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Westport Program Update



## Managing Director's Message

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

**Westport has reached a significant milestone with the proposed marine and landside port infrastructure within the Kwinana Industrial Area, and the Anketell Road upgrades, referred to the Western Australian Environmental Protection Authority (EPA) to determine the level of environmental assessment.**

In mid-2024, we will submit a business case to the WA Government which will include our final recommendations on a development approach and timings for the new port facilities, and the road and rail infrastructure. Commencing the environmental assessment process now gives us the flexibility to target the late 2030s for completion of the new port facilities in Kwinana.

Multiple integrated infrastructure projects of the scale proposed will take around a decade to construct. While we expect environmental approvals to take about 2 years, there are factors that could extend the process, including the possibility of appeals and the EPA having discretion to allow more time. Delaying environmental referral until after the business case is assessed would push the completion date well into the 2040s which creates a risk for our economy.

It's important to note that referral is just

the first step in a long journey. The 'big' step is the assessment stage which we expect will include a public environmental review (PER). This stage is anticipated to commence in 2025, following completion of the WAMSI-Westport Marine Science Program and a State Government decision on the Westport Business Case. As part of the PER, the public will be invited to comment for 8 to 12 weeks on Westport's full documentation including the supporting research, data and insights that underpin the submission.

I'd like to acknowledge the massive effort to get to referral. More than 30 independent research projects and a raft of other studies are underway, to deliver up-to-date and publicly available marine science, informing significant decisions around infrastructure design, supporting development and mitigation planning to minimise environmental impacts, and helping Westport deliver a

robust environmental impact assessment. I believe this will be one of the best-informed assessments in terms of the knowledge developed beforehand, and this is appropriate given how important the Sound is to Westport and to our community.

I'm especially proud of the work we've done to avoid marine impacts, which included moving the port footprint over 1km south to avoid seagrass in Cockburn Sound, keeping an open-ended breakwater to avoid any major impacts on water currents, and developing a second channel through old dredging grounds and channels where seagrass has already been lost. Going forward, we will further explore potential options to reduce the project footprint, as well as opportunities for mitigation, restoration, and resilience building activities.

**Patrick Seares**  
Managing Director, Westport

### Westport commences environmental impact assessment process

Referral marks the first step in the environmental impact assessment process which is expected to take around two years.

Westport's referral documentation outlines the scope of the proposal, which includes:

- Port facilities, comprising an area of reclaimed land in Cockburn Sound and connections to road and rail infrastructure in the Kwinana Industrial Area.
- A shipping channel into Cockburn Sound to accommodate larger container vessels expected in the future.
- An offshore breakwater required to protect ships berthed at the proposed terminal.



### EPA invites public comment on Westport's referral

The EPA has published Westport's referral document and is receiving public comment on the level of assessment. The public comment period commenced on 19 March and will close on 25 March 2024.

To provide comment to the EPA on Westport's level of assessment visit: <https://consultation.epa.wa.gov.au/seven-day-comment-on-referrals/outer-harbour-port-dev-kwinana/>



# What's next?



Following a decision on the level of assessment, a draft Environmental Scoping Document (ESD) will be prepared. The purpose of a scoping document is to specify the proposed approach for environmental assessment. The scoping document outlines the preliminary key environmental factors, any specific work required and key areas of focus for the environmental review.

A draft scoping document is expected to be made available for a 14-day public comment period with the final versions updated and approved by the EPA following consideration of public submissions.

The most significant stage in the process is Environmental Assessment. As Westport are requesting the highest level of assessment, this is expected to be a Public Environmental Review (PER). This is likely to occur in 2025 and would involve an 8 to 12 week public comment period on Westport's full submission detailing potential impacts and a proposed environmental restoration program.



Watch a short video to learn more about the environmental impact assessment process.



## Road infrastructure referral

Main Roads has submitted a separate referral to the EPA for upgrading Anketell Road, from Leath Road to Kwinana Freeway, to support freight requirements for the Western Trade Coast and the future port in Kwinana. Learn more [Anketell Road Upgrade | Main Roads Western Australia](#)

## Westport's proposed new channel

Of all the options considered, Westport's preferred design has the smallest dredging and reclamation requirements and the least impact on benthic habitat in Cockburn Sound.

Notably, the work we've done now means that the port footprint avoids direct impact to seagrass meadows in Cockburn Sound.

However, the channel footprint cannot avoid impact to around 1.5% of seagrass across Owen Anchorage, Gage Roads, and the existing Deep Water Channel.

Widening the existing channel would have impacted more seagrass than developing a new channel, as the proposed new channel has been designed to run through areas previously dredged by industry, therefore minimising overall impacts.

As the project progresses into detailed design, opportunities will be explored to reduce the project footprint, including the size of the access channel.

We acknowledge that there will be indirect impacts from dredging. However, going forward we will further investigate ways to mitigate or reduce indirect impacts.

Westport is in the early stages of

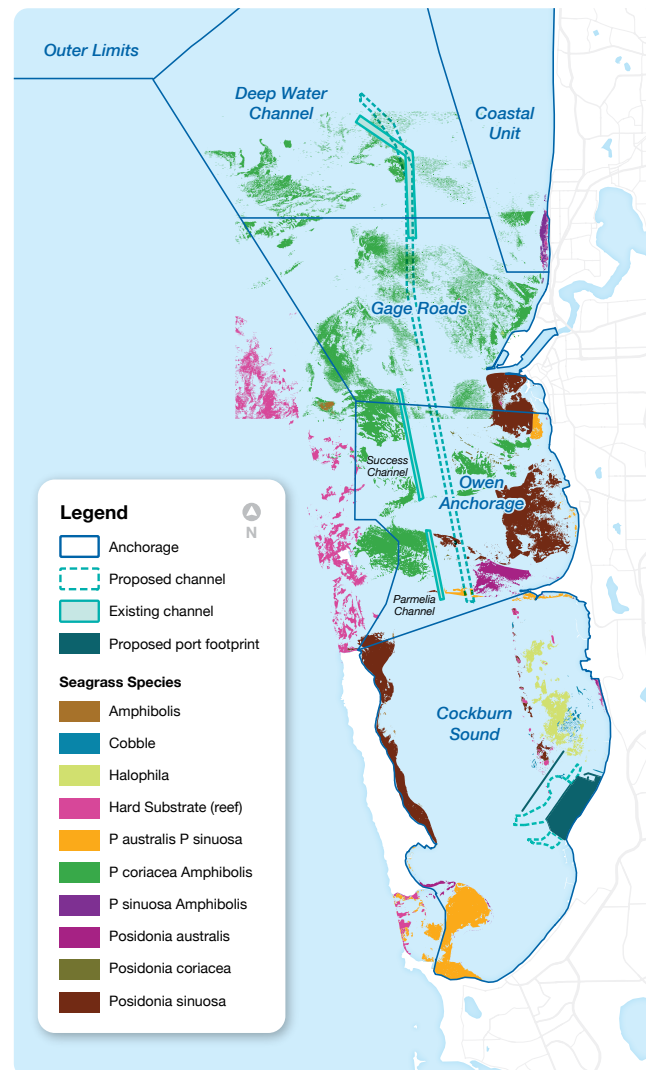
dredging planning and will aim to minimise impacts to the greatest extent possible. Minimising impacts to seagrass and snapper, particularly during the spawning season, is a key focus and will accompany a rigorous water monitoring program.

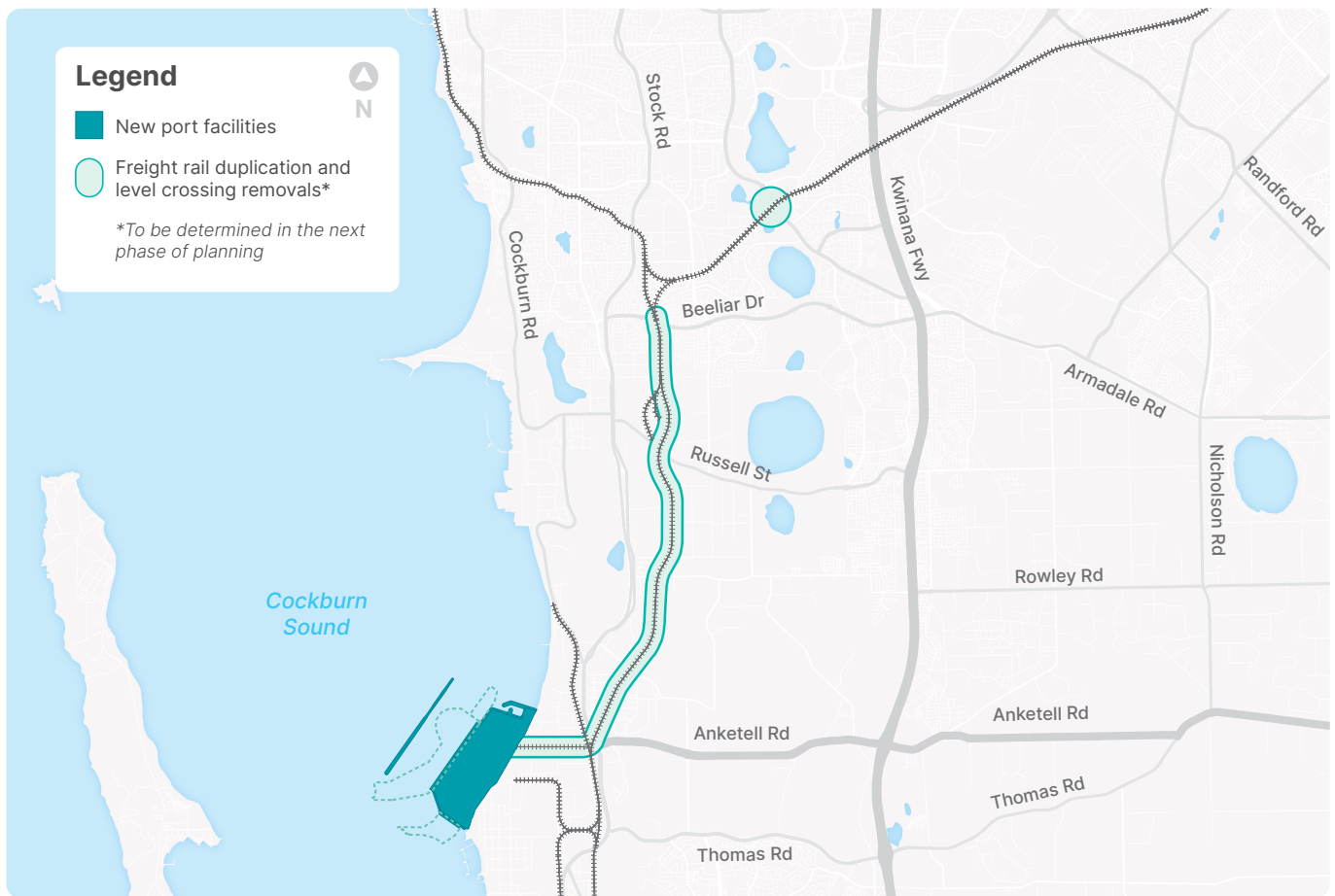
The materials dredged by Westport will be used for reclamation purposes for the port and, where suitable, for other activities like creating seagrass habitat.

Through Westport's marine research program with the WA Marine Science Institution (WAMSI) research has been undertaken to inform best practice around dredging, and avoid, minimise, and mitigate the risks.

The program is delivering research on seagrass mapping, light and sediment tolerance thresholds, and the success factors for restoration trials.

This research will help increase the effectiveness of future restoration activities and will inform our dredge management plan. Westport is planning for long-term mitigation activities that aim to support seagrass restoration programs in Cockburn Sound and increase the success and scale of seagrass recovery.





# Rail upgrades

**Western Australia’s freight rail network connects primary industries in regional areas with industrial processing hubs, the Fremantle Inner Harbour and Outer Harbour, and the east coast of Australia.**

Freight rail currently moves around 20% of shipping containers through the Inner Harbour in Fremantle. This is the highest rail mode share in Australia, partly enabled by a State Government funded subsidy for containers moved from the port on rail.

As part of the long-term planning for new port facilities in Kwinana and an integrated supply chain, Westport has considered how the freight task can be shared between road and rail networks in the most efficient, sustainable, and cost-effective way.

Westport’s preferred supply chain design includes a new rail connection and targeted upgrades to the existing rail network, to enable an even higher commercial rail share for container distribution.

## Proposed rail upgrades include:

- ✓ Longer, wider, semi-automated (with potential for full automation) on-dock rail head on the new container terminal.
- ✓ 4.5km rail connection running along the new port terminal to the existing network east of Rockingham Road.
- ✓ Duplication of approximately 8.4km of the freight rail line between Kwinana and the Cockburn Triangle, near Beeliar Drive in Cockburn.
- ✓ Removal of existing rail level crossings between the new port facilities and the Kwinana Freeway to facilitate safe and efficient rail freight operations, improve safety for road users and pedestrians, and reduce congestion.
- ✓ Planning changes to clear the path for future upgrades to rail connections at the intermodal terminals (IMTs), including Kewdale, which is also the inter-state rail IMT, led by industry demand.

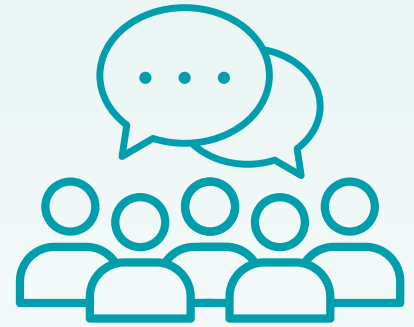
Westport is still in early planning, with years of further design and development still to come following submission of the Westport Business Case to government in mid-2024.

Subject to approval of the business case, the next stage of planning for the rail upgrades will include:

- ➔ Further design and constructability assessments
- ➔ Environmental assessments and approvals
- ➔ Site investigations and surveys including noise and vibration assessments

Westport will engage with stakeholders, including the local community, as planning continues.

# Westport features at sustainable infrastructure symposium



Recognising our work towards net-zero, resilient, and nature positive infrastructure, Westport was invited to present at Western Australian Connect – A sustainable infrastructure symposium and supplier showcase.

Westport’s Managing Director, General Manager, and sustainability consultants all spoke at the event, discussing the opportunities and challenges of planning for infrastructure of this scale.

Discussions included the benefits of embedding sustainability early during planning to increase the impact of initiatives during operations, and opportunities to de-risk sustainability initiatives during the planning phase.

Westport’s intention is that from day one of operations the port will be fully electrified, with no diesel burned or used at the port, and that the governance of the entire supply chain will encourage and support the adoption of low and zero emission vehicles.



*Westport General Manager, Cath Lyons, presenting at Western Australian Connect*

## Planning activities currently underway include:



Developing a net-zero plan to design, catalyse and certify a net-zero port and local container supply chain by 2050.



Investigating opportunities to import and trial zero emission vehicles (ZEVs), container trucks and trains in Perth metropolitan area.



Identifying opportunities for inclusion of automated transport within the road network.



Delivering a research and innovation plan that prioritises innovation opportunities and funding for Stage 4.



Engaging with industry from across the full supply chain to inform design and encourage a commercially viable supply chain.

Understanding that the transition of heavy freight to low and zero emission is a challenging issue of state and national significance, truck and rail transport sectors are represented on Westport’s Supply Chain Reference Group. Going forward, we will continue to engage with operators, including small business owners, as we explore options for a low and zero emissions supply chain.

To learn more visit:

<https://westport.wa.gov.au/environment/environmental-social-and-governance/>

# New WAMSI reports released

As part of Westport's partnership with the Western Australia Marine Science Institution (WAMSI), two new research reports have been released.

To view the reports and learn more about the status of projects that comprise the WAMSI-Westport Marine Science Program, visit [westport.wa.gov.au/environment/wamsi-project-status/](https://westport.wa.gov.au/environment/wamsi-project-status/)



Research Theme:

## Ecosystem Modelling

**Report:** Using conceptual, qualitative, and quantitative ecosystem models to characterise the trophic structure, ecosystem attributes and functioning of Cockburn Sound

**Westport's summary:** Using Ecopath software, local data, expert knowledge, and workshop findings, researchers in the project, jointly funded by WAMSI and Westport, have developed different ecosystem models of Cockburn Sound.

These models explore the trophic structure, functions, and key indicators of the Sound's health, and can predict the impacts of climate change and port activities on key species.

Based on biological surveys, fisheries data, and diet matrices reviewed by experts, Ecopath software created a static food web model of Cockburn Sound. 16 conceptual models and 14 qualitative models for key species and pressures in Cockburn Sound were also developed.

Researchers found that Cockburn Sound is a complex and highly connected system that depends on external energy inputs and nutrient cycling. The study identified keystone groups (for example dolphins and sea lions) and ecosystem indicators (including total system throughput) that can inform future management and conservation strategies.

This research has provided a baseline understanding of the key ecosystem processes, drivers, and pressures in Cockburn Sound and will help Westport explore and refine solutions for managing risks and developing effective management strategies.



Research Theme:

## Fisheries and Aquatic Resources

**Report:** The effects of total suspended sediment associated with dredging on fishes: a review and management strategies

**Westport's summary:** This literature review examined potential impacts of elevated suspended sediment from dredging on fish species in Cockburn Sound.

The review identified that suspended sediment can affect fish behaviour, such as foraging, predation, and habitat settlement, as well as fish physiology, such as gill damage, susceptibility to pathogens, and oxygen uptake.

Egg and larval stages were found to be the most vulnerable to suspended sediment, with suspended sediments potentially resulting in reduced hatching success, impaired oxygen uptake, and increased susceptibility to pathogens.

Going forward, research into the potential impact of suspended sediment from dredging activities on fish species will help Westport determine key environmental thresholds for the dredging program.