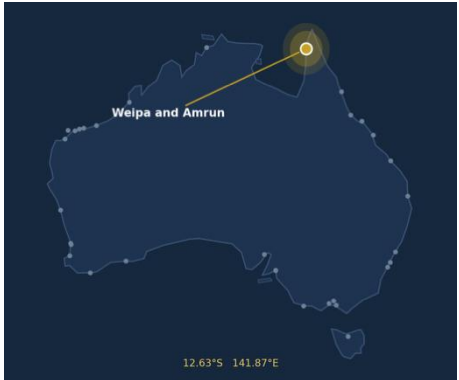
Coal and bauxite dominate the tonnage. Offshore trestle jetties several kilometres long are the defining structural form.

Weipa and Amrun

QLD

North Queensland Bulk Ports / Rio Tinto

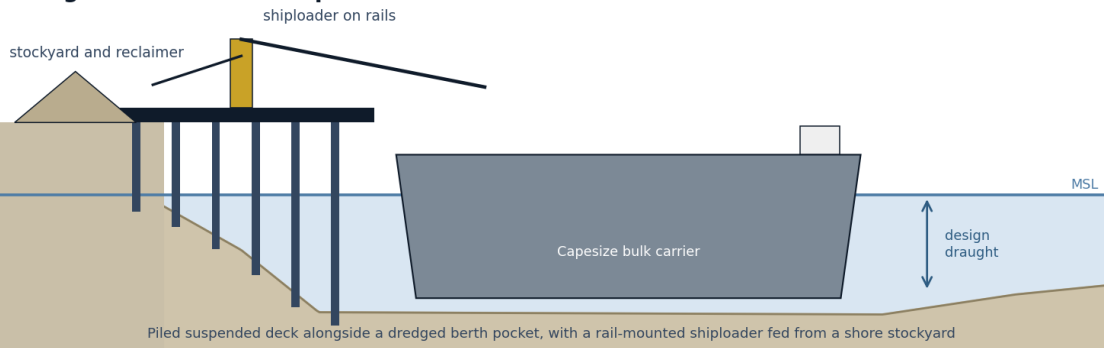
● Main usage	Bauxite export (Rio Tinto)
● Throughput	Weipa 16.0 Mt and Amrun 28.8 Mt (FY25)
● Berths	Weipa: 4 wharves, Lorim Point East and West for bauxite, plus Humbug and Evans Landing for general cargo and fuel. Amrun not published
● Value metric	Not published



Engineering note

- Amrun's Chith Export Facility is a 650 m access jetty and a 350 m loading wharf, designed by Jacobs and built by McConnell Dowell with constructability oversight by Bechtel
- The wharf was split into seven jacket modules with integral dolphins and six topside modules. The jacketed arrangement cut permanent wharf piles from 100 to 28
- Cyclone region with a very limited local construction supply chain, which pushes design toward prefabrication. The access jetty was built on a cantilever traveller frame at about three days per bent

Dredged-channel bulk export berth



Generic dredged-channel bulk berth. Weipa and Amrun are piled wharves reached by causeways, built largely from modular marine components barged to site.

Project status

Chith Export Facility completed 2018. Winner of the Australian Construction Achievement Award and the ICE Brunel Medal. No new marine FID public.

Port of Cairns

QLD

Ports North



● **Main usage** Cruise, fuel, defence and naval, sugar, general cargo, marine repair

● **Throughput** 1.0 Mt (FY25)

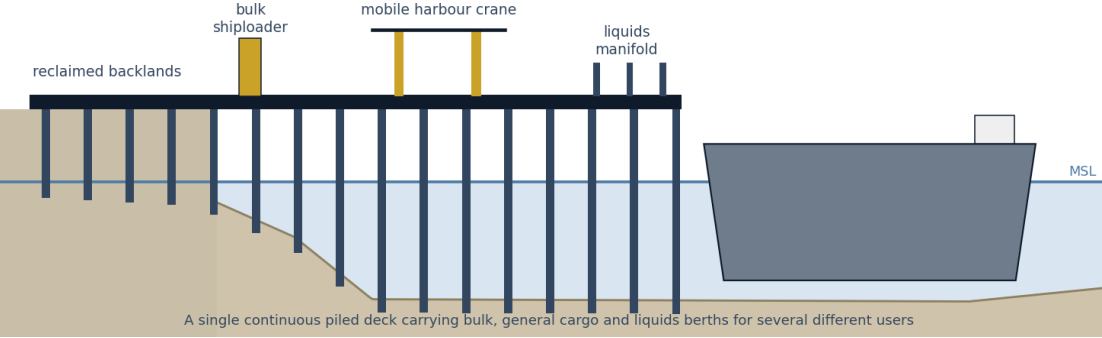
● **Berths** Not published

● **Value metric** Not published

Engineering note

- Shallow, dredge-dependent entrance through Trinity Inlet. The channel is the asset that constrains everything else
- Cairns Marine Precinct: hardstand, wharves and vessel maintenance for naval and commercial fleets
- Inside the Great Barrier Reef Marine Park, where dredge material placement is typically a larger approvals question than the structural works

Multi-user common-user wharf: several cargo duties on one deck



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status Marine precinct works progressively committed.

Port of Townsville

QLD

Port of Townsville Limited

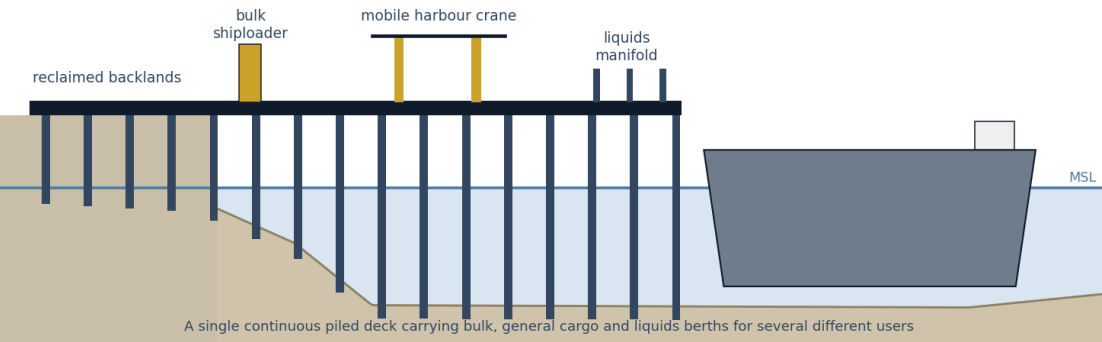


● Main usage	Minerals and zinc, sugar, fuel, containers, motor vehicles, livestock, defence
● Throughput	6.58 Mt (FY25, TMR basis as used throughout Queensland); 7.03 Mt including Lucinda
● Berths	8 operational berths
● Value metric	Not published

Engineering note

- The Channel Upgrade widened the entrance channel for larger vessels, with dredge material used for reclamation
- A mix of ageing quay-wall berths and newer piled berths, so remediation and strengthening work is close to continuous
- Cyclone region. Northern Australia's most diversified multi-cargo port

Multi-user common-user wharf: several cargo duties on one deck



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status Channel widening delivered. Berth upgrades staged and committed.

Abbot Point (NQXT)

QLD

North Queensland Export Terminal / NQBP



● **Main usage** Coal export only, both thermal and metallurgical. No imports

● **Throughput** 34.03 Mt (FY25): 20.71 Mt thermal, 13.32 Mt metallurgical

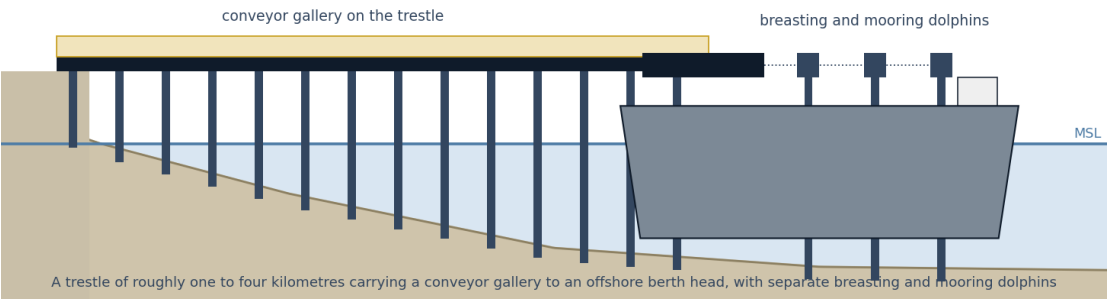
● **Berths** 2 operational coal berths

● **Value metric** Cargo trade value: A\$9.9bn (reported by NQBP)

Engineering note

- A long offshore trestle jetty reaches naturally deep water without a long dredged approach channel
- Conveyor gallery along the trestle, with the shiploader on a berth structure at the seaward end
- Cyclone exposed, with a long slender load path. The extreme wind and wave event is normally the controlling design case, with fatigue relevant to conveyor and machinery supporting steelwork. Having only one terminal limits structural redundancy

Long offshore trestle jetty to natural deep water



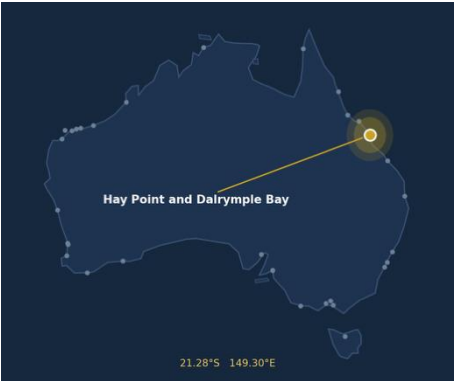
Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status Expansion approved historically. No current construction FID public.

Hay Point and Dalrymple Bay

QLD

NQBP; terminals operated by BMA and DBI



● **Main usage** Metallurgical coal export, the world's largest met coal port

● **Throughput** 96.2 Mt (FY25)

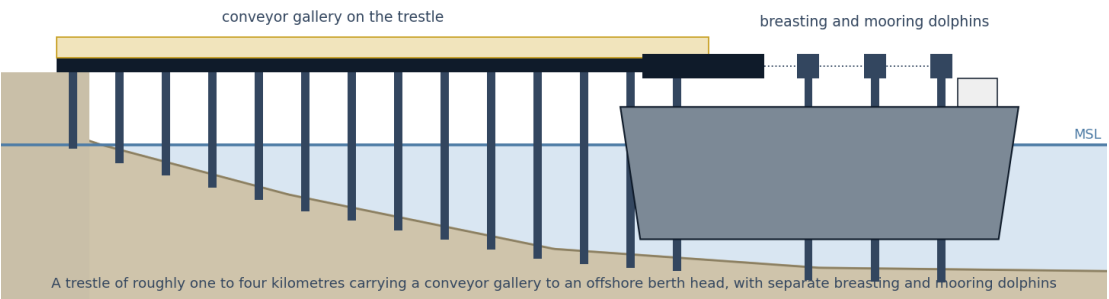
● **Berths** 7 berths: 4 at Dalrymple Bay, 3 at Hay Point

● **Value metric** Not published

Engineering note

- Two separate offshore trestle jetties reaching deepwater berths. NQBP states the Hay Point wharf is 1.8 km offshore
- Berth structures are independent piled platforms with breasting and mooring dolphins
- Dalrymple Bay's berth and jetty remediation is a reference case for in-service marine strengthening under continuous operation

Long offshore trestle jetty to natural deep water



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status DBI terminal expansion staged. 8X and 9X capacity phases under commercial negotiation.

Port of Gladstone

QLD

Gladstone Ports Corporation

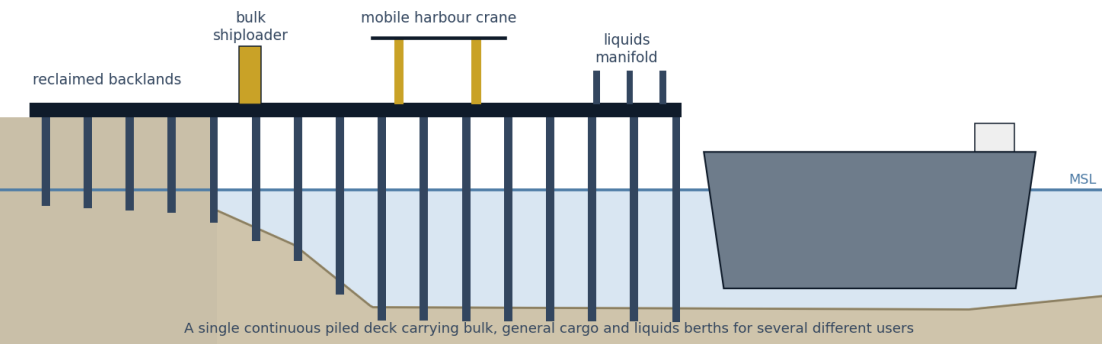
● Main usage	Coal, LNG from Curtis Island, alumina and bauxite, cement, ammonium nitrate, general cargo
● Throughput	117.4 Mt (Port of Gladstone, FY25). GPC's three-port total of 117.9 Mt adds Rockhampton and Bundaberg
● Berths	Not published as a single figure across the port's terminals
● Value metric	Not published



Engineering note

- Australia's most diversified large port: RG Tanna and Barney Point coal, Auckland Point, Fisherman's Landing, plus three LNG jetties on Curtis Island
- Extensive dredged channel network through a harbour with significant environmental sensitivity
- The three LNG projects on Curtis Island, six trains in total, were delivered in parallel and remain one of the largest marine construction programs run in Australia

Multi-user common-user wharf: several cargo duties on one deck



Generic multi-user wharf. Gladstone spans coal berths, alumina wharves and three separate LNG jetties on Curtis Island.

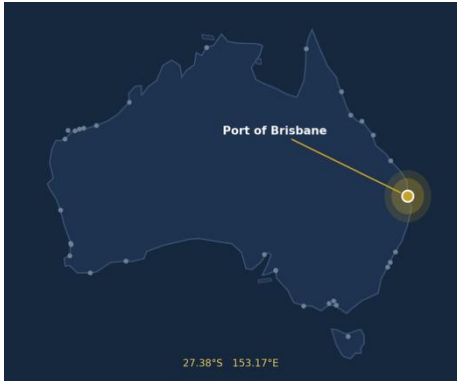
Project status

Nominated in Infrastructure Australia's 2026 list for renewable-component handling upgrades.

Port of Brisbane

QLD

Port of Brisbane Pty Ltd



● **Main usage** Containers, coal, grain, motor vehicles, fuel, cement, cruise

● **Throughput** 34.9 Mt, up 7.8% | 1.62 million TEU (FY25)

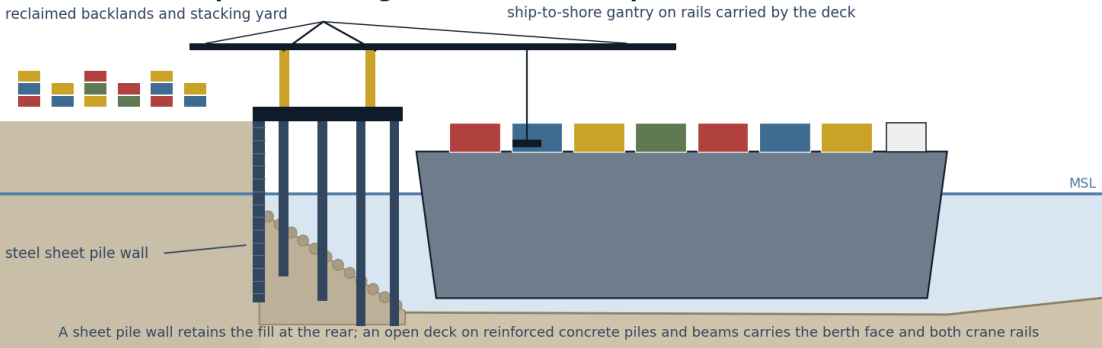
● **Berths** 27 operating berths, including the equivalent of eight 300 m container berths

● **Value metric** Cargo trade value: A\$73.5bn (FY25, Port of Brisbane)

Engineering note

- Built on reclaimed land at Fisherman Islands, so expansion is a reclamation and settlement problem before it is a wharf problem
- Long-term seawall and reclamation program creating new terminal land
- Soft estuarine founding conditions, where ground improvement and staged surcharge are central to programming

Container berth: piled relieving deck over a sheet pile wall



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status

Staged reclamation and berth development continue. Channel Enhancement Project in EIS and approval.

NEW SOUTH WALES

The eastern seaboard

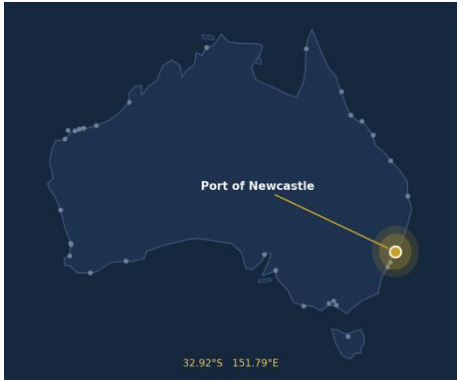
One coal port at global scale, one container port at national scale, and a third waiting on decisions that keep being deferred.

Port of Newcastle

NSW

Port of Newcastle (long-term lease)

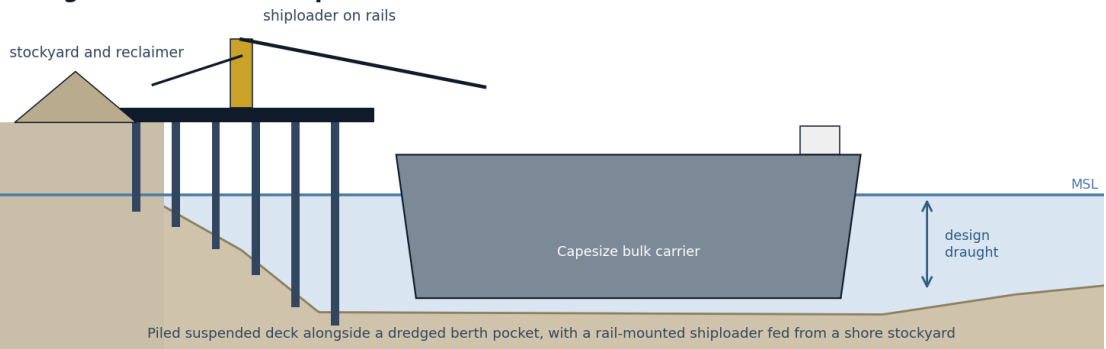
● Main usage	Coal, grain, alumina, fuel, cement, steel, wind turbine and project cargo
● Throughput	Over 160 Mt (CY2025), including 149 Mt coal
● Berths	20 operational berths: nine dedicated to coal, 11 for other cargoes
● Value metric	Cargo trade value: about A\$48bn a year (Port of Newcastle)



Engineering note

- The largest deepwater port on the east coast, with the channel operating at around half its capacity
- River-mouth port with entrance breakwaters and long training walls. 20 operational berths, nine of them dedicated to coal across three terminals
- The diversification task is structural: converting coal-configured berths and land to project cargo and heavy-lift duty. The Multipurpose Terminal berth extension adds an 80 m piled quay retaining structure with about 6,000 cubic metres of dredging and foreshore works

Dredged-channel bulk export berth



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status

Multipurpose Terminal berth extension in delivery: A\$36M, early works Q1 2026, completion due early 2027. Clean Energy Precinct pre-FID, FEED and EIS due 2026. EnergyCo's A\$115.5M logistics precinct is separate and still in planning.

Port Botany

NSW

NSW Ports



● **Main usage**

Containers (99.6% of NSW container volume), bulk liquids and gas

● **Throughput**

About 2.8 million TEU a year; capacity over 7 million TEU

● **Berths**

12 berths across three container terminals

● **Value metric**

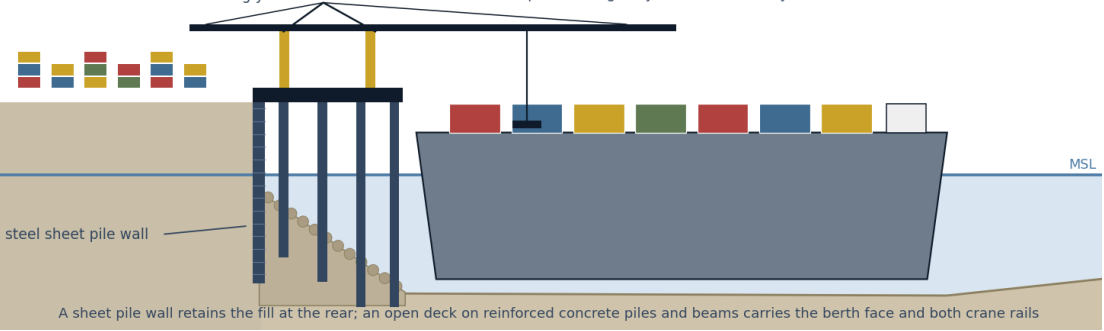
Not published on a comparable cargo-value basis

Engineering note

- Three terminals, 12 berths, all on reclaimed land in Botany Bay behind a constructed shoreline
- The only Australian container port with on-dock rail at every terminal. Current infrastructure supports vessels up to about 15,000 TEU
- Berth deepening, pavement fatigue, crane rail alignment and reclamation settlement are the recurring engineering questions in staged growth
- Sydney Harbour is a separate Port Authority of NSW operation handling cruise and naval traffic, and is not counted in the figures above

Container berth: piled relieving deck over a sheet pile wall

reclaimed backlands and stacking yard ship-to-shore gantry on rails carried by the deck



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

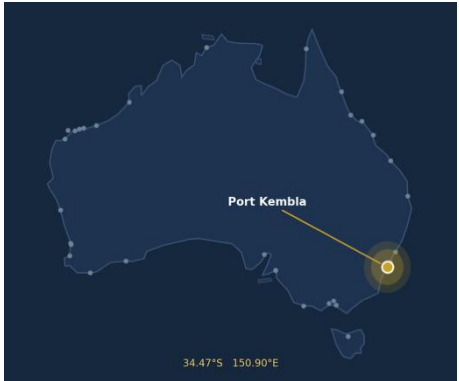
Project status

No new terminal expected before the mid-2040s.

Port Kembla

NSW

NSW Ports

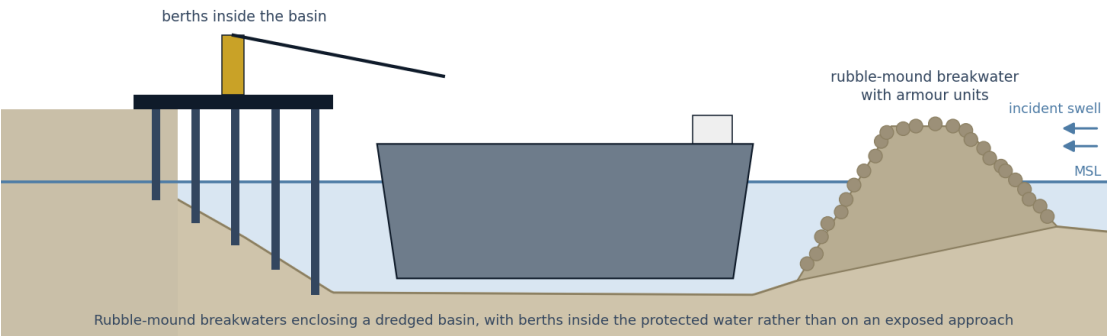


● Main usage	Motor vehicles (Australia's largest vehicle import terminal), coal, grain, steel, LPG
● Throughput	Not published on a basis comparable to this deck; NSW Ports reports network tonnage
● Berths	18 berths across the Inner and Outer Harbours, including 2 coal, 4 vehicle and general cargo, and 1 grain
● Value metric	Not published on a comparable cargo-value basis

Engineering note

- A fully artificial harbour formed by breakwaters, with separate inner and outer harbours
- The Outer Harbour holds existing planning approval for port development, which is why it recurs in offshore wind and container studies
- Proposed offshore wind terminal: 35 ha with 750 m of quay, needing deck bearing capacity well beyond container duty

Breakwater-protected harbour basin



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status

Offshore wind terminal and future container terminal both pre-FID. Container plans conflict with a possible submarine base.

VICTORIA AND TASMANIA

Bass Strait and the south east

Australia's largest container port, its main fuel gateway, and the ro-ro network that keeps Tasmania supplied.

Port of Hastings

VIC

Port of Hastings Corporation

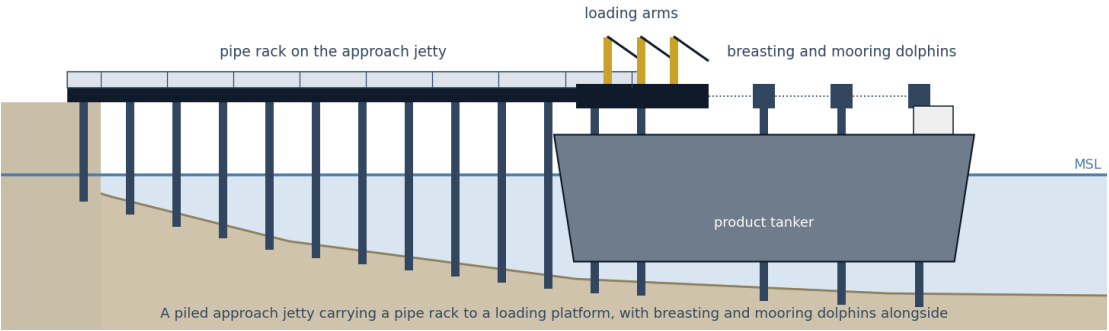


● Main usage	Crude oil and LPG at Long Island Point, bulk liquids at Crib Point, steel at the BlueScope wharves
● Throughput	Not currently published. A 2009 State strategy cited about 4 Mt of petroleum products and 1 Mt of steel
● Berths	Not published; two jetties of roughly 1 km each
● Value metric	Not published

Engineering note

- Long Island Point (1970) and Crib Point (1965) are each roughly 1 km piled jetties, built in reinforced concrete with piles and crosshead beams
- Western Port offers a naturally deep channel of around 14 m without extensive dredging. Jetty length here is set by the shallow intertidal margin between shore and channel, not by a need to reach deep water
- Both jetties have been investigated for reinforcement corrosion. Residual service life and repair strategy, rather than new load capacity, are the current engineering question, and whether this asset base can carry Renewable Energy Terminal duty is a separate matter

Liquids and products loading jetty



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status No FID. A\$124.5M in the 2026-27 Victorian budget to progress the Environment Effects Statement.

Port of Melbourne

VIC

Port of Melbourne (long-term lease)

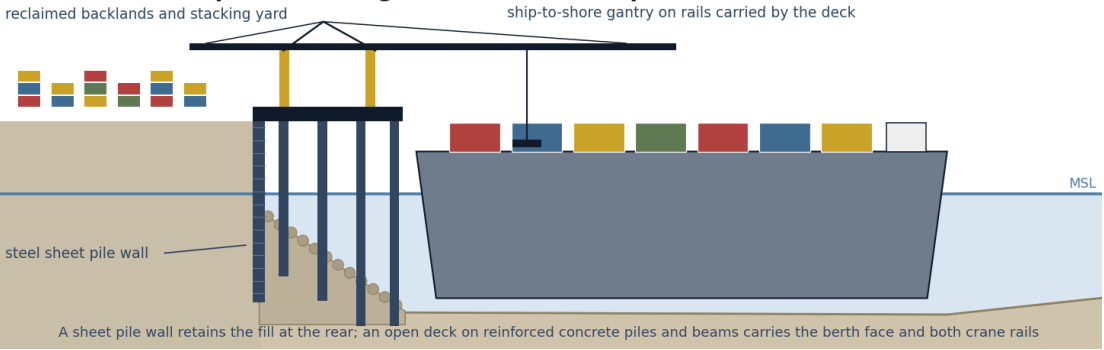
● Main usage	Containers, motor vehicles, general cargo, dry and liquid bulk
● Throughput	113.6 million revenue tonnes 3.39 million TEU (FY25)
● Berths	Over 30 commercial berths, including three international container terminals. Swanson Dock West alone is a 944 m wharf with three container berths
● Value metric	Cargo trade value: A\$154bn (FY25)



Engineering note

- Australia's largest container port, handling about 37% of the national task on the container volumes in this deck. Revenue tonnes are a charging measure and are not interchangeable with mass tonnes
- A river port: Swanson and Appleton Docks sit upstream of bridges, so air draught and channel depth cap vessel size
- Webb Dock East's 71 m quay extension was marine work: timber piles replaced with steel, a new wharf and hardstand, and berth pocket dredging. Completed January 2024, restoring a two-berth terminal at 731 m
- Swanson Dock West, a 944 m wharf with three container berths built between the 1960s and 1980s, is under a three-stage design-life extension. Stage 1 completed May 2025

Container berth: piled relieving deck over a sheet pile wall



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status

Swanson Dock West design-life extension in delivery, Stage 1 complete May 2025. Webb Dock East extension completed January 2024.

Port of Geelong

VIC

GeelongPort (Stonepeak and CareSuper)

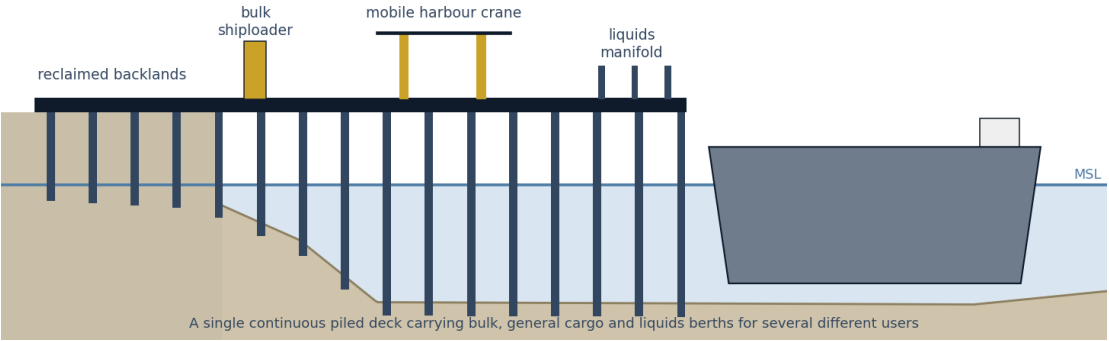


● Main usage	Crude and refined petroleum, grain, woodchips, fertiliser, alumina, cement clinker, Bass Strait ferry
● Throughput	Over 13.6 Mt a year across roughly 1,060 vessel visits
● Berths	15 berths across Corio Quay and Lascelles Wharf
● Value metric	Cargo trade value: about A\$10.2bn a year

Engineering note

- 15 berths across Corio Quay and Lascelles Wharf, plus the Viva refinery tanker berths
- Victoria's premier bulk port and the state's main fuel import gateway
- Older timber and steel wharf structures under a long-running replacement and strengthening program

Multi-user common-user wharf: several cargo duties on one deck



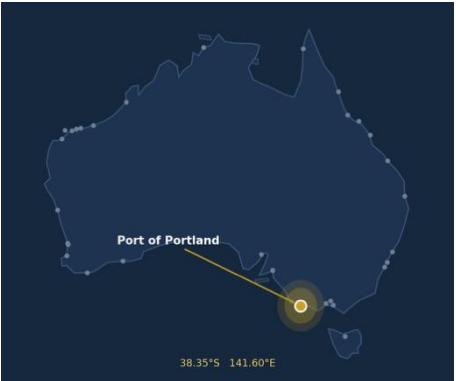
Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status 2024 Port Development Strategy sets a 25 to 30 year framework. No single FID pending.

Port of Portland

VIC

Port of Portland Pty Ltd



● **Main usage** Aluminium, woodchips, grain, mineral sands, livestock, fertiliser

● **Throughput** Not separately published

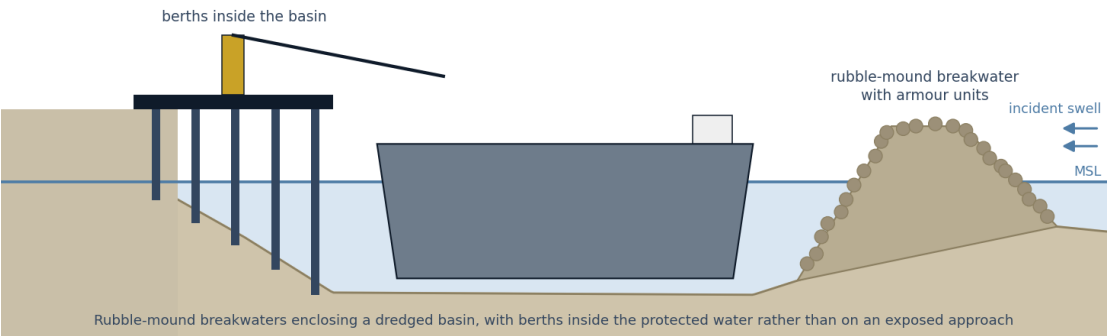
● **Berths** Not published

● **Value metric** Not published

Engineering note

- A naturally deepwater harbour sheltered by breakwaters, unusual on that stretch of coast
- Serves the Portland Aluminium smelter and the western Victorian agricultural catchment
- Repeatedly assessed as an alternative offshore wind assembly port because of its depth and Bass Strait access

Breakwater-protected harbour basin



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status No committed major project.

Tasmanian Ports Network

TAS



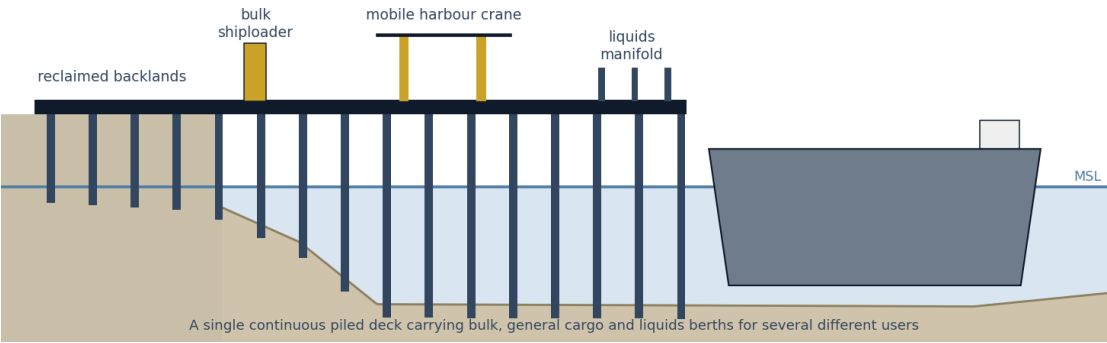
TasPorts (Tasmanian Government)

● Main usage	Bass Strait ro-ro and containers, forestry, minerals, fuel, Antarctic science, cruise
● Throughput	14.3 Mt across the TasPorts network (FY25)
● Berths	Not published across the network
● Value metric	Not published

Engineering note

- Burnie handles the largest tonnage; Devonport dominates containers and the Spirit of Tasmania ro-ro trade
- Bell Bay serves the adjacent industrial estate and forestry exports. Hobart is Australia's Antarctic gateway
- QuayLink Berth 3E at Devonport is a recent completed example of ro-ro marine infrastructure delivered on time and budget

Multi-user common-user wharf: several cargo duties on one deck



Generic multi-user wharf. The four Tasmanian ports differ: Devonport is ro-ro, Bell Bay industrial bulk, Hobart Antarctic and cruise.

Project status	Bell Bay shiploader replacement and Macquarie Wharf redevelopment progressing. Bass Strait Renewable Energy Terminal in planning.
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SOUTH AUSTRALIA

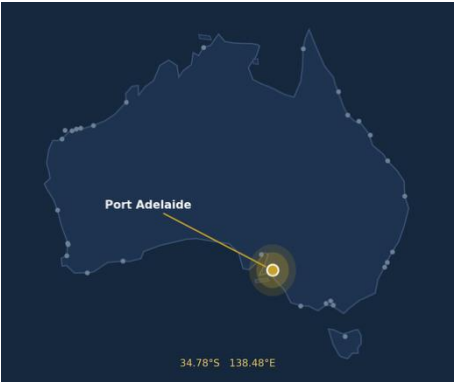
The gulfs

Grain and mineral jetties around Spencer Gulf, plus the submarine construction yard that will reshape Adelaide's northern suburbs.

Port Adelaide

SA

Flinders Port Holdings



● **Main usage** Containers, grain, vehicles, fuel, steel, fertiliser, petroleum, cruise

● **Throughput** Around 400,000 TEU a year (indicative)

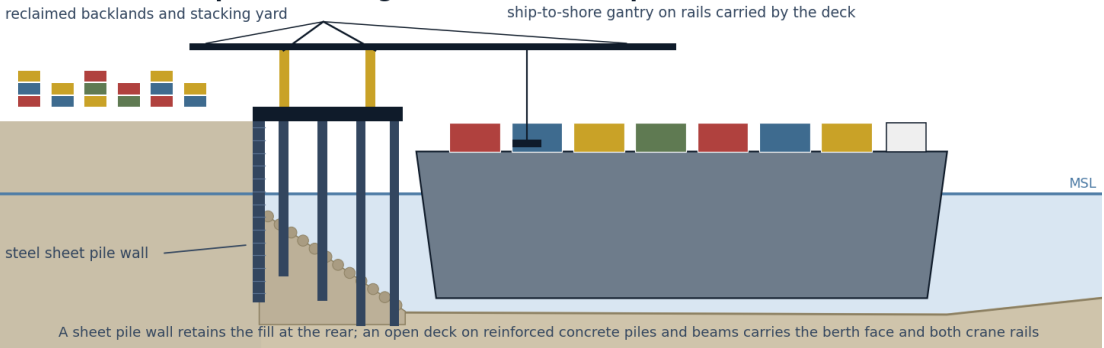
● **Berths** 2 container berths at Outer Harbor (6 and 7), about 660 m of quay

● **Value metric** Not published by the operator

Engineering note

- Flinders Adelaide Container Terminal occupies Outer Harbor Berths 6 and 7: two container berths, around 660 m of quay
- The Inner Harbour remains active for grain, steel, fertiliser, petroleum and other cargoes. It is not obsolete
- A long dredged tidal channel through Gulf St Vincent, so sedimentation and maintenance dredging access are recurring issues

Container berth: piled relieving deck over a sheet pile wall



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status

Named in Infrastructure Australia's 2026 list for renewable-component handling upgrades.

Osborne Naval Shipyard

SA

Australian Naval Infrastructure

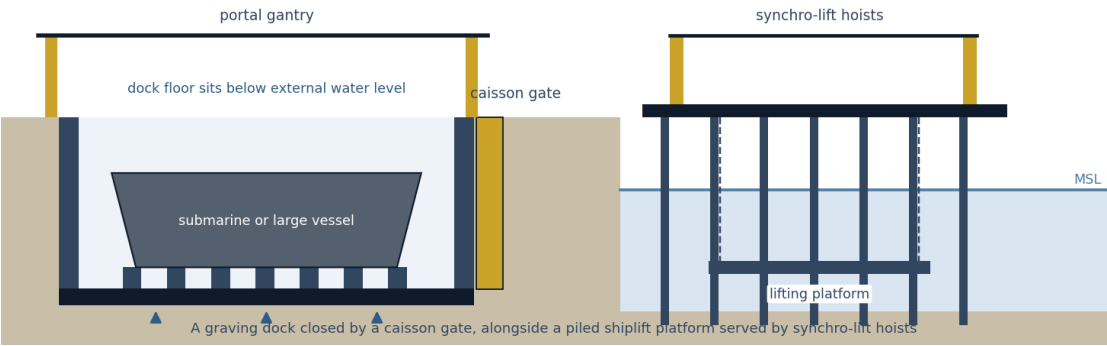


- Main usage** Naval shipbuilding; future SSN-AUKUS submarine construction
- Throughput** Not a trade port
- Berths** Not a trade port
- Value metric** Program funding: Australian Government equity contribution A\$8.5bn

Engineering note

- A new submarine construction yard alongside the existing surface shipbuilding facility
- Laing O'Rourke and Amentum appointed Capability Partner on 29 July 2026
- Heavy-load transfer, deep excavation below the water table and very high floor tolerances. Closer to industrial structures than to conventional wharf work

Graving dock and shiplift: naval sustainment infrastructure



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status Capability Partner appointed. Construction yard definition and phasing continuing.

Spencer Gulf: Whyalla, Port Bonython, Cape Hardy

SA



OneSteel Manufacturing, in administration under KordaMentha (Whyalla); Santos (Port Bonython); Iron Road and SA Government (Cape Hardy)

● Main usage	Iron ore and steel, crude, naphtha and LPG; proposed green iron and bulk export
● Throughput	Not separately published
● Berths	Not published
● Value metric	Not separately published

Engineering note

- Port Bonython is a 2.4 km liquids jetty with loading arms for tankers up to about 110,000 DWT. It is not a dry-bulk Capesize berth
- Cape Hardy is a separate approved greenfield deepwater proposal on Eyre Peninsula, with its own commercial dependencies
- The earlier Port Bonython bulk export proposal was refused in 2024 and should not be conflated with either

Liquids and products loading jetty

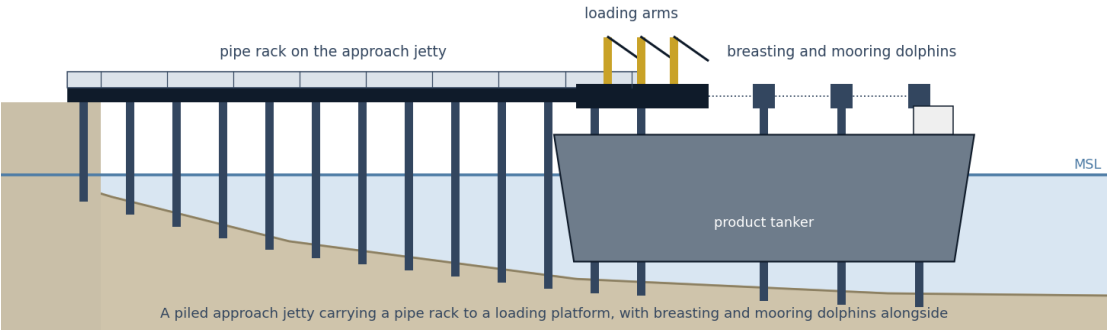


Diagram shows the Port Bonython liquids jetty only. Whyalla is a bulk and steelworks facility and Cape Hardy is an unbuilt deepwater proposal.

Project status	Whyalla sale shortlisted to two bidders 27 May 2026, with A\$1.9bn of government funding for a new owner. Cape Hardy is a separate project, approved but pre-FID.
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WESTERN AUSTRALIA

Closing the loop on the south coast

Back west through Esperance, Albany and Bunbury to Cockburn Sound, where three multi-billion dollar marine programs now overlap.

Port of Esperance

WA

Southern Ports



● **Main usage** Iron ore, nickel and other concentrates, grain, fuel, fertiliser

● **Throughput** 8.23 Mt (FY25), down from 13.17 Mt in FY24

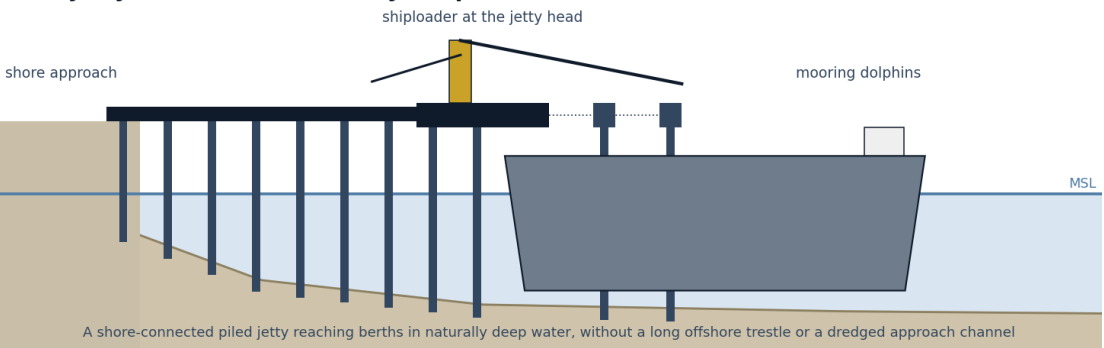
● **Berths** 3 berths: 1 and 2 land-backed, Berth 3 a dolphin berth

● **Value metric** Not published

Engineering note

- A naturally deep, sheltered harbour, the deepest on WA's south coast
- A long piled jetty with in-house stevedoring and port-owned handling equipment, unusual for an Australian landlord port
- The FY25 fall against FY24 is large enough that commodity-level data is needed before drawing conclusions about berth utilisation or demand risk

Piled jetty to berths in naturally deep sheltered water



A shore-connected piled jetty to berths in naturally deep water, which matches Esperance. This is not an offshore coaltrestle arrangement.

Project status Hughes Road upgrade programme, A\$19.6M, with remaining works forecast for 2026.

Port of Albany

WA

Southern Ports

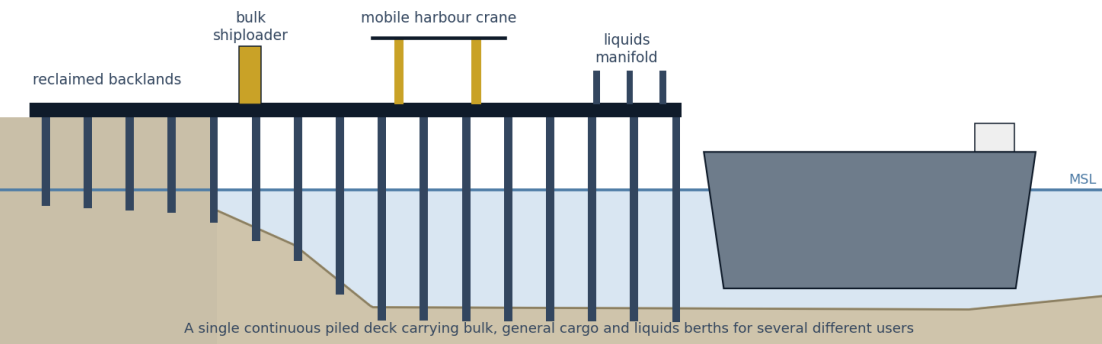
● Main usage	Grain, woodchips, silica sand, fertiliser and fuel imports
● Throughput	4.86 Mt (FY25)
● Berths	4 berths, numbered 1, 2, 3 and 6. Berth 6 is a dolphin berth for woodchips
● Value metric	Not published



Engineering note

- A deep natural harbour in King George Sound, historically WA's first port
- Grain and woodchip shiploaders operate from a compact wharf footprint
- Southern Ocean swell and long-period wave response are a principal operability consideration rather than water depth
- Southern Ports has engaged Freyssinet for a A\$12.2M suite of berth remediation works across its three ports

Multi-user common-user wharf: several cargo duties on one deck



Generic multi-user wharf. Albany is a compact grain and woodchip berth in a natural harbour, not a reclaimed multi-cargo terminal.

Project status

Within the A\$205M Southern Ports asset program.

Port of Bunbury

WA

Southern Ports



● **Main usage** Alumina, spodumene and lithium, woodchips, mineral sands, silica sand, caustic soda imports

● **Throughput** 17.09 Mt (FY25). Southern Ports network total 30.18 Mt

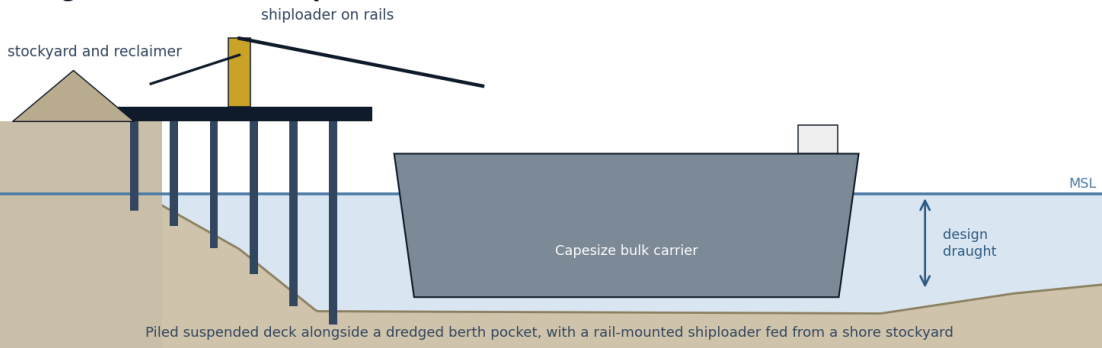
● **Berths** 7 berths across the Inner and Outer Harbours, numbered 1 to 6 and 8. Berth 6 is a dolphin berth

● **Value metric** Not published

Engineering note

- Inner harbour formed by a cut through the coastal dune system, with berths on both sides
- Alumina from Worsley is the largest single commodity, alongside one of the world's largest spodumene and lithium export trades
- Turkey Point road and bridge, A\$34M, opened 1 September 2025, separating heavy vehicles from public access and unlocking port land at Berth 8

Dredged-channel bulk export berth



Generic diagram of this structure type. This port's actual structure is described in the engineering note above.

Project status

Turkey Point access road and bridge completed at A\$34M and opened 1 September 2025.

Cockburn Sound: Henderson, Stirling, Westport

WA



Fremantle Ports; Commonwealth Defence; Westport

● Main usage	Bulk imports and exports, naval shipbuilding and sustainment, proposed container port
● Throughput	Kwinana bulk facilities sit within the Port of Fremantle total
● Berths	Not published
● Value metric	Capital context: Henderson initial A\$12bn commitment HMAS Stirling up to A\$8bn

Engineering note

- Henderson site and boundary announced 24 August 2026; the program now moves into concept design. AECOM was appointed in May 2026 for site characterisation across Cockburn Sound
- HMAS Stirling expansion at Garden Island is separately funded for Submarine Rotational Force West from 2027
- Westport's container terminal would occupy the same body of water. Three very large marine programs sharing one sound, one seabed and one labour market

Graving dock and shiplift: naval sustainment infrastructure

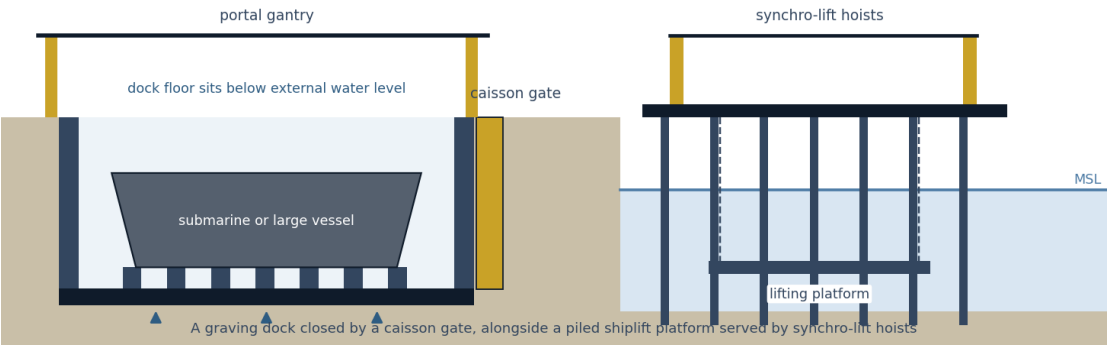


Diagram shows the Henderson graving dock and shiplift only. Kwinana's bulk jetties and the proposed Westport container terminal are different structures.

Project status	Henderson: site selected, concept design next. Westport: Bill at second reading, FID pending.
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Smaller ports: Western Australia and the Top End

Working ports carried here rather than on their own slide. Several are single-commodity private facilities, but each is a real piece of marine infrastructure.



Numbers on the map match the list. A leader line shows the true position where a marker has been nudged apart to stay readable.

1	Varanus Island (WA)	Gas hub operated by Santos; transferred to Pilbara Ports governance 1 July 2021
2	Cape Cuvier and Useless Loop (WA)	Salt export jetties: Cape Cuvier serves Lake MacLeod, Useless Loop is in Shark Bay
3	Cape Preston West (WA)	Pilbara Ports port; the Mardie salt and potash project sits within it
4	Anketell, Balla Balla, Cape Preston East, West Urala (WA)	Greenfield Pilbara ports declared by Pilbara Ports, none yet built
5	Wyndham (WA)	Kimberley cattle and general cargo; very large tidal range
6	Gove and Melville Bay (NT)	Bauxite export; alumina refinery closed 2014
7	Milner Bay, Groote Eylandt (NT)	GEMCO manganese export
8	Bing Bong (NT)	McArthur River zinc and lead concentrate, transhipped

Smaller ports: Queensland and the south coast

The remainder of the smaller network, from Cape York round to the South Australian gulfs.



Numbers on the map match the list. A leader line shows the true position where a marker has been nudged apart to stay readable.

1	Skardon River (QLD)	Bauxite, 6.2 Mt FY25, fastest-growing Queensland port
2	Karumba (QLD)	Zinc concentrate transhipment, Gulf of Carpentaria
3	Cape Flattery (QLD)	Silica sand export, 2.5 Mt FY25
4	Mourilyan and Lucinda (QLD)	Sugar terminals; Lucinda has a 5.8 km jetty
5	Mackay (QLD)	Fuel, sugar and offshore support, 3.4 Mt FY25
6	Port Alma and Rockhampton (QLD)	Ammonium nitrate, tallow, general cargo
7	Bundaberg (QLD)	Sugar, molasses and silica sand, 0.24 Mt FY25
8	Port of Eden (NSW)	Forestry, fishing, cruise; breakwater wharf extension
9	Port Latta (TAS)	Grange Resources iron ore pellet export
10	Flinders regional ports (SA)	Port Pirie, Thevenard, Wallaroo, Port Giles, Klein Point

Where the marine capital sits on the coast

Nineteen port and marine programs, grouped by the gate each has actually reached. Funding, approvals and FID are separate things.



● FUNDED, CONSTRUCTION UNDER WAY

1. Lumsden Point, Port Hedland
2. Dampier port facilities
3. Darwin Ship Lift
4. Newcastle MPT berth extension
5. Hughes Road, Esperance
6. Cape Preston West, including Mardie

● FUNDED, DESIGN AND DEFINITION CONTINUING

7. Henderson precinct and HMAS Stirling
8. Osborne submarine yard
9. Newcastle Mayfield precinct
10. Bell Bay shiploader replacement
11. Macquarie Wharf, Hobart

● FID OR APPROVALS OUTSTANDING

12. Westport, Kwinana
13. Newcastle Clean Energy Precinct
14. Middle Arm, Darwin
15. Port of Hastings renewable terminal
16. Port Kembla offshore wind and container
17. Cape Hardy
18. Whyalla green iron
19. Anketell, Balla Balla, Cape Preston East, West Urala

The capital pipeline in detail

Committed funding is not the same as a final investment decision. Numbers match the map on the previous slide.

FUNDED, CONSTRUCTION UNDER WAY

- 1 Lumsden Point, Port Hedland**
A\$450M of the A\$565M Pilbara package; wharf construction advanced
- 2 Dampier port facilities**
A\$115M Dampier allocation of the A\$565M package, in delivery
- 3 Darwin Ship Lift**
Around A\$820M; marine works well advanced
- 4 Newcastle MPT berth extension**
A\$36M; 80 m piled quay, early works Q1 2026, complete early 2027
- 5 Hughes Road, Esperance**
A\$19.6M programme; remaining works forecast 2026
- 6 Cape Preston West, including Mardie**
Channel dredging began April 2026

FUNDED, DESIGN AND DEFINITION CONTINUING

- 7 Henderson precinct and HMAS Stirling**
A\$12bn initial, up to A\$8bn at Stirling; site selected 24 Aug 2026, concept design next
- 8 Osborne submarine yard**
ANI equity A\$8.5bn; Capability Partner appointed 29 Jul 2026
- 9 Newcastle Mayfield precinct**
A\$115.5M committed; EIS in preparation, construction expected 2027
- 10 Bell Bay shiploader replacement**
Planning and procurement progressed
- 11 Macquarie Wharf, Hobart**
Multi-stage redevelopment, planning milestones

FID OR APPROVALS OUTSTANDING

- 12 Westport, Kwinana**
Around A\$7.2bn planning estimate; Bill at second reading
- 13 Newcastle Clean Energy Precinct**
FEED and EIS due 2026; approvals and FID outstanding
- 14 Middle Arm, Darwin**
A\$1.5bn Commonwealth equity committed; still in approvals
- 15 Port of Hastings renewable terminal**
A\$124.5M for the EES process only
- 16 Port Kembla offshore wind and container**
Designs progressed; competing submarine base
- 17 Cape Hardy**
Approved greenfield deepwater proposal, Eyre Peninsula
- 18 Whyalla green iron**
Two bidders shortlisted May 2026; A\$1.9bn on the table
- 19 Anketell, Balla Balla, Cape Preston East, West Urala**
Greenfield Pilbara ports, still unbuilt

Status checked 29 August 2026. Verify with the relevant proponent before commercial reliance.

What this means for structural and marine practice

- **Brownfield work outweighs greenfield**

A large share of national throughput moves across structures built between the 1960s and 1990s. Assessment, strengthening and life extension under continuous operation is likely to remain a larger workload than new build, and a harder engineering problem.
- **Transshipment can substitute for dredging**

Cape Preston and the Onslow Iron operation show shallow berths, barges and offshore transfer replacing capital dredging where metocean and tow logistics suit. The trade is capital cost against operating cost, a lower handling rate per tonne and weather-limited availability, so the comparison belongs at whole-of-life, not at capital cost alone.
- **Northern exposure is not one design envelope**

Cyclone, tide and swell regimes differ materially around the coast. Geraldton sits outside Region D, the Pilbara combines Region D wind with a large tidal range, and the Gulf is cyclonic with little swell. Site-specific metocean data sets the design parameters including wave height, period and water level, which in turn drive deck soffit elevation and wave uplift.
- **Energy-transition cargo demands heavier quays**

Turbine blades, nacelles, tower sections and transformers move on self-propelled modular transporters. That pushes quay and laydown bearing capacity, point loads and crane hardstand well beyond container terminal duty. Newcastle, Kembla, Hastings, Gladstone and Adelaide all have projects or listings aimed at it.
- **Defence is now a major marine workload**

Publicly announced envelopes across Henderson, HMAS Stirling and Osborne come to roughly A\$28.5bn, though the three are not commensurable: an A\$12bn initial commitment, an up-to A\$8bn figure, and A\$8.5bn of equity. Defence has separately indicated around A\$25bn for Henderson alone over the coming decade, so A\$28.5bn is a floor rather than a ceiling. Graving docks, shiplifts and heavy load transfer are a different discipline from wharf design, and the local capability base is thin.

Sources, definitions and caveats

Primary sources

- Fremantle Ports annual trade overview; Mid West Ports; Southern Ports FY25 annual report
- Pilbara Ports FY2025-26 trade release
- Queensland Department of Transport and Main Roads port trade statistics to 30 June 2025
- Port of Melbourne FY25 trade performance; GeelongPort; TasPorts; Flinders Port Holdings
- Port of Newcastle releases and submissions; NSW Ports; Transport for NSW
- Infrastructure Australia evaluations and the 2026 Infrastructure Priority List
- Prime Minister's Office, Defence, Australian Submarine Agency and Australian Naval Infrastructure releases
- Chevron Australia, CITIC Pacific Mining and Westport proponent material

Read these metrics carefully

- Reporting periods are not aligned. The period is shown beside each figure.
- Cargo trade value is the single value basis used. Contribution-to-GSP measures are not comparable port to port and are not shown.
- Port throughput, plant capacity and environmental approval capacity are three different measures and are not interchangeable.
- Private and Shipping and Pilotage Act ports do not publish throughput on a comparable basis, and are marked as not published.
- Engineering notes are professional observations on structure type and design considerations, not verified port-specific design criteria.
- Structure diagrams are generic type illustrations shared by several ports. Two ports on the same diagram are not the same structure.
- Where a figure is contested between sources, both values are shown on the port slide with the basis stated.