Department of Transport

# Mid West Region
## Recreational Boating Facilities Study July 2021

# Introduction

The Mid West Region Recreational Boating Facilities Study (this Study) is being undertaken by Department of Transport Maritime to identify the need for new and improved recreational boating facilities. For the purposes of this Study the Region is defined as the Local Government Areas (LGAs) of Carnamah, Chapman Valley, Coorow, Cue, Greater Geraldton, Irwin, Meekatharra, Mingenew, Morawa, Mt Magnet, Murchison, Northampton, Perenjori, Sandstone, Three Springs, Wiluna and Yalgoo; and navigable waterways located adjacent to or within their boundaries.

# Study Parameters

The term “recreational boating” refers to registered recreational vessels that navigate the waterways of the Region and require formal boating facilities. The definition excludes all commercial vessels including some sail-only vessels.

Registered recreational vessels in the Region range in size from small dinghies to large luxury craft. For planning purposes these vessels are categorised by length - vessels up to 7.5 metres are typically stored on trailers and vessels greater than 7.5 metres are typically stored in mooring installations.

For the purpose of this Study the term “boating facilities” refers to facilities which are available for recreational vessels. These include, public boat ramps and mooring installations such as boat pens, swing moorings, private jetties and boat stackers/storage.

The planning horizon for this Study is 2036 and has been selected as it approaches the reliable forecasting limit of the referenced data sets. The timeframe also recognises the lead times associated with planning and providing maritime infrastructure.

The Study examines the growth in the local fleet of registered vessels to the end of 2020 and forecasts future growth based on average boat ownership growth rates and population projections for each of the LGAs.

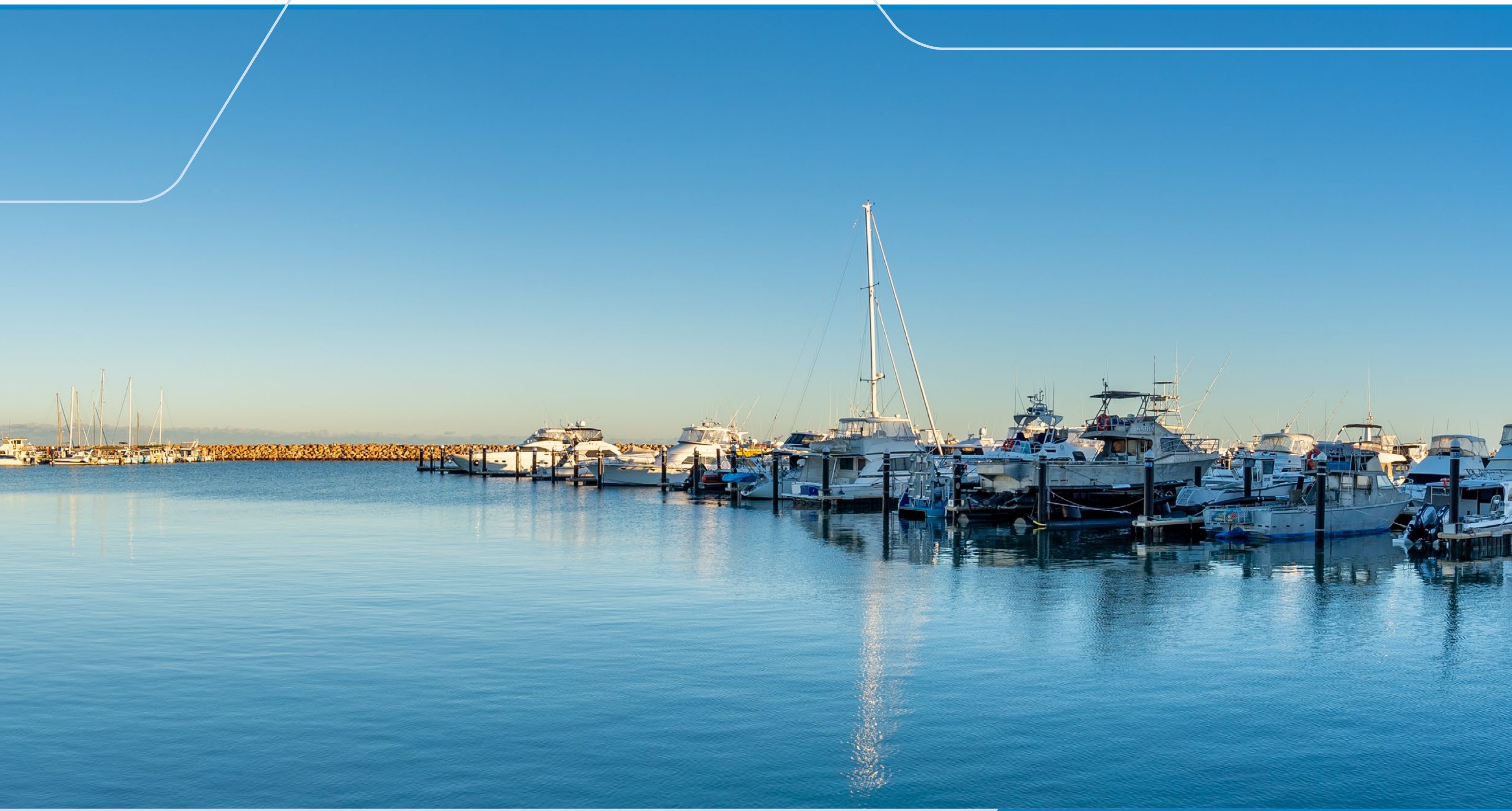
For determining boat ramp requirements, boating facilities with a classification rating of less than Level 3 have not been used in this calculation. However, it is recognised that these smaller/informal facilities still provide access for some vessels in suitable conditions and will assist with satisfying future demand for boat ramp lanes. For determining mooring installations an additional five per cent has been allowed for transient/visitor requirements.


*Front cover: Kalbarri Maritime Facility*
*This page: Geraldton (Batavia Coast) Marina*

# Boating Facility Classification

The standard to which the facilities are developed varies considerably from location to location, ranging from informal open coast launching sites to formal serviced boat harbours. To assist with comparison, DoT has established levels of boating facility development - the higher the level, the higher the standard of facility. The table below summarises the classification levels and type of boat launching facility.

| Level | Classification |
|---|---|
| **Level 1 (Informal)** | Open/beach launching with sea search and rescue organisation. |
| **Level 2 (Minimal)** | A restricted length of waterside (usually a beach) over which launching can take place as determined by environmental conditions; four-wheel drive vehicle access and limited unsealed car-trailer parking. |
| **Level 3 (Local)** | A single or two-lane ramp with a holding jetty for launching and retrieval of shallow draft craft by a two-wheel drive vehicle. Limited sealed car-trailer parking with unsealed overflow area. |
| **Level 4 (District)** | A two-lane ramp with a holding jetty for launching and retrieval of shallow draft craft by a two wheel-drive vehicle. Limited sealed car-trailer parking with unsealed overflow area. Navigation aids and public toilets. |
| **Level 5 (Regional)** | A multiple number of lanes for launching and retrieval by a two-wheel drive vehicle. Boat holding jetties to assist launching and retrieval for each lane. Navigation aids and public toilets. Formal sealed car-trailer parking with unsealed overflow area. |
| **Level 6 (Major Boat Harbour)** | Boat pens and yacht/sailing club facilities. Multiple ramp lanes for launching and retrieval by two-wheel drive vehicle. Boat holding jetties to assist in launching and retrieval and boat wash down facilities. Formal sealed car-trailer parking and car parking. Service jetty and boat refuelling and sullage pump out facilities. Boat repair facilities including one boat lifter (or similar) and associated commercial development. Navigation aids, lighting and public toilets and showers. |



# Current Situation

To determine the current situation existing facilities have been considered satisfactory in condition and suitable for operational requirements.

The Mid West Region is currently served by 18 boating facilities however only seven are considered class Level 3 and above. *See map 1.*

The number of recreational vessels registered in a particular area may also be expressed as the number of vessels per thousand residents, also referred to as the ‘boating density’ or ‘rate of boat ownership’.

The table below provides a ‘2020 snapshot’ of the registered recreational vessels for each LGA and the corresponding population. For the purposes of this Study several inland LGA’s have been combined into one group (Cue, Meekatharra, Mingenew, Morawa, Mt Magnet, Murchison, Perenjori, Sandstone, Three Springs, Wiluna and Yalgoo).

| Local Government Area | Population 2020 (Estimated) | Recreational Boating Registrations 2020 | | Vessels / 1,000 |
|---|---|---|---|---|
| | | 0 – 7.5m | > 7.5m | |
| **Carnamah** | 519 | 56 | 1 | 110 |
| **Chapman Valley** | 1,522 | 305 | 23 | 216 |
| **Coorow** | 949 | 226 | 6 | 244 |
| **Greater Geraldton** | 38,263 | 2,383 | 168 | 67 |
| **Irwin** | 3,540 | 489 | 30 | 147 |
| **Northampton** | 2,909 | 481 | 17 | 171 |
| *** Inland LGA’s** | 4905 | 164 | 10 | 75 |
| **TOTAL** | **52,607** | **4,104** | **255** | **83** |

The estimate for peak boat ramp usage on a good boating day is determined by the number of local boat users plus the number of visitor boat users.

Local boat users have been calculated as a percentage of the boats that are registered within the Region. LGAs denoted (*) have been excluded in this calculation due to the excessive travel component for a return day trip to a boating facility.

It has been noted on a good boating day in a region where the visitor percentages are high, the percentage of local boat users are low. This percentage reduction of the local boat user is in accordance with the table below.

Percentage visitor numbers have been calculated using Department of Fisheries data collected over two peak boating seasons. For the Mid West Region this equates to 35 per cent.

| Visitors | Local registered vessels |
|---|---|
| 0 - 20% | 5% |
| 21 - 40% | 4% |
| 41 - 60% | 3% |
| 61 - 100% | 2% |

## Boat Ramp

- 4% of local boat registrations* ≤ 7.5 metres = 158
- Visitors = 85
- Total boat users = 243

To determine boat ramp requirements, 20 boat users per ramp lane has been used in accordance with AS3962-2020 Marina design.

## Mooring Installations

- Local boat registrations > 7.5 metres = 255
- Transient visitors (5% of 255) = 13
- Total = 268

To allow for a mooring installation assessment, the current moorings include an estimate of recreational swing moorings. This estimate has been determined from limited information available at the time of this report.

An assessment of boating facilities indicates there is a surplus of boat ramp lanes and a shortfall of 144 mooring installations.

# Forecast Demand - 2036

DoT's Recreational Boat Licencing Register was used to extract data required for calculating demand for each LGA in the Study area. The number of registered vessels, their location and length were used for modelling the forecast demand. A time series analysis of historical data dating back to 1990 was used to predict future patterns of ownership out to 2036. Population estimates for the study area is based on population figures derived from the WA Tomorrow Population Report series released by the Department of Planning, Lands and Heritage (DPLH) .

A linear trendline growth rate was applied to the vessel and population forecast. This methodology was suited to the available data on population and boat ownership for the regional area. The methodology is statistically sound and suitable for estimating growth in the number of recreational vessels and future needs.

The table below provides a 2036 forecast number of registered recreational vessels for each LGA and their corresponding forecast number of vessels per thousand head of population.

| Local Government Area | Recreational Boating Registrations (forecast) 2036 | | | | Vessels / 1,000 |
|---|---|---|---|---|---|
| | 0 – 7.5m | Growth | > 7.5m | Growth | |
| **Carnamah** | 54 | -2 | 2 | 1 | 242 |
| **Chapman Valley** | 389 | 84 | 22 | -1 | 233 |
| **Coorow** | 295 | 69 | 14 | 8 | 554 |
| **Greater Geraldton** | 3,497 | 1,114 | 251 | 83 | 86 |
| **Irwin** | 718 | 229 | 40 | 10 | 197 |
| **Northampton** | 720 | 239 | 16 | -1 | 241 |
| *** Inland LGA's** | 207 | 43 | 14 | 4 | 146 |
| **TOTAL** | **5,880** | **1,776** | **359** | **104** | **111** |

The number of registered recreational vessels in the Region is predicted to increase from 4,359 to 6,239 (5,880 + 359) by the end of 2036. This represents an increase of 43 per cent over the period 2020 to 2036.

**Forecast boating facilities requirements in 2036:**

<u>Boat Ramp</u>

- 4% of local boat registrations* ≤ 7.5 metres = 227
- Visitors = 122
- Total boat users = 349

<u>Mooring Installations</u>

- Local boat registrations > 7.5 metres = 359
- Transient visitors (5% of 359) = 18
- Total mooring installations required = 377

A comparison of the forecast demand for boating requirements against the current capacity of the existing facilities indicate there is a requirement for an additional 2 boat ramp lanes and 253 mooring installations to meet future demand.

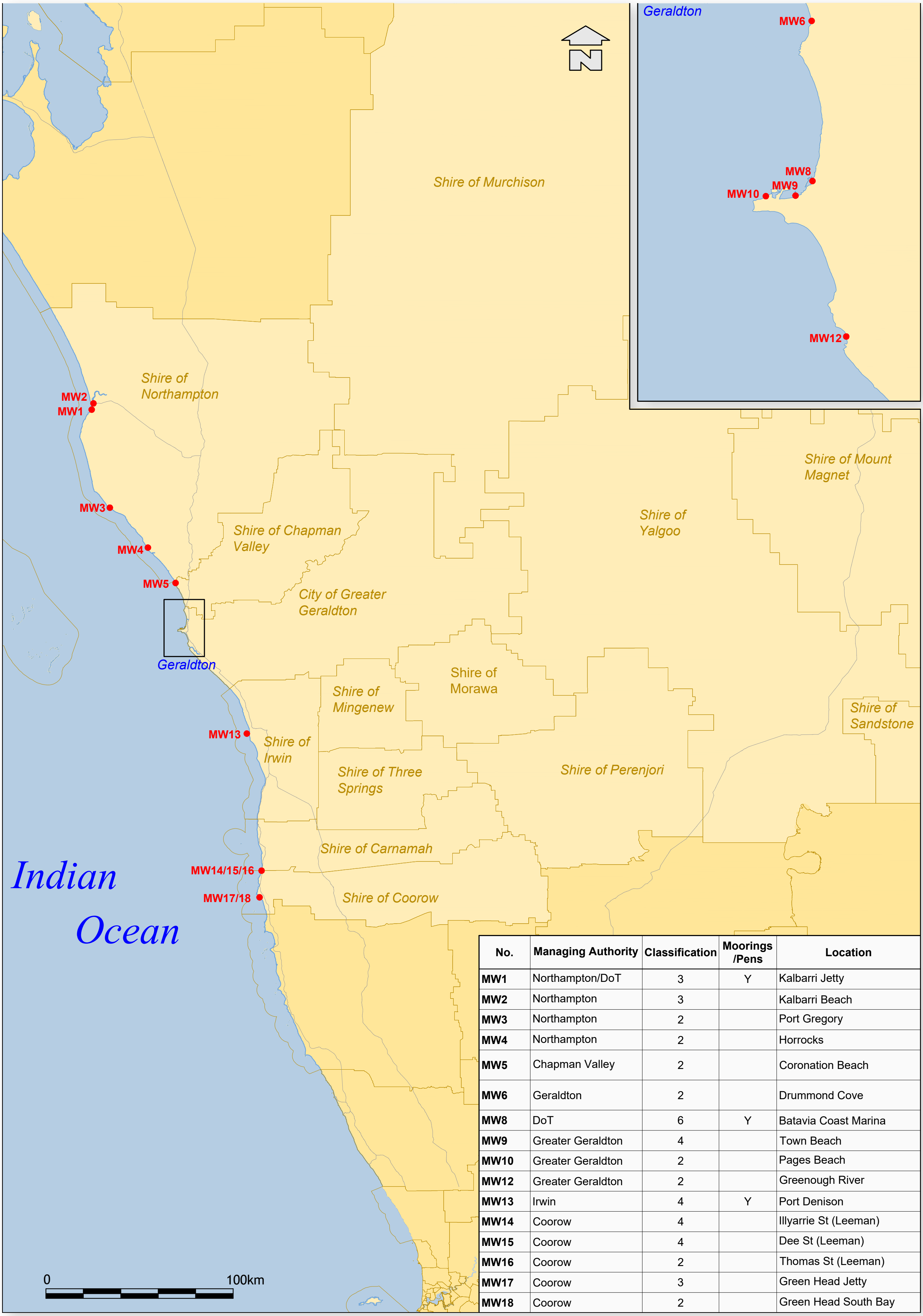
# Recommendations

This Study has predicted growth in the boating fleet and subsequent demand for recreational boating facilities across the Region. Where considered achievable, development/expansion options have been proposed at existing boating facilities to meet the demand. However, it is recognised that in some locations there is also a need to plan and provide for facilities at new sites.

The following table provides a list of development options for recreational boating facilities in the Region. *See map 2*

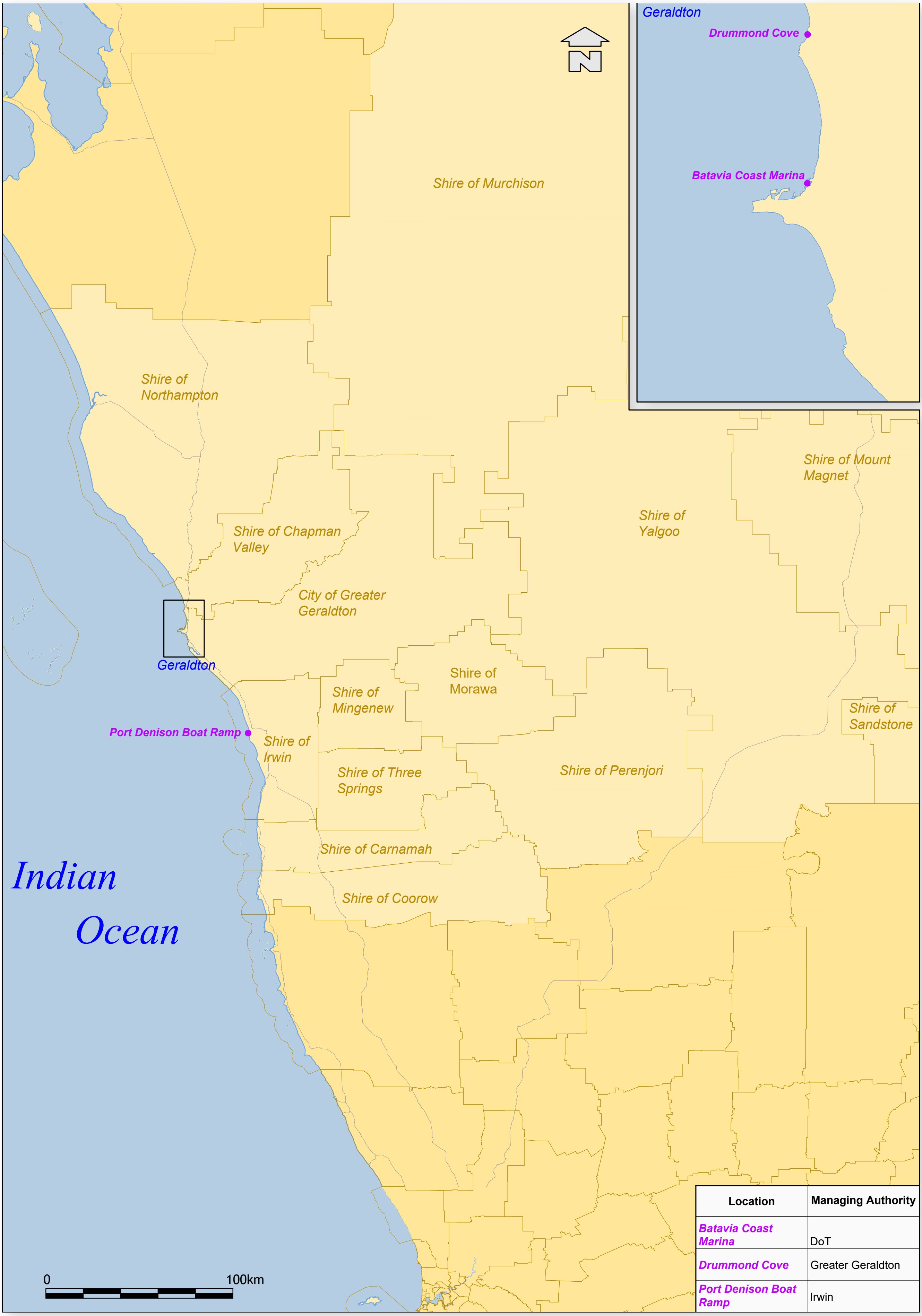
| Local Government Area | Facility | Recommendation |
|---|---|---|
| **DoT** | Batavia Coast Marina | • 60 Additional pens<br>• Investigate developing an outer harbour for future pen installations |
| **Greater Geraldton** | Drummond Cove | • 3 New lanes |
| **Irwin** | Port Denison Boating Facility | • 100 Additional pens |

# Map 1. Existing Facilities




| No. | Managing Authority | Classification | Moorings /Pens | Location |
|---|---|---|---|---|
| MW1 | Northampton/DoT | 3 | Y | Kalbarri Jetty |
| MW2 | Northampton | 3 | | Kalbarri Beach |
| MW3 | Northampton | 2 | | Port Gregory |
| MW4 | Northampton | 2 | | Horrocks |
| MW5 | Chapman Valley | 2 | | Coronation Beach |
| MW6 | Geraldton | 2 | | Drummond Cove |
| MW8 | DoT | 6 | Y | Batavia Coast Marina |
| MW9 | Greater Geraldton | 4 | | Town Beach |
| MW10 | Greater Geraldton | 2 | | Pages Beach |
| MW12 | Greater Geraldton | 2 | | Greenough River |
| MW13 | Irwin | 4 | Y | Port Denison |
| MW14 | Coorow | 4 | | Illyarrie St (Leeman) |
| MW15 | Coorow | 4 | | Dee St (Leeman) |
| MW16 | Coorow | 2 | | Thomas St (Leeman) |
| MW17 | Coorow | 3 | | Green Head Jetty |
| MW18 | Coorow | 2 | | Green Head South Bay |

# Map 2. Recommendations Map




| Location | Managing Authority |
|---|---|
| Batavia Coast Marina | DoT |
| Drummond Cove | Greater Geraldton |
| Port Denison Boat Ramp | Irwin |

## CONTACT

Email: maritime.planning@transport.wa.gov.au
Website: www.transport.wa.gov.au



DoT 148417070