

Marine Search and Rescue Activity in Western Australia between 2015–2023

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INTRODUCTION

Marine Rescue Western Australia (WA) is a primarily volunteer organisation providing search and rescue (SAR) services along WA's extensive coastline. Despite their critical role, little is published on the workload of water-based SAR agencies. Understanding spatial and temporal patterns in marine SAR demand is essential for community preparedness, resource planning, and prevention strategies.

AIMS

To quantify the workload and describe spatial and temporal trends in SAR incidents attended by Marine Rescue WA between January 2015 and December 2023.

METHODS

SAR incidents attended by Marine Rescue WA were aggregated by geographical area using ABS statistical boundaries. Analyses included annual, monthly, seasonal, and weekday trends. Per capita incidence rates were calculated using estimated coastal populations.

RESULTS

Marine Rescue WA responded to 15,024 SAR incidents between 2015 and 2023, averaging 1669 incidents annually. Activity peaked during warmer months and on weekends. Most cases occurred in Perth, but rates were higher in regional areas when adjusted for population.

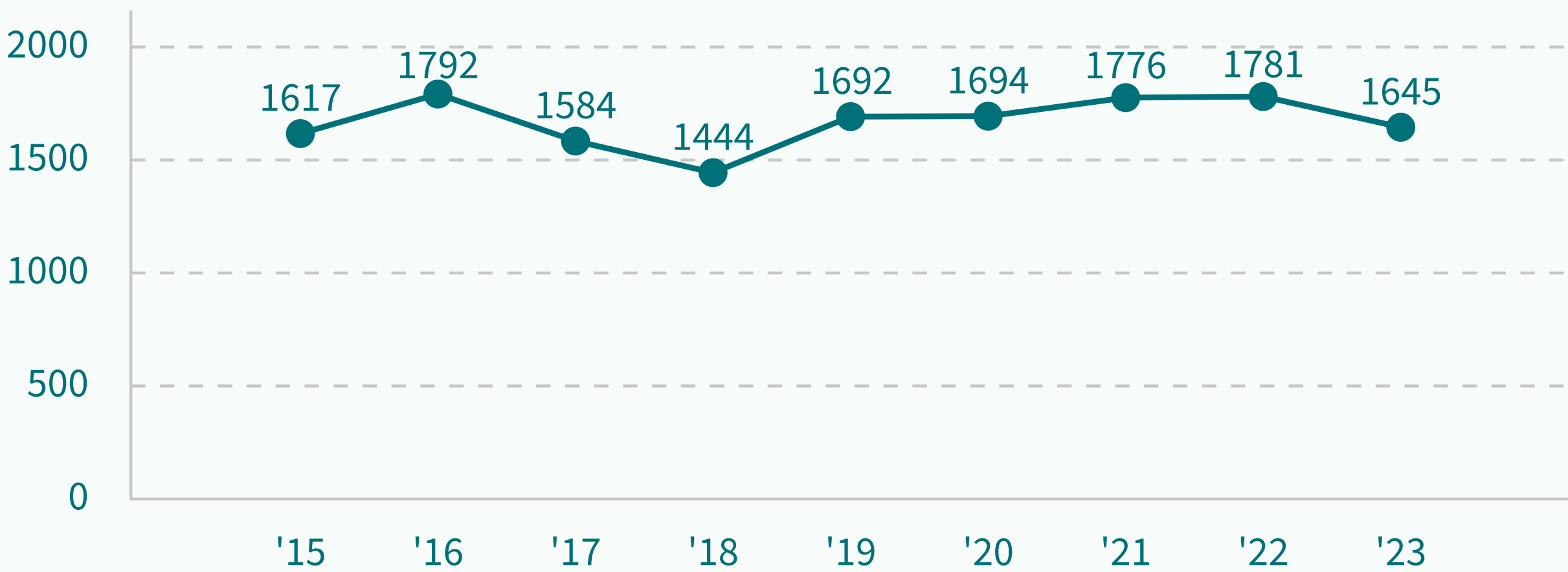
CONCLUSION

Marine Rescue WA experienced seasonal and weekly peaks in demand, reflective of recreational water activity. Although most incidents occurred in metropolitan areas, regional communities face a substantially higher per capita burden, underscoring the need for targeted support for regional volunteer units.

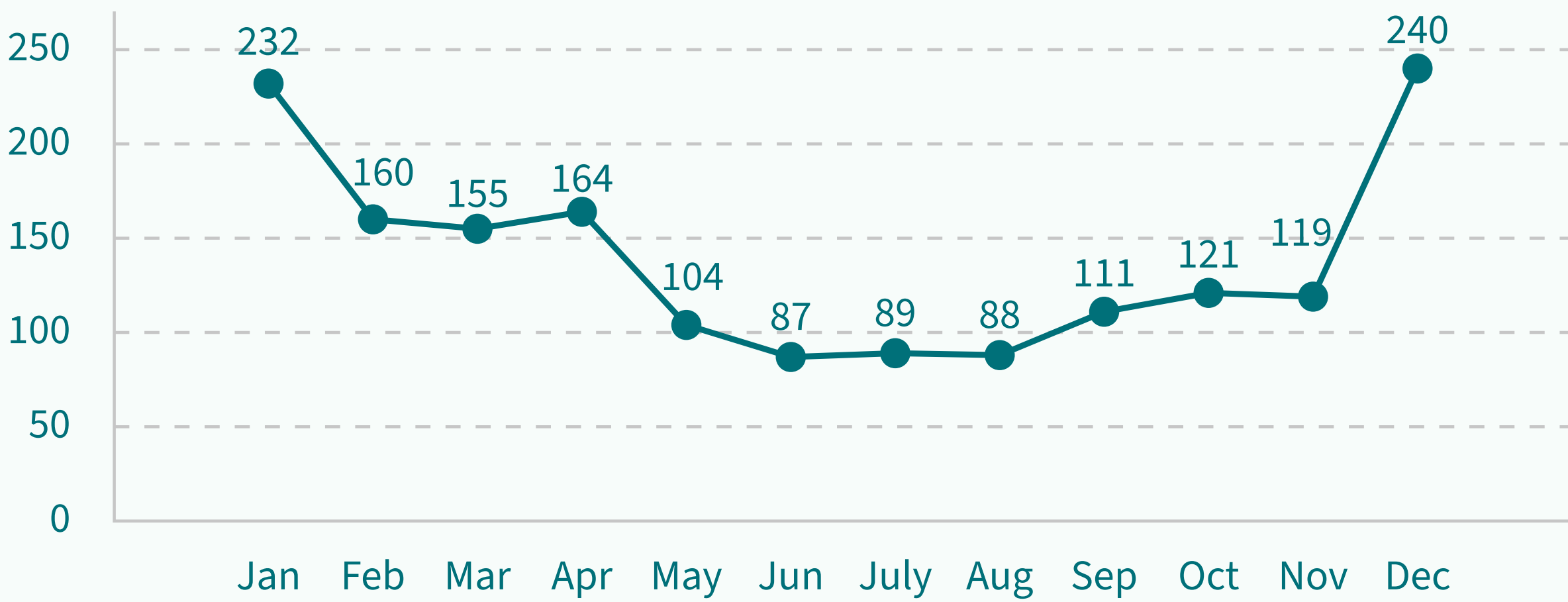
KEY FINDINGS

- Marine Rescue are busiest during summer and weekends
- Most incidents occurred in Metropolitan Perth
- Regional WA had nearly double the per capita rate

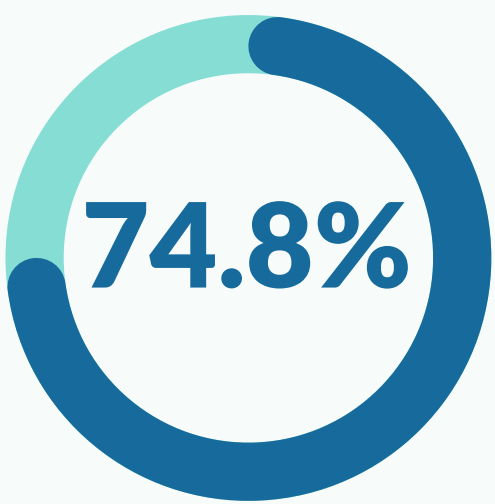
Total Incidents Attended Annually (2015-2023)



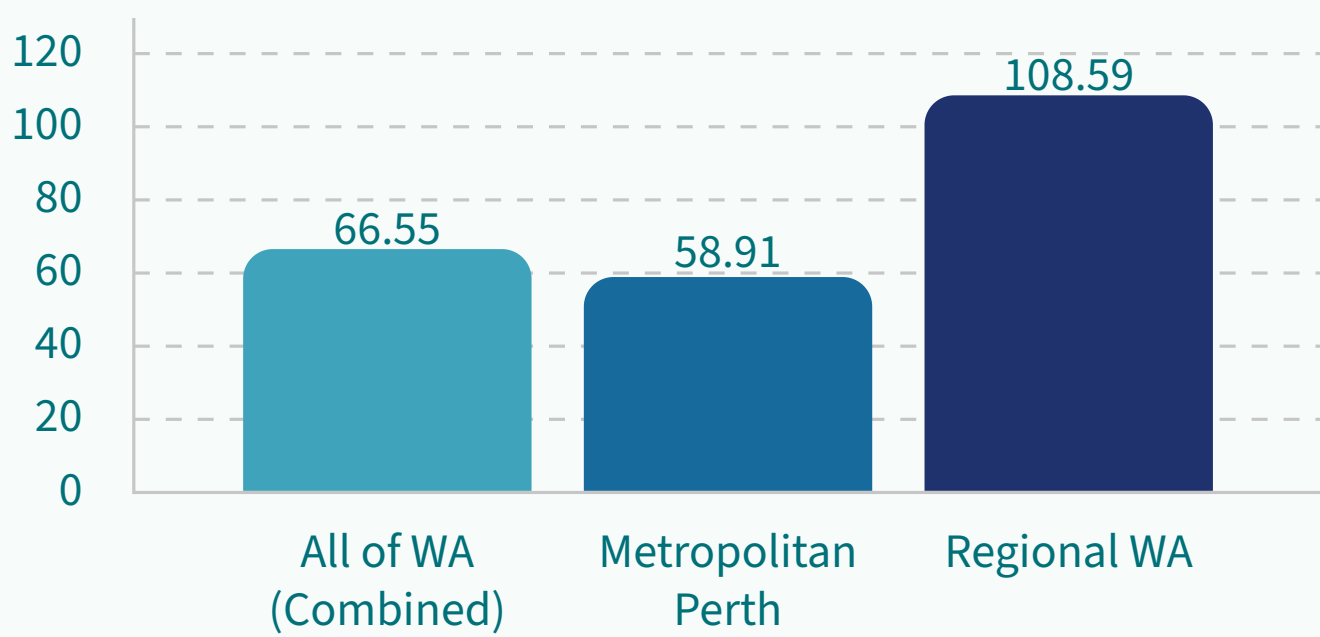
Average Incidents Attended by Month



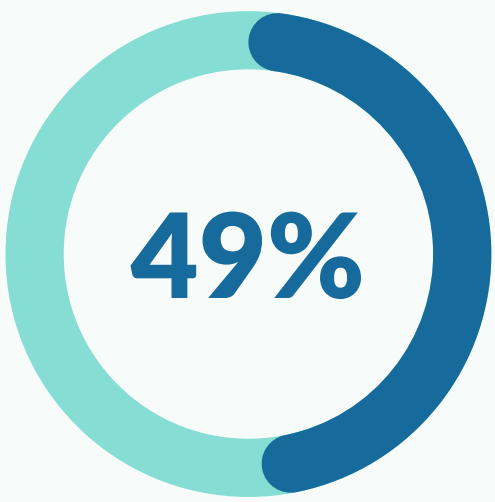
Proportion of Incidents Attended in Metropolitan Perth



Average Incident Rate per 100,000 Coastal Population



Proportion of Incidents Attended on the Weekend



This poster is a sub-project of the Mapping and Analysing Rescue Incidents and Notable Episodes by the Marine Rescue Service in Western Australia (MARINE) study - a collaborative study between Marine Rescue WA (DFES) and Curtin University.

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