Kooragang Terminal 5,604ML Carrington Terminal 224ML

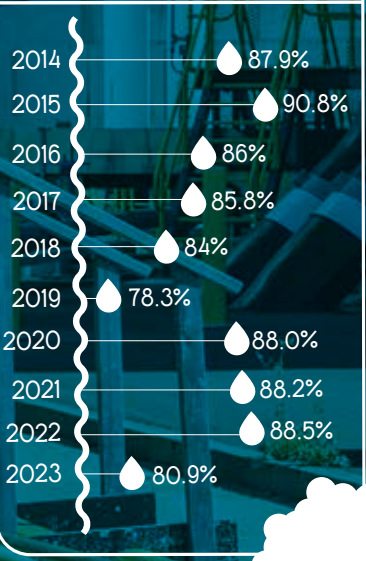
# =5,828ML

WATER USE FROM CAPTURED AND STORED SUPPLY **IN 2023 (80.9%)**

**19.1% WATER USE FROM POTABLE WATER (1,379ML)**

Kooragang Terminal
1,130ML
Carrington Terminal
249ML

**YEARLY RESULTS**



## Environmental footprint

We describe our environmental footprint as our demand on the capacity of natural resources and the environment in which we operate. This demand, or impact, is reduced through identifying and implementing opportunities to use potable water more efficiently, producing less waste and diverting more from landfill, as well as enhancing onsite biodiversity and improving land use practices.

## Potable water consumption

Water use at Port Waratah is a critical aspect in nearly all areas of our operations. Recycled site water is used preferentially for operational activities, with potable water purchased from Hunter Water being used for amenities, and if required, to top up supplies during periods of insufficient water availability onsite. We aim to be conservative with the amount of potable water used for operational purposes, and continually strive to improve our onsite water efficiency and reuse opportunities. We also reduce our potable water consumption by reusing our onsite water resources regardless of regional weather conditions.

Although rainfall across the region was much lower than that experienced in 2022, there were no water restrictions in place and no areas of water stress. Hunter Water catchment storage capacity reduced slightly throughout 2023, ending the year with storage volumes at more than 83 per cent. Our water management system capacity did not change throughout 2023, however there was a short period of reduced capacity at Kooragang Terminal as Detention Pond D underwent repairs, which were managed without impact. In addition, the implementation of new flocculation assets at the Kooragang Terminal enabled the ability to improve site water quality and reuse potential.

Despite a reduction in regional rainfall and 150.6ML reduction of inflows to the Carrington Terminal's CDFS compared to 2022, the system retained 485.5ML of filtered water, an increase of 35.9ML for onsite operational reuse. This demonstrates Port Waratah is utilising available tools to reduce reliance on the region's potable water supply, particularly in drier weather.

In 2023, we established a target to reduce our potable water consumption compared to the previous five-year average (2018-2022). Due to lower levels of harvestable rainfall, and periods with elevated sediment levels in our site water storages, there was an increase in potable water consumption to meet operational demands. Our total potable water consumption was 1,379ML, an increase of 46 per cent compared to the five-year average.

## Land use and biodiversity

Our Kooragang and Carrington terminals are nestled amongst areas rich in industrial history and border areas with great ecological significance. This is especially true for Kooragang, with the 2.1km$^2$ terminal being situated immediately adjacent to the Hunter Wetlands National Park and the internationally recognised Hunter Estuary Wetlands Ramsar site. These wetlands are of significant ecological value, supporting 45 species of migratory birds listed under international agreements and more than 110 species of waterbirds.

Port Waratah also manages two non-operational land holdings adjacent to Kooragang Terminal. These sites are established seasonal habitats of the Green and Golden Bell Frog (Litoria aurea), a species listed Vulnerable on the IUCN Red List. Since 2010, Port Waratah has collaborated with the University of Newcastle in conducting a research programme on the Green and Golden Bell Frog population on Kooragang Island. The programme involves rigorous monitoring during the breeding season, which is typically between November to March each year. Research continued during 2023 and aims to provide insight into population dynamics as well as other factors that may contribute to the persistence of the species on the island.

Our land management activities across our sites and land holdings focus on maintaining native biodiversity through effective weed management. Port Waratah conducts regular site inspections to identify and prioritise weed treatment as required and in accordance with the *Biosecurity Act 2015*.

### CASE STUDY

**LTO Hazard Guide**

This year we launched our LTO Hazard Guide, with the aim of providing all workers with an easily accessible and simplified summary of the behavioural controls concerning seven critical LTO Hazards These include material tracking, intrusive noise, offsite spills and discharges, dust generation, impacts to biodiversity, waste generation and hydrocarbons and chemicals.

While Port Waratah has a suite of physical and automated controls in place to minimise harm to the environment, the LTO Hazard Guide provides a checklist for workers about the behavioural controls that can be implemented to reduce risks, as well as high-risk settings for each of the hazards. The guide was designed to fit inside shirt pockets and Port Waratah's Take 5 booklet. It is also available online and features in work area signage onsite.

# TOTAL WASTE 4,490t

## CARRINGTON TERMINAL WASTEWATER: 2,486t

## LANDFILL: 211t

- Hazardous: 1t
  - Oily rags & absorbents: **1t**
- Non-hazardous: 210t
  - Bulk (skip) mixed waste: **136t**
  - Other mixed waste: **74t**

## DIVERTED FROM LANDFILL: 1,793t

- Hazardous: 1,208t
  - Oil, oily water & grease: **100t**
  - Liquid waste: **1,104t**
  - Solid hazardous wastes: **4t**
- Non-hazardous: 585t
  - Commingled, paper & cardboard: **12t**
  - Metals: **569t**
  - Timber/ greenwaste: **1t**
  - Other: **3t**

## 95.3% LANDFILL DIVERSION BEST EVER

**annual diversion rate recorded by Port Waratah**

For reporting purposes, one litre of liquid waste (for example, effluent, oil, chemicals) is taken to be one kilogram. All waste is diverted to local treatment facilities. Due to rounding numbers may not add up precisely to the totals and percentages provided. We monitor our waste-related data monthly. Carrington Terminal wastewater is classified as a hazardous material diverted for treatment and beneficial reuse.

## Waste

Port Waratah's objectives of improved resource efficiency through waste segregation, waste minimisation, landfill diversion and recycling opportunities are core to improving our environmental footprint.

We engage with licenced waste management contractors to collect, safely manage and transport offsite waste materials generated in accordance with local legislative requirements. Our waste management contractors provide detailed feedback on the waste materials collected, including quantities and the treatment and disposal locations. These are regularly reviewed and verified through internal auditing.

In 2023, our waste target was to maintain our landfill diversion rate over 90 per cent. Pleasingly we achieved this target, recording a landfill diversion rate of 95.3 per cent, which is our best ever annual performance. We have now achieved a diversion rate of over 90 per cent for the past seven years. Supporting this landfill diversion rate was a 47.4 tonne (18.3 per cent) annual reduction in our waste disposed to landfill, which was 211.4 tonnes.

Wastewater removed from the Carrington Terminal generates the largest proportion of waste across our operations at 55 per cent of the total waste generated by Port Waratah. Wastewater collected is transported to and treated at local treatment facilities. Following the treatment process, water is reused for irrigation and industrial use, with remaining volumes returned to the environment. The biosolids produced from the treatment process are reused for mine site rehabilitation.

This year, no waste materials were received for disposal at our terminals or licenced waste facilities.

## Climate action

This year marked the publication and first year of implementation of our Climate Action Plan 2023-2030. We have established a goal to reduce our net Scope 1 and Scope 2 (market-based) emissions by at least 50 per cent by 2030. The Port Waratah Climate Action Plan has four key themes, all with a set of actions that will contribute to continuous emissions reduction and achieving our 2030 goal.

We also developed a new corporate Climate Action Policy and revised our Energy and Emissions Management Plan in the documented framework to support the Climate Action Plan. A new dedicated webpage was launched as part of the Port Waratah website, where regular updates will be posted on our Climate Action Plan progress.

An Energy Efficiency Working Group was established to assess current and new opportunities to reduce electricity consumption, refine operational efficiencies and to improve system reliability. See case study on page 28.

A low-emission Light Vehicle Transition Strategy was also developed this year following a review of site vehicle requirements. The strategy provides the basis for Port Waratah to sustainably transition a proportion of our current vehicle fleet with low-emission or electric vehicles upon replacement. It also involves matching necessary EV charging infrastructure with electric vehicle numbers and where they will be utilised across the business.

This year we also announced a new electricity contract commencing in January 2024, which will boost efforts to reduce greenhouse gas emissions towards our 2030 goals. The new contract progressively increases our procurement of renewable electricity in the form of Large-scale Generation Certificates (LGC's), attributable to actual renewable energy delivered to the national grid.

### CASE STUDY

**Soft plastic recycling**

Port Waratah made its first significant purchase of products manufactured from recycled soft plastics collected from our soft plastics recycling programme. We purchased 56 wheel stops, offsetting 1,290kg of soft plastic. The majority of these have been installed at the Carrington main entrance parking bay, with others installed at our Kooragang Terminal wharf.