

navigate

Westport Program Update



Taking a closer look at some of the science, thinking and technical processes behind one of Western Australia's largest ever infrastructure projects.

Managing Director's Message

Port infrastructure is vital to our economy and way of life. One of our Westport goals is to improve trade outcomes for exporters, importers, and the economy, to the benefit of everyone.

Ports Australia's recent [State of Trade](#) report stresses the importance of getting our port infrastructure right, highlighting Western Australian ports as a significant driver of the national economy.

The report found that 62% of Australia's international trade (by volume) passes through WA's ports. Exports from WA made up 53% of Australia's exports by value, the highest contribution of all the states, at a total of \$209 billion.

As expected, a significant amount of this is due to WA's iron ore exports. However, WA's seaborne imports were also significant, with an estimated value of \$28 billion, which is well over half of the [State's \\$49 billion total international and domestic imports](#).

Bringing in everything from agricultural and industrial machinery to furniture and

household appliances, container trade is crucial to our way of life and functioning economy. The importance of container trade will only increase as trade grows over the coming decades.

We're already seeing a trade increase. In the 2024 financial year, Fremantle Ports recorded the [highest ever annual volume of container trade for the Inner Harbour](#) at 856,526 TEU. That's an increase of 46,807 TEU, or 5.8%, compared with the 2023 financial year.

Ensuring the reliable and efficient supply of goods into WA over the coming decades makes developing a new container terminal at Kwinana a matter of state and national strategic significance. This was echoed by Federal Infrastructure Minister Catherine King at the unveiling of the [new Kenwick intermodal terminal](#) (IMT).

Minister King described WA as a "big driver of the national economy" emphasising the role of efficient freight movement in growing our economy and creating jobs.

The new Kenwick IMT, funded by Arc Infrastructure and the Australian and Western Australian Governments, fits within Westport's larger vision of an efficient and resilient supply chain that will support our economy for the next 100 years.

In this edition of Navigate we explore the new Kenwick IMT, along with the work underway to set Westport up for success in future stages. This includes the next round of marine geophysical surveys, developing an urban and landscape design vision, the trialling of a new environmental analytical tool and more.

Patrick Seares
Managing Director, Westport





Kenwick IMT to help future-proof WA's supply chain



Example of an Intermodal Terminal

In September, the launch of the Kenwick Intermodal Terminal (IMT) marked a critical step towards an efficient and resilient supply chain for WA's future.

The unveiling of the Kenwick IMT, a \$25 million investment between Arc Infrastructure, the Australian Government and WA State Government, will shift more container freight onto rail, cutting road congestion and improving WA's supply chain efficiency.

The project supports the WA Government's target of moving 20% of container freight via rail, and Westport's plans for a new container port to facilitate the state's long-term economic growth and diversification.

Modelling has shown that trade volumes will increase significantly over the coming decades and that

new and upgraded intermodal hubs will help increase the capacity of the network.

The new Kenwick IMT will support the movement of up to 200,000 containers annually, eliminating around 135,000 truck journeys each year.

This IMT will form part of the future Westport supply chain, which includes a new container terminal in Kwinana, supported by an upgraded road and rail freight network and intermodal terminals.

Westport identified 3 preferred locations for intermodals at Kenwick, Kewdale and Forrestfield, to support

the future port facilities through to 2074.

These locations were selected based on:

- Container origins and destinations (both current and future),
- Forecasts of population, retail, and industrial growth areas,
- Site constraints,
- Capital expenditure required, and
- Supply chain operating costs.

The combination of Kenwick, Kewdale and Forrestfield sites was found to offer the best value for money.

Next wave of geophysical surveys to commence



Another round of marine geophysical surveys are scheduled to commence in October and are expected to be completed by December 2024. This work builds upon initial marine geophysical surveys completed last year.

Geophysical surveying is a non-intrusive and low-impact method of mapping the characteristics of the seabed by sending sound waves through the water.

Understanding what lies beneath the seabed is crucial to refining marine infrastructure design and planning for dredging works. The type and extent of subsurface material can impact on dredging

and construction methods, construction timeframes and overall cost.

The surveys will be conducted via a small vessel around the footprint for the proposed port facilities including the navigation channels. A drone will also be deployed as part of LiDAR (advanced light detection and ranging) surveys.

The information collected from the surveys will inform Westport's detailed design and planning activities, including dredge management planning, as well as provide inputs to our environmental impact assessment.

The geophysical surveys will be followed by geotechnical surveys to commence in 2025.

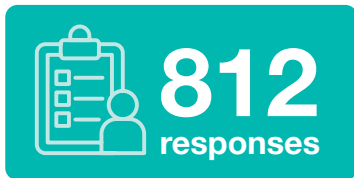


What we heard: Findings from Westport's Community Survey

Westport's communications and engagement activities during the first half of Stage 3 focused on operators, industry and technical stakeholders. This ensured we captured their expertise to help shape the design of our future container supply chain. However, Westport is a program of major infrastructure with considerable implications for all of WA, and we need to bring the broader community on this journey.

To complement our ongoing community pop-ups, monthly e-newsletter and webinars, we launched an online survey in September 2023 to hear the community's thoughts on Westport.

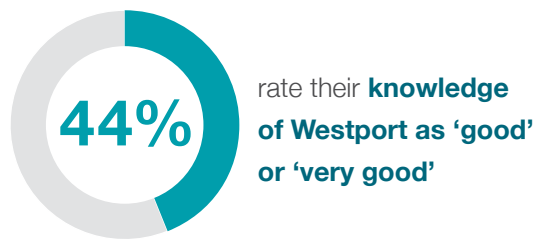
More than 800 people completed the [Westport Community Survey](#). This included the question: "What do we need to get right, in planning for Westport?" The top-ranked theme was the marine environment, followed by road upgrades and freight rail.



Cities of Rockingham, Cockburn and Kwinana top 3 most represented areas

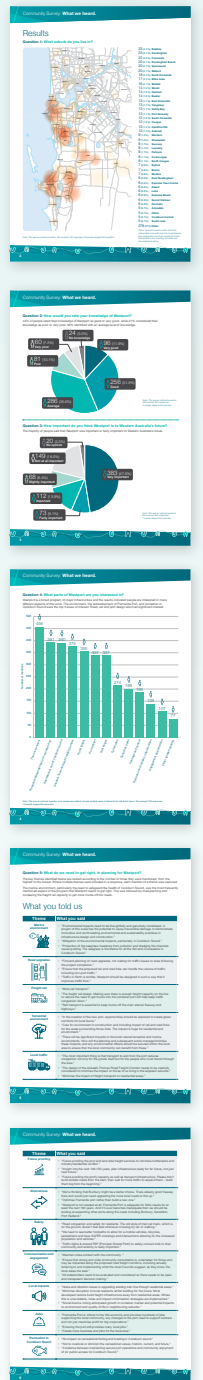
The top 5 things we need to get right, in planning for Westport:

- 1 Marine environment
- 2 Road upgrades
- 3 Freight rail
- 4 Terrestrial environment
- 5 Local traffic



This feedback will inform our ongoing planning, and provide a guide for future communication and engagement activities to help us address the things the community cares about most.

[Read the full survey report here.](#)





Our vision for Westport's urban and landscape design

To effectively meet the needs of end users and tailor our design to the wider physical, urban and operating environment, Westport is developing an Urban and Landscape Design Framework.

An Urban and Landscape Design Framework is a strategic document used in infrastructure planning to help understand and respond to user requirements and ensure seamless integration with the wider environment. In this context the term 'environment' includes the physical, community and governance environment of a project.

Westport's Urban and Landscape Design Framework will consider the supply chain through the lens of different user groups, assets owners

and the community to improve the overall design quality. Following a people-centric approach, the process will involve identifying the needs and aspirations of these groups and seek to balance potential conflicts between them.

The first step in developing Westport's Urban and Landscape Design Framework is the preparation of an Urban and Landscape Design Vision.

This vision will set the expectations for urban and landscape design

for the whole of Westport. It will shape the design of road, rail and marine components and provide a benchmark for future aspects of urban and landscape design.

Procurement for an Urban and Landscape Design Vision is currently underway, with the vision expected to be finalised by mid-2025. As part of this process, we will be calling on our partners and key stakeholders to provide input into the vision.

Westport supporting WA-first data trial

The [WAMSI-Westport Marine Science Program](#) is amassing a tonne of new data about Cockburn Sound.

This data will not only help inform our planning but, through a new Shared Environmental Analytics Facility (SEAF), will be available to regulators, industry, and researchers interested or planning major developments in the Sound.

A cloud-based platform, SEAF, will be used to share, interpret and analyse environmental data. It will be able to generate maps, reports, and forecasts, to help support research and decision making.

SEAF is being developed by WAMSI in partnership with the Western Australian Biodiversity Science Institute (WABSI), with input from end users and stakeholders including Westport.

Westport is one of many organisations that is contributing funding, data, and expertise to the Cockburn Sound pilot, which is supported by our WAMSI-Westport



Cockburn Sound

Marine Science Program.

Westport is one of 2 SEAF pilot programs, which included the development and delivery of the Cockburn Sound Integrated Ecosystem Model (CSIEM). This model will be able to run scenarios exploring shifts in Cockburn Sound associated with climate change and development.

Using data collected as part of the WAMSI-Westport Marine Science Program, SEAF will be able to

provide hydrodynamic and sediment transport models and maps, as well as integrated marine ecosystem biogeochemistry and ecological models and maps.

SEAF will also inform the Cockburn Sound Drivers-Pressures-State-Impacts-Responses (DPSIR) reporting model. In the longer term, SEAF will support the delivery of regional assessments.

To learn more visit: www.seaf.org.au



Port Botany

PIANC APAC 2024: Connecting Asia Pacific ports in a changing world

PIANC, the World Association for Waterborne Transport Infrastructure, hosts the biannual Asia Pacific Conference (APAC) that brings together international and national technical, engineering, economic, and environmental experts in the field of marine transport infrastructure.

Westport was represented at the third PIANC APAC (27 – 30 August) by two of our environmental team leads who attended, sharing their knowledge and benefiting from the diversity of expertise on show across the 3-day event.

The conference, which focused on harbours, ports and recreational boating in the Asia Pacific region, explored the 2024 theme “Connecting Asia Pacific ports in a changing world”.

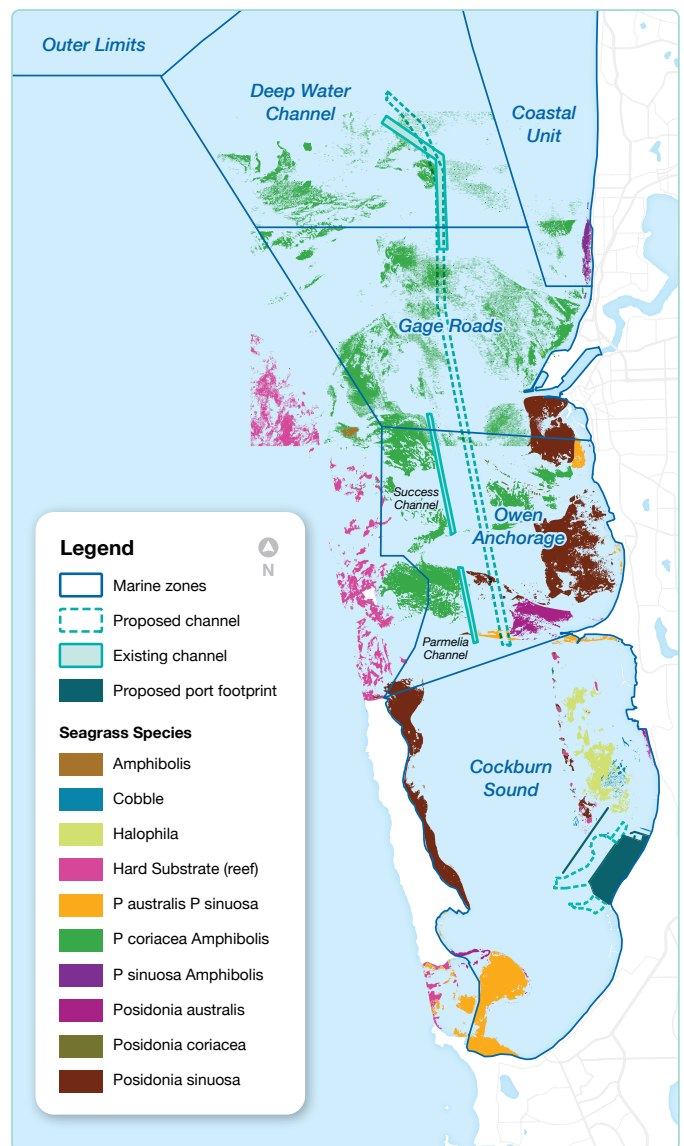
The theme resonated strongly with Westport. There is only one gateway for international and domestic container trade on the western side of Australia (compared with 4 in the East), making it WA’s gateway to markets across the Asian Pacific.

The conference featured more than 50 presentations across a variety of topics including decarbonisation, AI technology, digitalisation, resilient marine infrastructure, and the beneficial re-use of dredge material, as well as site visits to Port Botany and the Patrick AutoStrad Sydney Terminal.

Westport’s delegates presented on the benefits of early investment in science, and the environmental considerations that were applied to the multi-criteria analysis (MCA) process to determine a single recommended port footprint from around 30 potential configuration options.

Underpinned by substantial weighting of environmental criteria, technical studies, and expert advice, the MCA process helped us choose the port footprint option that provided the best environmental outcome of those considered, and importantly one that avoids existing perennial seagrass meadows on the Kwinana Shelf.

Going forward, Westport will continue to explore opportunities to integrate positive environmental outcomes into our port design as we work to deliver a sustainable and efficient new port for WA.



The port footprint avoids existing seagrass meadows in Cockburn Sound.