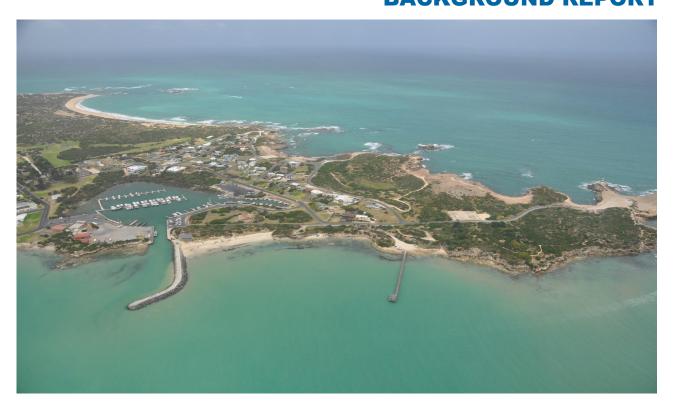
SOUTH AUSTRALIAN BOATING FACILITIES STRATEGIC PLAN BACKGROUND REPORT





Department of Planning, Transport and Infrastructure

June 2017

This background report forms the basis for the new South Australian Boating Strategic Plan.

It is the result of research and consultation undertaken from October 2016 through to mid 2017.

This version of the background report encompasses the feedback received from councils and other significant stakeholders after circulating the draft version comment.

In particular, feedback was sought on whether there were any gaps or errors in the information collected during the consultation, or any priority actions that should be included for consideration.

Following receipt of comments from this consultation, the strategic plan was finalised. Next steps will be for a framework to be produced to assist in using the strategic plan to assess and prioritise funding applications to the Marine Facilities Fund.

Executive Summary

Boating provides an important social and economic contribution to South Australia and in many ways defines the state's character. The boating sector plays a particularly important role in tourism and outdoor recreation, and South Australia's boating population is growing at a consistent rate of around 3% per annum.

The South Australian (SA) Government has been collecting a facilities levy from boaters for several decades and the money collected has been used, in partnership with councils, to build and improve marine infrastructure across South Australia's waterways. These upgrades help improve boating safety and access including at ramps and wharves; have provided additional navigation aids; and the upgrade of the marine radio network.

There are many boating facilities across the state, and the development of these sites has typically been based upon local community need rather than a broader assessment of state priorities. Marine infrastructure is costly to build and maintain, and it is important that available funding is best directed to those sites of highest need.

Need will vary but it is important that there is still equity of access for boaters. This may mean some locations will have minimal investment and may need to be phased out over time, whilst others are developed, expanded and improved. The plan will provide guidance on our strategic investment needs across South Australia. It is important to note that the plan relies upon collaboration with local councils, who often co-contribute to the capital cost of marine infrastructure and maintain the infrastructure on a daily basis.

As well as improving the recreational boating experience, infrastructure investment enables commercial activities that contribute to the state's economy. If marine infrastructure is well maintained, safe and easy to use it will help promote tourism. It opens up the waterways to the trailer boat, allows longer journeys with better connections and destinations, and enables events and festivals.

Marine related commercial activities and tourism are the economic lifeblood of many South Australian towns.

The development of the *South Australian Boating Facilities Strategic Plan* (plan) represents a new approach to the identification and delivery of boating infrastructure. The plan will identify a framework for investment in infrastructure which will increase boating participation by:

- · activating key boating hubs,
- · connecting key boating routes, and
- · improving safety outcomes.

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1. Introduction

1.1 General

This initiative to develop a strategic plan for boating facilities follows a series of other Department of Planning, Transport and Infrastructure (DPTI) reforms. These reforms include the Integrated Transport and Land Use Plan, update to the 30 Year Plan for Greater Adelaide, Operation Moving Traffic, heavy vehicle access reform, road pricing reform, new transport and planning legislation and level crossing, public transport, ports and cycling strategies.

Currently, councils and other organisations can apply for funding for eligible projects from the monies collected through contributions to the marine facilities levy as described in 1.3 below. The plan will represent a new approach to the identification and delivery of significant boating infrastructure and will allow Councils and other new project partners to work collaboratively to improve South Australia's boating future.

The aims of the plan are to improve the boating experience across the State, increase boating participation and to guide strategic investment in recreational boating infrastructure, in support of the following *South Australia's Strategic Plan* visions:

- Our communities are vibrant places to live, work, play and visit;
- We value and protect our water resources;
- A strong, sustainable economy that builds on our strengths;
- · We have a skilled and sustainable workforce;
- South Australia plans and delivers the right Infrastructure; and
- We are active in looking after our health.

1.2 Developing the Plan

The plan is being developed in two phases, and this document is the background report that captures the information and feedback gathered during the consultation and investigation. The final version will be produced following consultation on this draft. The key focus during this phase is establish stakeholder priorities and ideas to:

- Improve access to the waterways: factors include capacity, facilities and location,
- Improve destinations: factors include capacity and facilities at destinations and creating new destinations (place making), and
- Improve connectivity: factors include identifying current and new routes and identifying gaps in capacity and facilities.

Registration data shows that there are approximately 60,000 registered vessels in South Australia, with close to 3,000 new vessels being registered in 2014-15. As boat ownership and participation in boating in South Australia continues to grow, the plan will ensure DPTI delivers on its commitment to ensure that boating infrastructure and facilities meet the needs of the boating community. The plan will establish a strategic approach to funding so that boating participation and related tourism can grow to support a vibrant state economy whilst responding to boaters' and the wider community's expressed needs.

An extensive consultation process was undertaken with stakeholders including councils, other state agencies, boating businesses, boaters and the community.

Note: The term boat is used in this report as the more commonly recognised form of vessel

1.3 The current levy

Under section 90 of the *Harbors and Navigation Act* 1993, the South Australian Government collects a facilities levy from almost 60,000 boat registrations paid by recreational and specified commercial boaters. The funds are used for improvements to boating infrastructure that improve safety and access including at ramps and wharves, and for navigation aids and dredging. Public boating facilities are generally owned and maintained by Councils, although DPTI does own some infrastructure.

Funding for boating infrastructure is currently allocated through an application process. Councils, and community groups, can make applications for funding assistance that is usually provided at up to 50% of the total project costs. Applicants can apply for funding as required, with no specific dates or cycles for applications. More information about the current levy can be found at http://www.dit.sa.gov.au/recboatingfacilities.

1.4 Background information and context

1.4.1 About the key geographic regions in the draft strategic plan

Four key geographic regions in South Australia with the highest levels of boating activity were identified for analysis in this report. The four regional study areas are Central, Western, Murray and South Eastern. Priority projects and actions for South Australia and for each region have been identified through the engagement process described at 1.5.



Figure 1 - Map of the four key boating regions

1.4.2 Context

The plan will be developed in the context of the following plans and strategies.

DPTI Strategic Plan 2016-2020

The DPTI Strategic Plan 2016 - 2020 is focused on five core objectives:

- Growth and job creation;
- Enhanced liveability and connectivity between people and places, business and markets;
- Community focused and customer focused services;

- Maximised use and return on infrastructure; and
- Optimised, safe and effective operations and workforce.

The plan is consistent with the *DPTI Strategic Plan 2016-2020* and will help to achieve the objective of maximising the use and return on infrastructure. This will be achieved by undertaking targeted priority projects in growth areas, holiday hotspots and activity centres and complementing infrastructure delivery by establishing and promoting 'boating destinations'.

South Australian Port Strategy

The South Australian Port Strategy will ensure that planning and development is aligned with the national port strategy and provide a platform for innovation and economic growth in and around South Australian ports. The plan is being developed with stakeholder input and is expected to be released as a draft later this year.

Whilst the strategy is focused on shipping ports, there is potential for complementary infrastructure initiatives in waterways that are used for shipping as well as recreational and light commercial uses.

1.5 Stakeholder engagement and plan development

1.5.1 Development of the strategic plan

This report has been developed using feedback received through an initial engagement program with councils, boating industry stakeholders, boaters and the broader community. Several different engagement practices were used to gather comprehensive information and feedback from this diverse range of stakeholders and community members.

Ongoing direct communication continues with the coastal and riverine councils on boating infrastructure and assets. During pre-draft engagement, councils were contacted to confirm whether they have identified any projects that may meet the strategic requirements for funding. All coastal and riverine councils were invited to workshops, generally with senior representation, and with very few unable to attend. The information collected through the workshops and meetings was supplemented through submissions lodged to provide more in-depth details, highlighting projects and actions to meet strategic planning goals.

An extensive community survey was open from mid-October to 16 December 2016. Over 650 boaters, boating industry business, councils and community members were engaged through the survey. The survey was widely distributed through diverse channels to ensure that all interested stakeholders had the ability to leave feedback. This included the DPTI and Boating Industry Association websites, with a dedicated phone and email address, council websites and boating stakeholder websites, including recreational fishing groups, who are by far the single largest group of boaters.

The feedback received during the initial consultation phase significantly assisted the analysis and development of the draft plan. With this input the team has concluded that there is no need for a further round of public consultation, however consultation seeking confirmation that all feedback has been correctly interpreted is being undertaken through circulation of this draft. Comments received on the draft plan will be considered and will assist in the development of the final plan.

1.5.2 What we heard - overview

Feedback about the funding to date for marine infrastructure was generally positive, particularly noting the extent of available infrastructure across South Australia. Councils were appreciative

of the funding support, particularly in regional areas where boating is a key economic contributor to their community.

One of the key comments from councils and supported by feedback from other stakeholders, was that given the requirements for all levels of government to identify spending on a strategic basis, the development of the plan will greatly assist project partners in identifying and demonstrating the strategic nature of future projects at all levels of government. They saw that any changes are a natural evolution that will also allow better alignment with other funding programs at the State and Federal level. Additionally, it was commented that strategic planning also provides clarity and transparency for tax and ratepayers.

In the survey, most respondents rated their satisfaction with infrastructure as acceptable to very satisfied overall indicating a general level of satisfaction, with some scope for improving the boating experience.

Respondents were also asked if they had any issues with infrastructure they used and were asked to identify whether the issue related to:

- · Condition quality of the facility,
- Capacity whether the facility met the level of demand, and
- Accessibility was it difficult to access the facility.

In subsequent questions, respondents were asked to identify individual infrastructure and the particular issues.

Q22 Do you have any suggestions for improvement?

Maintaining Government Toilets Lock Parking Launching Gulf access House Boats Marion Bay Fish Cleaning Locations & destinations Channel Markers Dredging Murray Need extra lanes

Figure 2 – Key words highlighted from comments to question 22.

Some respondents said there was scope for improvement with the level of public moorings, temporary berths and access to favourite places. This feedback supports the observations during site visits, information from workshops with councils, meetings with industry groups and study of the available infrastructure for destinations and for connecting boaters to their favoured activities. This, together with all the information including the suggestions from stakeholders highlighted below, is further discussed in relevant chapters for each region and in Chapter 7.

Suggestions for boating activities included: more events, including sailing regattas, festivals, making sure that there was good infrastructure to support the growth of events, have "try-boating" days and boating tours, cruising rallies, especially for smaller boats, other community (boating and non-boating) events. Additional suggestions included the ability to pull up for lunch and dinner, opening up Port Adelaide and making access to St Vincent Gulf easier, fuelling in strategic locations such as Kangaroo Island, information about where to go when cruising.

Other feedback included the need to recognise the relationship between boating and fishing and how it supports the economy, better education for boaters about on-water protocols and behaviours, the lack of navigation maps, both electronic and hard copy. Feedback also included the need for more toilets at access points and favourite destinations, lighting to make boating safer, better and more navigation aids, the need to listen to boaters more directly, suggestions that agencies visit boating sites to better understand boating use, and regional councils to commission reports that illustrate the economic value of boating for their region.

1.5.3 How this report is structured

Chapters 2 to 7 of the report are structured as follows:

- Chapter 2 provides information and a high-level examination regarding population, boating licence and registration numbers, boating safety, boating and the environment and boat storage.
- Chapters 3 to 6 provide detailed information about the Central, Western, Murray and South Eastern regions respectively. This include 17C277 s characteristics of the region, overviews of activities, boating numbers and current infrastructure in each region. Each chapter also contains high-level overview of feedback from the engagement to date, analysis of the information and projects and actions for consideration for the region.
- Chapter 7 identifies strategic goals for improving the boating experience and growing and sustaining boating participation across South Australia.

2. Boating in South Australia

South Australia provides a wealth of opportunities for boating enthusiasts. With more than 5000 km of coastline, vast gulfs, shallow inlets and inland rivers; the waterways of South Australia support a diverse range of recreational and commercial pursuits including fishing, blue water cruising, inshore water sports and big river tourism.

Boating provides an important contribution to the social and economic fabric of South Australia. The industry encompasses a broad range of activities that span the primary, secondary and service sectors of the economy. The recreational marine industry plays a particularly important role in Australia's tourism and recreation, with boaters accounting for over 10% of Australia's overnight stays. Significantly, approximately 50% of the tourism and leisure benefit is delivered to communities along inland waterways, providing much needed accessibility and economic support to regional towns. Commercial marine vessels also play a significant role in the state's economy and the relationships and synergies between recreational and commercial facilities should be exploited.

Improving the quality and availability of infrastructure is the single biggest driver for increased boating participation. South Australia's boating population is growing and with it comes increased demand for modern and accessible boating facilities.

2.1 Population, boating ownership and licences

According to the Australian Bureau of Statistics, the estimated resident population (ERP) of South Australia at 30 September 2015 was 1,701,100 people. This is an increase of 12,400 people since 30 September 2014 and an annual growth rate of 0.7%.

Looking at the period form 1991 when the population was 1,446,299 the population has grown by more than 252,000, an increase of over 17% over that period. The average over the period was just short of 0.6%.

The number of people with boat licences has grown at a consistently higher rate for the same period averaging just over 3.1% per annum with a total increase of over 105% over the same period.

Boat registration statistics available for the report do not correspond with the same periods as population and boating licences, and are discussed below at 2.2 and 2.8.1

Of interest from the over 650 surveys received were the following:

- 484 respondents identified that they owned a boat. Of these, 159 owned a second boat
- Most respondents said they stored their boat on land. This supports the registration figures relating to trailerable boats
- Most respondents store their boats in the Central region

Table 1 - Registered boats and licence numbers in each region as of 2016

Region	Number of registered boats	% of total	Number of Licences	% of total
Central	36411	70%	218463	76%
Western	5643	10%	20661	8%
South Eastern	3199	6%	13801	5%
Murray	7419	14%	32385	11%
Total	52281	100%	285310	100%

Table 2 - Population from ABS 3218.0 Regional Population Growth 2014-2015

Region	2015	% of population who hold boating licences
Central	1,410,735	15%
Western	72459	27%
Murray	94420	34%
South Eastern	38507	36%
Total	833758	32%

2.2 Registration numbers and information

2.2.1 Recreational boat numbers

Registration data shows approximately 60,000 total registered boats with information provided that close to 3000 new boats were registered in 2014 -15. Open boats including runabouts and half-cabins comprise over half of the total. The data does not show boats that do not need to be registered.

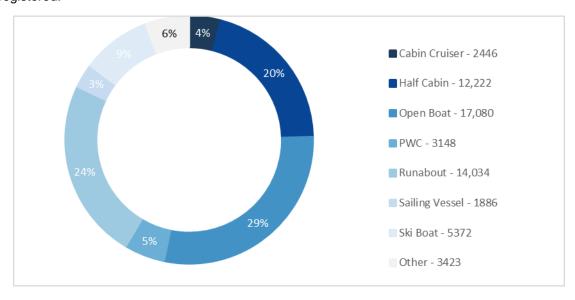


Figure 3 – Analysis of Boat use by Hull Type (12/12/2016)

From 2007 to 2014, the registration numbers for boats were as shown in Table 3. As can be seen, apart from a drop in registrations in 2008, there has been a small but consistent growth. The growth for the period 2007 to 2014 was just over 8% at an average of 1.075%.

Table 3 - Boating Registration Numbers 2007 - 2014

Year	Boat registrations
2007	55495
2008	55034
2009	55767
2010	57211
2011	58611
2012	59292
2013	59656
2014	60272

DPTI collects data from applicants when they are registering new or used boats for the first time or changing ownership. The information collected includes:

- Hull type
- · Length and breadth of the boat
- Construction material
- What the boat is mainly used for, e.g., fishing, cruising, towing activities
- Where the boat is normally used, restricted to only identifying the Murray River and Lakes, harbour / sea, other inland waters, and other

Apart from informing fees and other requirements, collecting this information can be useful to industry and boaters as well as government, for example, when identifying servicing / maintenance needs, the type of infrastructure required to access boating and assist in determining destination requirements. The limitation of the data is that questions about boat use and where it is normally used are limited to the first registration.

Boats less than 7 m in length can now choose whether they want six or twelve-month registration. Given there are 49658 registered boats that are less than 7 m, which is approximately 93% of all boats, registered in South Australia, it is important to consider this in terms of funding for boating facilities.

Growth rates for boats > 6 m have consistently been twice that of growth rates for 0-6m boats from 2010-2014, reflecting an increasing demand for boating facilities that cater for larger boats.

These points are further discussed in Chapter 7.

2.2.2 Commercial boats

Commercial boats are also an important category as they provide boating opportunities for an ever-increasing numbers of boaters who do not own their own boats. The types of boats that are relevant to discussion in this plan as they require access to boating infrastructure and destinations include:

- Houseboats (Hire and Drive),
- Other Hire and Drive boats such as ski, fishing and smaller boats (BBQ boats),
- Larger commercial vessels such as paddle steamers, and
- · Commercial fishing vessels.

2.3 Licence numbers and information

2.3.1 Boating and other licences

Anyone who operates a recreational boat with an engine in South Australia, including a personal watercraft (PWC), is required to have a boat operator's licence, even if the engine is not in use at the time. Children between 12 and 15 years of age can apply for a special permit to operate a recreational boat with some operating restrictions, but require parental/guardian permission. A licence is not required if a person is at least 12 years of age, and under the direct supervision of a person with a boat operator's licence and does not exceed 10 knots.

There are exemptions available for operators of kayaks or canoes fitted with smaller electric motors who apply for the exemption.

PWCs operate under the same general rules as other power-driven boats. The driver must have a boat operator's licence and it is illegal to let an unlicensed person drive a PWC. There are some exemptions, for example, where an area is covered by an approved commercial hire and drive business operation.

Boaters only need to apply for an initial boat licence and renewals and any associated fees are not a requirement in South Australia. This is discussed further in the next point.

Comprehensive information about SA boating licences can be found at http://www.sa.gov.au/topics/boating-and-marine/

2.3.2 Licence numbers

There are over 305,000 South Australian boat licence holders. From available data, approximately 87% show South Australia as their main residence, 3% Victoria, 2.2% Queensland and just over 1% New South Wales. The remainder are from others states, overseas or not specified; this last category may include other South Australian residents.

Given the proximity of Victoria and Southern New South Wales, this group of licence holders are likely to select South Australia as a regular boating location.

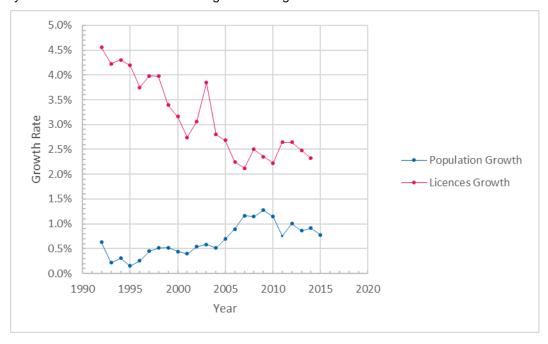


Figure 4 - Growth Rates of Boat Registration

Of the total licences, over 55,000 or 18% are held by females and almost 251,000 by males.

Over 6000 Licences

4500 – 5999 Licences

2500 – 3499 Licences

2000 – 2499 Licences

The top 32 postcodes with over 2000 total licences in each postcode are shown in Figure 5 below.

Figure 5 - Postcodes with over 2000 licences

The City of Onkaparinga has over 28,000 licence holders within its council area, followed by the City of Salisbury with over 17,000 licence holders. The total boating licence numbers are also discussed further in this chapter at 2.8.

One of the limitations of not having to renew licences is that it is unclear exactly how many licence holders still go boating. As with registrations, this is further discussed in Chapter 7.

2.4 Recreational boats and boating in South Australia

As noted at 2.2.1, data from DPTI records boat use by activity and location, differentiating between harbour/sea, inland lakes, the Murray River and other. By far the largest use is fishing at 56% of the total.

Table 4 – Analysis of boat use by location used for current boats. Publish date: 12/12/2016

Location Used	Cruising	Fishing	General	Hire	Other	Skiing	Unknown	Total
Harbour/Sea	1,887	26,312	2,177	33	697	520	8	31,634
Inland Lake	40	283	79	1	36	66	1	506
Other	115	1,666	356	9	9,887	152	2	12,187
Murray River	1,966	5,180	2,889	74	492	4,617	7	15,225
Unknown	1	33	7	0	1	6	11	59
TOTAL:	4,009	33,474	5,508	117	11,113	5,361	29	59,611
Percentage	6.73%	56.15%	9.24%	0.20%	18.64%	8.99%	0.05%	100.0%

Half cabin, open boats and runabouts together comprise over 43,000 or almost 73% of the total number of registered boats in South Australia. When the type of activity is added for these three groups of boats, fishing is identified as the primary activity for almost 31,000 of the 43,000 boats in these three groups alone, that is, almost 71% of half cabin, open boats and runabouts use their boats for fishing. Additionally, these three groups of boats comprise almost 92% of all boats that identify fishing as their primary activity.

Of the other identifiable activities, cruising and skiing (towing activities) together are identified as the primary activity by almost 16% of total registered boats with towing activities comprising almost 9% of the total of identifiable activities.

Information collected in the survey in relation to boat types reflects the large numbers of smaller, trailerable boats, with almost 75% of respondents owning boats in this category and 16% of respondents owning canoes or kayaks.

The above information is discussed at 2.8 and the relevant chapters for each region and in Chapter 7.

2.5 Boating Safety

DPTI has responsibility for boating safety in South Australia; safety is also one of the key outcomes of the plan in relation to boating infrastructure, noting, "marine infrastructure shall be managed to achieve the vision for marine safety".

The inclusion of the following information is to help inform the reader of the context of safety and its relationship to boating infrastructure, improving the boating experience and funding for safety related infrastructure projects.

The main governing legislation for safety includes:

- · Harbors and Navigation Act 1993, and
- Harbors and Navigation Regulations 2009 (including amendments).

Safe boating practices are encouraged through a variety of media, including the DPTI website; DPTI also publishes the *South Australian Recreational Boating Safety Handbook* at https://marinesafety.sa.gov.au/__data/assets/pdf_file/0006/1106376/SA-Recreational-Boating-Safety-Handbook-August-2022.pdf

An overview of safe boating messages includes:

- Reminding boaters that safety starts before they go out on the water by making sure boats and conditions are suitable for the trip,
- Asking boaters to ensure boats carry necessary safety equipment,
- Advising boaters that their safety responsibility does not end until all passengers are safely back on shore,
- Log-on and log off practices advising boaters to log their journey with marine rescue groups,
- Having a plan and telling people where they are going and when they expect to be back, and
- Encouraging life jacket wear and highlighting the need for children and others to always
 wear a life jacket and to wear life jackets in hazardous conditions, that is, conditions of
 heightened risk.

DPTI highlights the need for boaters to be aware of any restrictions; speed limits are specified in the *Harbors and Navigation Regulations* 2009. Boaters also need to be aware of any restrictions imposed by councils.

Limiting speed in certain conditions such as at night, in poor visibility or during certain weather conditions is highlighted and boaters are advised to be aware of any general and specific speed limits. These may include:

- 4 knot limits for all boats within 50 m of:
 - a person in the water;
 - a boat or buoy displaying a blue and white flag;
 - international flag A (indicating that there is a diver below); and
 - a person in or on a kayak, surfboard, sailboard or similar small unpowered recreational boat.

These 4-knot limits are also relevant to boats within certain marinas and other restricted areas including within:

- 30 m of any other boat (whether stationary or underway) that may be adversely affected by your wake or wash;
- 100 m of a ferry crossing;
- or passing through a mooring area or boat haven; and
- 30 m of a jetty, wharf or other place at which a boat is being launched or retrieved.

The 4-knot limit also applies to all PWCs operating within 200 m of the metropolitan shoreline (edge of water) between the Outer Harbor southern breakwater and the southern end of Sellicks Beach unless zoned otherwise; and the backwaters of the Murray River (excluding Lake Bonney at Barmera).

There is a 7-knot speed limit applied to specified areas, such as in sections of the Port River.

There are some restrictions in aquatic reserves ranging from totally closed areas to areas allowing some recreational fishing. Marine Parks are described below.

2.5.1 Boating restrictions

In addition to limits and requirements outlined above, the *Harbors and Navigation Regulations* 2009 (including subsequent amendments) specify boating restrictions in Schedule 5 of the Regulations. Part 1 identifies restricted areas and includes maps of each area. Part 2 identifies controls, including the recent addition of sub-clause 18 and Part 3 outlines which controls apply to which areas listed under Part 1.

Feedback in relation to restrictions is discussed where relevant in the chapters for each region and in chapter 7.

2.5.2 Safety - signage and navigation aids

Signage and navigation aids are important contributors to safety and the boating experience. Signage can indicate restrictions including speed limits, location of services and amenity, information about tides and weather, fishing limits as some of the main examples.

Navigation aids, including buoys, beacons and markers can be hard infrastructure as well as maps and other information that assist boaters in identifying where they can navigate. They can include channel markers, safety markers in, danger marks, for example, where there is an obstruction to safe navigation.

The South Australian Recreational Boating Safety Handbook provides details about the different navigation aids.

Signage was raised as an issue during engagement with stakeholders who saw signage as important for safety but found it at times confusing and excessive. During site visits, signage was observed to be inconsistent, at times faded and excessive (multiple signs) and this supports the feedback received. This is further discussed in Chapters 3 to 7.

2.5.3 Safety and other waterway users

In addition to recreational boating, a wide variety of activities on or adjacent to South Australian waterways are popular. These include swimming, snorkelling, diving, walking, fitness activities and events such as triathlons. Additionally, on the water, newer types of smaller craft including stand-up paddleboards (SUP's) are becoming more popular along with long-standing activities such as kayaking, which is also growing, and rowing that continues in popularity.

During summer months in particular, access in the more urbanised areas and at popular boat ramps or favoured swimming locations can lead to conflicts. Improving on-water behaviour is one of the issues that is consistently raised; however, improving access and amenity can also make a difference to the boating experience.

This is further discussed at 2.8 and in relevant chapters for each region.

2.5.4 What we heard about safety

Some survey respondents highlighted several areas of concern relating to safety. These are outlined in the chapter for each region. Respondents were able to select more than one issue. On-water behaviour, which can include speed and wash received the largest number of detailed comments in subsequent survey questions. Navigation aids and maps were also highlighted as issues. Dissatisfaction with waiting times at boat ramps, lack of infrastructure in the metropolitan areas, boating restrictions and dredging were all raised as issues that also had an impact upon safety. These are further discussed in the relevant in the chapters for each region and in Chapter 7.

2.6 Boating and the Environment

2.6.1 General environmental information

Chapter 14 of the *South Australian Recreational Boating Safety Handbook* provides information to boaters on appropriate practices when boating. This includes information on pollution from boats (waste, fuel spills, and garbage), minimising erosion and boating near wildlife such as whales and dolphins. Whilst National Parks South Australia has responsibility for aquatic species including whales and dolphins, the safety handbook provides information for boating near wildlife including minimum allowable distances from whales and dolphins and appropriate speeds to protect boaters and the wildlife.

It also describes restrictions, including the 7-knot speed limit, which may apply within the Adelaide Dolphin Sanctuary, located mainly within the Port River. Feedback on the impact of this and other restrictions is discussed at 2.8 as well as Chapter 3.

2.6.2 Aquatic reserves and marine parks

The safety handbook also provides information about aquatic reserves and marine parks that safeguard important marine habitats, species of flora and fauna, significant natural features and cultural heritage. It also notes that restrictions in aquatic reserves range from totally closed areas to areas allowing some recreational fishing.

Marine park sanctuary zones prohibit all forms of extractive activities, including fishing, aquaculture and dredging. National Parks South Australia notes on its website that there are a number of resources to help boaters find where the marine parks are and to locate the zones in each park. All the maps and information can be found at http://www.environment.sa.gov.au/marineparks/maps-and-coordinates

2.6.3 What we heard about the environment

Although no specific question in the survey asked for feedback on the environment, respondents were able to provide general comment and a small number of respondents raised issues in relation to boating and the environment. Issues raised included; damage from informal access points, the need for "environmental" toilets in selected areas, providing fuelling facilities to reduce possible spills, the need for less high speed boating in elected areas to support the environment, and impacts from sports such as cage diving on shark numbers.

Other feedback highlighted the support for positive environmental outcomes, however that sometimes decisions are taken to restrict boating based on environmental outcomes without sufficient analysis. These restrictions include speed limits and prohibiting activities as examples. These are discussed in the relevant chapters for each region.

2.7 Boat storage

Storage for boats is generally provided on-land for smaller boats (< 6 m), and on-water for larger boats (> 6 m) and in particular from >9 m. Storage on land for some larger boats is provided on hardstands, such as at yacht and motor clubs and where available dry-stack facilities, for boats up to approximately 10 m.

Moorings in South Australia are identified as including buoys, pontoons, jetties, wharves, pylons or posts. Moorings, including on private land (water), generally require some form of permission; this may include from:

- State Government (DPTI / Planning agencies where relevant);
- Crown Lands (on the Murray River, Lake Albert, Lake Alexandrina, Currency Creek, Finniss River, Hindmarsh Island and Goolwa);
- Port Authorities
 National Parks (Marine Parks);
- · Councils.

In addition to the above, storage on-water in South Australia is also provided at commercial marinas, yacht / sailing / motor clubs, or boating facilities, and is provided through berths (floating or fixed), or moorings (swing, fore and aft or other. Berths can be leased short or long-term or purchased depending on any conditions / ownership of the marina. Marinas can also provide 'destination' berths where boaters can visit amenities and services such as cafes, restaurants, chandleries and other retail outlets, boat maintenance, fuelling, pump-outs, as well as access to nearby land-based services.

Marinas in South Australia can be commercially operated by private investors or clubs; owned and managed by councils, the State Government (DPTI, Crown Lands) and Port Authorities; or owned by these groups and leased to a managing agent/company. These categories do not include private / residential / strata marinas, which also operate on a commercial basis: for these types of marina there may be special requirements that boat owners/operators also hold ownership (or similar) of an associated property.

Marinas and other on-water storage facilities include:

•	Berri Marina	•	Mannum Slipway and Moorings
•	Cape Jaffa Anchorage	•	Mannum Waters Marina
•	Captain Sturt Marina.	•	Mannum Marine (Greenings Landing)
•	Christmas Cove Marina	•	Marina Adelaide
•	Copper Cove Marina	•	Marina St Vincent
•	Crown Marina	•	Morgan Waterfront Marina
•	Cruising Yacht Club of SA	•	Murray Bridge Resort Marina
•	Flinders Marina	•	North Arm Marina
•	Foxtail Marina	•	Port MacDonnell Boat Haven
•	Holdfast Quays Marina	•	Port Pirie Boat Harbour
•	Holdfast Shores Marina	•	Refuge Cove Marina
•	Garden Island Yacht Club	•	Riverglen Marina
•	Goolwa Regatta Yacht Club	•	Robe Lake Butler Marina
•	Griffens Marina	•	Royal Port Pirie Yacht Club
•	Jane Eliza Marina	•	Royal South Australian Yacht Squadron
•	Lincoln Cove Marina	•	The Marina Hindmarsh Island
•	Long Island Marina	•	Whyalla Marina

2.7.1 Long-term and permanent storage demand for boats larger (>) 9 m

While not part of the scope for the plan, comment on storage demand is nevertheless useful for informing strategic actions. Of the over 59,500 registered boats, almost 1700 are > 10 m in length, and an additional 430 > 9 m in length, that is just over 2100 (3.6%) in total; these are the sizes most likely to be stored on water. An examination of around five sites in the Adelaide metropolitan area found the following storage space (over 50) numbers:

metropolitan area found the following storage space (over 50) numbers:					
Marina Adelaide	- 175 berths				
 Cruising Yacht Club South Australia (East and West Marina 	as) - 313 berths				
	- 150 hard stand				
 Royal South Australian Yacht Squadron 	- over 190 berths				
Crown Marina	- 76 berths				
Outside the Adelaide area, marina storage numbers (over 50) inclu-	de:				
Captain Sturt Marina	- 60 berths				
Copper Cove Marina	- 120 berths				
Goolwa Regatta Yacht Club	- 106 berths				
Lincoln Cove Marina	- 110 berths				
The Marina Hindmarsh Island	- 300 berths				

- Marina St Vincent
- Port Vincent Marina
- Riverglen Houseboats Marina

- 210 berths
- 90 berths
- 80 berths

The above two lists are not an exhaustive record of on-water storage but provide a representative indication of storage numbers and total around 1800 storage spaces. During site visits, some sites were observed to have around 60% occupancy and feedback from stakeholders confirmed the general availability of on-water storage to meet current demand.

2.7.2 Long-term and permanent storage for boats < 9m

Unlike other more urbanised areas such as in Greater Sydney, Melbourne and Brisbane, availability for long-term or permanent trailerable boat storage was not seen as an issue at this stage. The majority of survey respondents store their boats on land and mainly in the Central Region.

2.7.3 What we heard about long-term boat storage

As noted above, there is a predominance of smaller vessels stored on land in South Australia. Feedback about storage related more to access and in particular, physical barriers for on-water storage such as siltation and water-depth for boats with keels. One particular barrier that is a determining factor for people buying and storing their boats in Adelaide is the amount of time it takes to navigate across sections of Port River and to access the St. Vincent Gulf or inner harbour areas such as Fisherman's Wharf.

2.8 Examination of the information in this chapter

2.8.1 Population and boating trends

Information from the Australian Bureau of Statistics (ABS) and DPTI described at 2.1 in relation to population and boat licences is shown in the graph below. As can be seen the rate of growth for licences continues to be higher than population growth, although following a peak from 2001 to 2003, it has slowed moderately since the 2007 Global Financial Crisis (GFC). During the period from 2007 to 2010, the population grew at a greater rate than the previous periods and has continued to sustain a higher rate of growth than the 1990s.

Based on current licence numbers and trends over the period shown in Figure 6 - Boat licence and population growth rates6, the rate of boat licence growth is projected to continue exceeding the growth rate of the population over the next five years.

With close to 3000 new boats registered in 2014 -15, there is no doubt that boating registrations at an average of 1.075% over the eight years from 2007, are continuing to grow in South Australia at a slightly higher rate than the population at 0.7% over the period from 1991 to 2015. Licences continue to grow at a higher rate than registrations as is the pattern in other states.

Overall, the sustained growth rates in boating licence and registration numbers over the past 25 years could be due to several reasons that are not specific to any local actions. They reflect similar patterns around Australia; looking at the early growth period in the 1990s, the ABS identified that by 1993, boating represented the tourism activity of choice for 25% domestic travellers when staying away from home for more than one night.

While some information is anecdotal, feedback provided during site visits, meetings and other forms of engagement all highlight several issues that have influenced the tapering of the growth rate over the last decade of boat registrations in particular. These include:

• The several stages of the GFC – cost of boating,

- · Duration and severity of the most recent drought,
- Introduction of fishing restrictions / bag limits,
- · Introduction of marine parks,
- Other boating restrictions such as speed limits and restricted access to favourite destinations, and
- Consumer preferences dictated by changing recreational choices including a greater focus on 'adrenalin' and active sports, and choosing other activities such as camping / caravanning ahead of boating.

While it is recognised that the cost of purchasing a boat and obtaining a boating licence cannot be compared, the key factor in considering the rate of increase of boating participation is the that obtaining a boat licence is an enabler for the population to participate in boating and participation is continuing to grow at a rate above population growth.

While it is not the purpose of this report to analyse or assess the above factors it is nevertheless relevant to consider the impact of a tapering in boating registrations and licences to inform strategic planning for recreational boating. With a strategic goal of increasing and sustaining boating participation, providing sufficient improvements, destinations and connectivity are key for boaters, while streamlining planning and delivery of projects are also seen as factors that contribute to the potential for growing boating in South

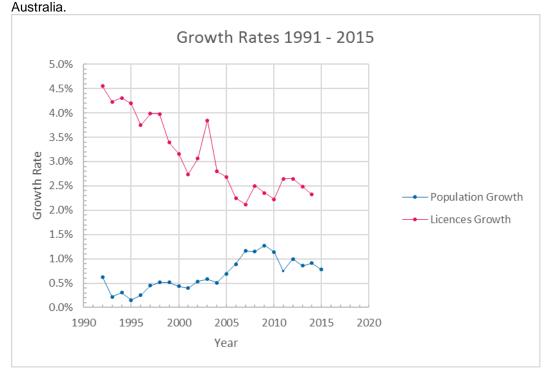


Figure 6 - Boat licence and population growth rates

2.8.2 Where / what / when boats are used

In terms of any comparative analysis of where boats are registered and where they are used, as is the case with all boating registrations in Australian states, not all boaters who register their boat at an address necessarily store or use their vessels in that area. Moreover, the more urbanised areas of South Australia offer ready access to large areas of boating such as on the Murray River or the Copper Coast, for example at Port Hughes or Wallaroo, within an acceptable travelling distance and time. This means it is likely that boaters go outside their residential region; this is not always the case in other more populous states and regions.

Information about boating activities also reflected the large numbers who choose fishing as their primary boating activity, followed by cruising. This was also evidenced in the number of survey respondents who identified fishing as their main activity.

Based on initial registration information, 56% of boating activity is identified as fishing and another 9% as towing activities, followed by cruising at around 7%, and the vast majority of these types of boats are trailerable. Fishing is by far the most popular activity for South Australian boaters.

In consideration of this activity, information about boating, access into the waterways, amenity at access points, such as toilets, parking and lighting, and facilities that support fishing, such as fish cleaning stations, are key factors for maintaining and improving the boating experience for this large group of boaters. Feedback from the survey is discussed in the chapters for each region as well as in Chapter 7.

Improving any or all of these factors in relation to fishing and other boating, will also meet DPTI's objective in relation to customer experience that ... marine infrastructure is maintained appropriately and marine infrastructure information is easily accessible.

Moreover, improvements to the boating experience for current boaters sustains participation and additionally as the community sees and hears about improvements, destinations, amenity and safety, new boaters will be attracted to recreational boating and this will support the goal of growing boating participation in South Australia.

The above is further discussed in the chapter for each region in consideration of the types of infrastructure available, favoured activity, and how addressing any divergence between quantity and quality of infrastructure will meet the goals of the plan.

2.8.3 Boating licences and practices in a different location from the primary place of residence / boat storage

As noted above, boating activities that occur in other regions from the residence of the registration and / or licence holder are very common. This is especially the case given the substantial numbers of trailerable boats and proximity to the preferred activities of fishing, towing activities and cruising (hire and drive houseboats and other) for the large numbers of boaters living in Adelaide and its outer suburbs. For example, feedback from houseboat hirers is that 80% of customers come from Adelaide suburbs, 16% from interstate and 4% from overseas.

Boat licences provide a clearer representation of where boaters are located. Of the licences holders identifying South Australia as their home state, almost 75% or around 190,000 live in the Central Region, over 11% in the Murray Region, almost 9% in the Western Region and under 6% in the South Eastern Region.

Several main considerations arise from the large numbers of boaters living in the Central Region and these are further discussed in Chapter 3. Feedback from the boating industry members as well as from commercial operators and the survey, all indicate that recognising the importance of the current number of recreational boaters and its associated activities who live in the wider Adelaide area is one of the key factors for informing how to sustain and boost boating participation in South Australia.

Some of the questions that will be considered in Chapters 3 to 6 for the regions and Chapter 7 include:

- Where are the preferred boating locations for Adelaide residents?
- How do boaters and boating numbers support regional and the state economies through tourism?

- Is there sufficient infrastructure locally in Adelaide to sustain and attract more people to boating?
- Are there good destinations within close proximity of Adelaide? For example, with the Murray River a key boating and tourism resource for the state, how can strategic funding in the Murray River and other regions of the state currently attracting Adelaide residents, become the nexus for increased participation?
- Are there opportunities for events, festivals and similar that can provide a focus for the large population of boaters?

2.8.4 Safety

This report considers specific locations where safety has been raised as an issue in the chapter for each geographic region. As noted above, on and off-water protocols and behaviour, and education were raised in the survey and during regional visits. Additionally, boaters having to travel longer distances or times to their favoured destinations, in particular where boating restrictions have been implemented, have raised the unintended consequence of restricting boating.

2.8.5 Storage

As noted above, storage on-water is relevant to larger boats (> 6 m) and in particular from >9 m or greater. An item that does need consideration in relation to on- water storage is the fact that boating registrations are still continuing to grow at a rate higher than the population, confirming the popularity of boating generally. Over the period from 2007 to 2014 the numbers of boats > 6 m also continued to grow at a rate more than double boats <6 m. While latent demand for storage can be difficult to quantify, factors that may be contributing to limiting growth in boating registrations and storage occupancy rates can include:

- Lack of destinations for larger boats;
- Boating restrictions, including speed limits; and
- · Lack of services.

These are discussed further in Chapters, 3 to 6.

Another factor for consideration as noted in Chapter 5 on the Murray Region and discussed in Chapter 7, is the number of predominantly private houseboats that are anchoring long-term on the Murray River.

Boat ownership growth rates for boats < 9 m have contracted since 2010. Nevertheless boat ownership overall continues to grow albeit at a lower rate of growth than in the period prior to the GFC. Given the substantial percentage of boat registrations and licence holders in the Adelaide metropolitan suburbs, storage for boats in particular in these areas, needs to be considered if boating participation is to be sustained and boosted.

Conflicting land uses due to population growth in eastern states resulting in lack of appropriate permanent storage, can be avoided in South Australia by careful planning. By working cooperatively with developers, councils and other planning and environment agencies, the availability of good boating and recreational storage infrastructure can be an attracting factor for bringing people to South Australia.

2.9 Commercial Fishing Industry

The commercial fishing and aquaculture industries have a positive impact to South Australia in terms of business activity, household income and contribution to the state's growth and

employment levels. Much of this impact occurs in regional South Australia and drives the economies of many coastal towns and cities.

The commercial fishing industry contributes over \$470 million (Gross State Product) in economic activity to the State and employes (direct and indirect) approximately 3,820 full time equivalent positions. The aquaculture industry contributes over \$280 million (Gross State Product) in economic activity to the State and employs (direct and indirect) approximately 1,900 full time equivalent positions (EconSearch 2016).

Commercial facilities encompass infrastructure that enables the commercial fishing and aquaculture industries to operate safely and efficiently. The infrastructure supports over 800 commercial fishing registrations which includes sectors such as Rock Lobster, Prawn, Blue Crab, Sardine, Pipi and Marine Scalefish as well as over 900 aquaculture registrations which includes sectors such as Southern Bluefin Tuna, Oysters, Mussels and Marine Finfish (PIRSA 2017).

The infrastructure also enables a range of other commercial activities that includes boat hire, commercial diving, yachting and cruising, and houseboating. These activities drive tourism in many of the state's regions, in particularthe Riverland, which relies heavily on the houseboat industry.

Appropriate infrastructure and facilities need to be provided to ensure safe access on South Australian waters and to encourage economic development, whether that be building on existing facilities or consolidating smaller facilities to a convenient central location or establishing new facilities.

3. Central Region

3.1 Region overview

The Central Region includes Adelaide and surrounding suburbs, and borders to the north-west with Port Augusta where the Western Region commences. On the eastern and southern side it goes to Cape Jervis and then around to Victor Harbor. Goolwa is included in the Murray Region. To the south, Kangaroo Island is included in the Central Region.

The main waterways in the region are described at 3.4.1 below.

3.2 Overview of engagement with Councils in region

During this engagement phase, councils were given the opportunity to provide input on future boating infrastructure projects in their LGAs, and to give feedback on the funding model and on broader boating infrastructure and planning issues. Future infrastructure projects and initiatives were explored using a "Blue Sky" methodology, encouraging participants to identify any projects or initiatives that would increase boating participation and enhance the boating experience in their region.

Each council was invited to workshops held in four locations in this region. Of the 18 invited councils, 12 attended the workshops. A small number of councils do not have boating infrastructure assets, but were invited to participate.

Details of the feedback received from councils is found below in 3.3.

Table 5 - Councils that attended in this region

Councils	Councils
Yorke Peninsula Council	City of Onkaparinga
District Council of Copper Coast	City of West Torrens
District Council of Barunga West	Kangaroo Island Council
City of Port Adelaide Enfield	City of Victor Harbor
City of Salisbury	District Council of Yankalilla
Port Pirie Regional Council	City of Charles Sturt

3.3 South Australian Marine Facilities Levy funded assets

A total of 18 projects have been funded in the Central Region at a cost of \$3,403,300 for total project value of over \$7,956,703 since 2012.

Table 6 - Projects funded in the Central Region

				,
Year	Project	Council / Other applicant	Total Project Cost	Amount of funding
2012	Port Victoria Boat Ramp	Yorke Peninsula	\$15,000	\$7,500
2013	Emu Bay Boat Ramp	Kangaroo Island	N/A	\$30,000
2013	American River Pontoon	Kangaroo Island	\$26,860	\$26,800
2013	Shoal Bay Boat Ramp	Kangaroo Island	\$110,000	\$55,000
2013	Penneshaw (Christmas Cove) Boat Ramp	Kangaroo Island	\$404,000	\$200,000
2013	St Kilda boat ramp	Salisbury	\$62,200	\$31,100
2013	Encounter Bay Boat Ramp	Victor Harbor	\$65,000	\$32,500
2013	O'Sullivan Beach lighting upgrade (Completed)	Onkaparinga	\$195,000	\$97,750
2013	Solomontown (Port Pirie) boat ramp (Completed)	Port Pirie	\$356,300	\$178,000
2014	Black Point boat ramp (Completed)	Yorke Peninsula	\$774,000	\$424,000
2016	Layby Berth at Encounter Bay Boat Ramp (Completed)	Victor Harbor	\$101,300	\$50,650
2016	Encounter Bay Boat Ramp car park extension	Victor Harbor	\$447,000	\$224,000
2016	Marion Bay Safe Haven (consultancy)	Yorke Peninsula	\$100,000	\$50,000
2016	Solomontown Boat Ramp	Port Pirie	\$1,498,786	\$571,000
2016	Port Hughes Boat Ramp	Copper Coast	\$2,085,551	\$1,040,000
2016	Baudin Beach Boat Ramp Breakwater	Kangaroo Island	\$55,000	\$30,000
2016	Weeroona Island Boat Ramp	Mount Remarkable	\$710,706	\$355,000

3.4 Boating in the Central Region

3.4.1 Physical characteristics of the waterways

Yorke Peninsula separates Spencer Gulf on its west from the Gulf of St Vincent to its east. Immediately south of Yorke Peninsula and bounded by the north of Kangaroo Island is Investigator Strait. This waterway can be traversed to travel between the Gulfs.

The upper Spencer Gulf is considered the region north of Whyalla (to the west) and Port Germain (to the east). Port Augusta is located on the northern extent of the Spencer Gulf and is accessed via the Flinders Channel. This inland sea is a popular boating area for cruising yachts, sailing and fishing. The shorelines are characterised by sandy beaches against a backdrop of mountain ranges. For the purpose of this study, Port Augusta forms the western limit of the Central region, and includes the whole Yorke Peninsula.

The Yorke Peninsula is a popular boating destination; however, remains largely undeveloped at the southern end due to the Southern Spencer Gulf Marine Park that extends from Hardwicke Bay around to Marion Bay. Access to Spencer Gulf is still provided through various boat ramps

and beach launches along the western coast, with Point Turton and Point Victoria offering multilaned ramps.

The eastern side of Yorke Peninsula offers more developed boat ramps and access to the Gulf of St Vincent. At the northern extent is Port Arthur and Port Wakefield, with Port Wakefield being a common stop for anyone making the road journey from Adelaide to Yorkes.

Port Adelaide, located on Gulf St Vincent, northwest of Adelaide CBD, is the main port for the city.

The entrance to Port Adelaide from Gulf of St Vincent is through a dredged channel entrance to the Port River, which runs around Outer Harbor and Pelican Point through to the Inner Harbor of Port Adelaide, and eventually joins the manufactured West Lakes. The shoreline is mostly industrialised with port facilities, power stations and ship building docks at ASC (formerly Australian Submarine Corp). The river is mainly used for shipping, rowing and has a recreational boating storage. Dolphins on the Port River provide a tourist attraction on the waterway.

St Kilda is the location of the northern-most boat ramp in metropolitan Adelaide and the southern node of the Adelaide International Bird Sanctuary. South of St Kilda, the Dry Creek runs to Port Gawler alongside the Barker Inlet. Barker Inlet, with its mangroves and wildlife can also be accessed from the Garden Island boat ramp. The waterway is shared by powered and unpowered vessels such as kayaks and canoes. As it is located near the mangroves, it is a popular spot to launch in order to explore them as well as fish via a kayak.

The River Torrens is the main river through Adelaide and is approximately 85km long and runs west from Adelaide Hills to the Gulf St Vincent discharging at Henley Beach. It is predominantly used by rowers.

Just south of Adelaide, the City of Marion's coastal area is unique with rocky reef systems and sensitive sand dunes; location of boating infrastructure such as boat launching facilities is therefore not possible in this council area, with the closest beach launch facility being at Seacliff (in the City of Holdfast Bay council area) providing access to Gulf St Vincent.

3.4.2 Boating activities and destinations

Waterways in this region are popular with boaters in particular during the warmer months, from October to March. The summer school holiday period is most popular followed by Easter and late January.

Favourite facilities and activities in the Central Region

- Metro area:(St Kilda, Largs North, North Haven (busiest ramp in the state), Holdfast Shores, O'Sullivan Beach) for boat launching;
- Central area: Victor Harbor, Kangaroo Island, Ardrossan, Black Point, Port Vincent, Stansbury, Edithburgh, Marion Bay, Pondalowie Bay, Corny Point, Point Turton, Port Victoria, Balgowan, Port Hughes, Moonta Bay, Wallaroo, Port Broughton, Port Pirie; and
- Launching to and from the shore at several of Adelaide's most popular swimming areas
 is prohibited either on a seasonal, time of day or permanent basis. This is discussed
 below and in Chapter 7.

Fishing is by the most popular past time for boaters in this region, followed by cruising, sailing and sightseeing. Some of the most popular fishing destinations for boaters include:

- Victor Harbor;
- Kangaroo Island (Eastern Cove, Emu Bay);

- Yorke Peninsula (Ardrossan, Black Point, Port Vincent, Stansbury, Edithburgh, Marion Bay, Pondalowie Bay, Corny Point, Point Turton, Port Victoria, Balgowan, Port Hughes, Moonta Bay, Wallaroo);
- · Port Broughton; and
- Port Pirie.

Favourite Cruising routes for motorised boats

For motorised cruising, the most popular routes in South Australia begin from Adelaide. Boats generally travel in both directions following the listed routes:

- Adelaide > Wirrina > Kangaroo Island (Christmas Cove, Eastern Cove, American River, Kingscote, Bay of Shoals, Boxing Bay, Emu Bay, Stokes Bay, Snelling Beach, Snug Cove) > Althorp Island > West Cape Bay > Wedge Island > Thistle Island > Sir Joseph Banks Group > Boston Island > Port Lincoln
- Port Lincoln > Reevesby Island > Tumby Bay > Franklin Harbour > Whyalla
- Adelaide > West Cape Bay > Pondalowie Bay > Wardang Island > Wallaroo > Port Augusta > Whyalla
- Adelaide > Port Vincent > Stansbury > Edithburgh > Black Point
- Adelaide > Wirrina > Robe > Port McDonnell

For sailing boats, the most popular cruising routes from Adelaide are:

- Adelaide > West Cape Bay > Pondalowie Bay > Wardang Island > Wallaroo > Port Augusta > Whyalla
- Adelaide > Port Vincent > Stansbury > Edithburgh > Black Point
- Adelaide > Wirrina > Robe > Port MacDonnell
- Adelaide > Wirrina > Kangaroo Island (Christmas Cove, Eastern Cove, American River, Kingscote, Bay of Shoals, Boxing Bay, Emu Bay, Stokes Bay, Snelling Beach, Snug Cove) > Havens and shelter (Althorpe Island > West Cape Bay > Wedge Island > Thistle Island > Sir Joseph Banks Group > Boston Island) > Port Lincoln

Boating events in the region include the Australian Dragon Boat Championships, 2016 Club Crew World Championships, the Wooden Boat Festival and the Yorke Peninsula's Saltwater Classic.

3.4.3 Boating licence numbers / overall population

The Central Region has the highest numbers of boating licences and registrations in the state. As noted in Chapter 2, licence holders identifying the Central Region of South Australia as their home state, account for approximately 75% or around 190,000 of the total licence numbers. The Murray Region, a popular destination for Adelaide boaters, is the next greatest with 11% of the total.

There are over 670,000 residents in the Central Region with a breakdown shown in Table 7. From available data, more than 190,000 licence holders are from the Central Region, accounting for nearly a third of the population and there are over 35,000 boat registrations in the region. As can be seen, population growth even in the Central region is below the rate of growth of boating licence holders as shown in the graph at Figure 4

Table 7 – Cross-section of Central Region Councils showing population growth. From ABS 3218.0 Regional population Growth 2014-2015

Councils	2005	2014	2015	Growth 14- 15
Yorke Peninsula Council	11530	11066	11018	-0.4%
District Council of Copper Coast	1140	13921	14114	1.4%
District Council of Barunga West	2590	2445	2434	-0.4%
City of Port Adelaide Enfield	104390	122301	123754	1.2%
City of Salisbury	119469	137308	138535	0.9%
Port Pirie Regional Council	17511	17645	17540	-0.6%
City of Onkaparinga	151906	167644	168798	0.7%
City of West Torrens	53069	58623	58964	0.6%
Kangaroo Island Council	4392	4582	4611	0.6%
City of Victor Harbor	12180	14937	15169	1.6%
District Council of Yankalilla	4151	4629	4700	1.5%
City of Charles Sturt	102797	112706	114209	1.3%

Table 8 – Councils in the Central Region with Licence Numbers > 7500 (as of July 2016)

Council (abbreviated)	Number of registered boats	% of central	Number of Licences	% of population in council who are licence holders
Charles Sturt	2599	7%	16895	15%
Adelaide Hills	1671	5%	9685	24%
Tea Tree Gully	2133	6%	14016	14%
Salisbury	2644	7%	17328	13%
Port Adelaide Enfield	2323	5%	8945	12%
Playford	1391	4%	9103	10%
Onkaparinga	4609	13%	28913	17%
Burnside	1378	4%	9854	22%
Mitcham	1641	5%	11336	17%
Holdfast Bay	1248	3%	7921	21%

3.4.4 Boating infrastructure assets

Assets in this region are predominantly boat ramps, with associated infrastructure such as pontoons, car parking and amenities such as fish cleaning and toilets. The predominance of boat ramps reflects the proportion of trailerable boats across South Australia.

The list of known infrastructure assets with available information for this region is shown in the following table:

Table 9 - Infrastructure assets in Central Region

LGA (Council area) *abbreviated	Asset	Formal lanes	Pontoon / Jetty	Groyne / Breakwater (x)
Adelaide Plains	Port Parham Boat Ramp	1		(*)
Adelaide Plains	Webb Beach Boat Ramp	1		
Adelaide Plains	Middle Beach Boat Ramp	2	Pontoon (1)	
Adelaide Plains	Port Gawler Boat Ramp	2		
Barunga West	Fisherman Bay Boat Ramp	2	Pontoon (1)	
Barunga West	Port Broughton Boat Ramp	3	Pontoon (2)	Х
Barunga West	Tickera Boat Ramp	1		
Charles Sturt	Henley Beach Boat Ramp		Jetty (1)	
Charles Sturt	West Beach Boat Ramp	4	Pontoon (2)	X
Copper Coast	Wallaroo Boat Ramp	4	Pontoon (2)	X
Copper Coast	Wallaroo (Bird Island Road) Boat Ramp			
Copper Coast	Port Hughes Boat Ramp	6	Pontoon (3)	X
Holdfast Bay	Seacliff Boat Ramp			
Kangaroo Island	Penneshaw (Christmas Cove) Boat Ramp	2	Pontoon (1) + Pontoon off ramp	
Kangaroo Island	Baudin Beach Boat Ramp	2		X
Kangaroo Island	American River Boat Ramp	2	Pontoon (2)	X
Kangaroo Island	Brownlow Ki Boat Ramp			
Kangaroo Island	Shoal Bay Boat Ramp	2	Pontoon (1)	X
Kangaroo Island	Emu Bay Boat Ramp	1	Jetty (1)	X
Kangaroo Island	Stokes Bay Boat Ramp	1		
Mount Remarkable	Port Flinders Boat Ramp	1		
Onkaparinga	O'Sullivan Beach Boat Ramp	4	Pontoon (2)	X
Onkaparinga	Port Noarlunga Boat Ramp	1		
Onkaparinga	Moana Beach Boat Ramp			
Onkaparinga	Aldinga Beach Boat Ramp			
Onkaparinga	Sellicks Beach Boat Ramp			
Onkaparinga	Christies Beach Sailing Club Boat Ramp		D ((0)	
Port Adelaide Enfield	Garden Island Boat Ramp	3	Pontoon (2)	
Port Adelaide Enfield	Outer Harbor Boat Ramp	2	Dontos (4)	V
Port Adelaide Enfield	Largs North Boat Ramp	2	Pontoon (1)	X
Port Adelaide Enfield Port Adelaide	North Haven Boat Ramp	5	Pontoon (3)	X
Enfield	Largs Bay Boat Ramp			

LGA (Council area) *abbreviated	Asset	Formal lanes	Pontoon / Jetty	Groyne / Breakwater (x)
Port Adelaide Enfield	Birkenhead Boat Ramp	1		
Port Adelaide Enfield	Semaphore Boat Ramp			
Port Adelaide Enfield	Snowdens Beach Boat Ramp			
Port Pirie	Port Pirie (Eastern Side) Boat Ramp	2		
Port Pirie	Port Pirie Boat Ramp	2	Pontoon (2)	
Port Pirie	Port Davis Boat Ramp	1		
Salisbury	St Kilda Boat Ramp	3	Pontoon (2)	
Victor Harbor	Victor Harbor (Encounter Bay) Boat Ramp	4	Pontoon (2)	X
Victor Harbor	Victor Harbor (Kent Reserve) Boat Ramp			
Victor Harbor	Victor Harbor (east of causeway) Boat Ramp	1		
Victor Harbor	Victor Harbor (Yacht Club) Boat Ramp			
Wakefield	Port Wakefield Boat Ramp	2	Pontoon (1)	
West Torrens	West Beach (Adelaide Shores) Boat Ramp	4	Pontoon (2)	X
Yankalilla	Normanville Boat Ramp			
Yankalilla	Wirrina Cove Boat Ramp	2	Pontoon (1)	X
Yankalilla	Cape Jervis Boat Ramp	2		X
Yankalilla	Myponga Beach – beach launch			
Yankalilla	Lady Bay – beach launch			
Yankalilla	Rapid Bay – beach launch			
Yorke Peninsula	Balgowan Boat Ramp	1		
Yorke Peninsula	Port Victoria Boat Ramp	3	Pontoon (2)	X
Yorke Peninsula	Port Rickaby Boat Ramp	1		
Yorke Peninsula	Bluff Beach Boat Ramp			
Yorke Peninsula	Parsons Beach Boat Ramp			
Yorke Peninsula	Port Minlacowie Boat Ramp			
Yorke Peninsula	Point Turton Boat Ramp	3	Pontoon (1)	X
Yorke Peninsula	Burners Beach Boat Ramp			
Yorke Peninsula	The Pines Boat Ramp	1		
Yorke Peninsula	Corny Point Boat Ramp			
Yorke Peninsula	Dunn Point Boat Ramp			
Yorke Peninsula	Pondalowie Bay Boat Ramp			
Yorke Peninsula	Marion Bay Boat Ramp			
Yorke Peninsula	Foul Bay Boat Ramp	1		
Yorke Peninsula	Port Moorowie Boat Ramp	1		

LGA (Council area) *abbreviated	Asset	Formal lanes	Pontoon / Jetty	Groyne / Breakwater (x)
Yorke Peninsula	Edithburgh Boat Ramp	4	Pontoon (2)	X
Yorke Peninsula	Wool Bay Boat Ramp	1		
Yorke Peninsula	Stansbury Boat Ramp	3	Pontoon (2)	X
Yorke Peninsula	Port Vincent (Town Foreshore) Boat Ramp	1		
Yorke Peninsula	Port Vincent Boat Ramp	2	Pontoon (1)	X
Yorke Peninsula	Port Julia Boat Ramp	1		
Yorke Peninsula	Black Point Boat Ramp	1		
Yorke Peninsula	Pine Point Boat Ramp	1		
Yorke Peninsula	Rogues Point Boat Ramp	1		
Yorke Peninsula	Ardrossan Boat Ramp	2	Pontoon (1)	X
Yorke Peninsula	Tiddy Widdy Beach Boat Ramp			
Yorke Peninsula	Price Boat Ramp	1		
Yorke Peninsula	Clinton Boat Ramp	1		

3.5 Feedback from engagement

3.5.1 Councils

Feedback received during workshops with councils and meetings with other stakeholders, as well as from submissions highlighted the conditions of the physical boating assets, safety, boating participation and the overall experience for boaters. Other items such as the need for new boating ramps and pontoons, or upgrades to existing ones, increased amenities such as toilets and fish cleaning facilities, courtesy moorings, educational campaigns and better signage, enhancing destinations and events. Details of this feedback can be found below.

Councils that attended workshops took the opportunity to provide feedback on the funding process and broader boating issues, which included streamlining the approvals process and providing greater transparency on how funds are allocated. It was also suggested to consider other funding models, for example contributions in excess of 50% or dividing the funds between councils to ensure an even distribution of moneys. Councils were not aware of the financial expenditure authority constraints imposed upon DPTI and were not aware that the approval of existing projects by SABFAC exceeded the availability of funds, resulting in the oversubscription of projects and a waitlist.

Councils in the Central Region outside of metropolitan Adelaide expressed the need for funding allocation to consider councils with greater numbers of boating facilities with fewer ratepayers to fund maintenance. Additionally, councils highlighted the need to identify current facilities as strategic to the state due to the patronage by large numbers of boaters from outside the LGA. Ongoing costs to maintain infrastructure and facilities were highlighted as a burden for these councils. Suggested improvements included broadening funding contributions to include site maintenance.

Generalised feedback included:

- The need for more destinations and connecting boating routes;
- Accessibility (disabled) more inclusion;

- Education regarding safety, boating behaviour and boating destinations in the region;
- Life jacket regulations;
- The need for more public toilets and fish cleaning facilities;
- Change facilities into destinations (playgrounds and BBQ's), diversify and create tourism attractions;
- Place making through boating day event;
- Enhanced signage to destinations; and
- Integration of boating with land use.

More detail about feedback can be found at 3.6

3.5.2 Surveys

Survey respondents provided comments about specific infrastructure or other issues in the Central Region. The main comments related to:

- Infrastructure: boat ramp condition and quality, car and trailer parking at boat ramps, breakwaters or groynes and toilets at access points;
- Safety: on-water behaviour, off-water behaviour for example at boat ramps, navigation aids and speed;
- Suggested improvements: boat-cleaning or fish-cleaning amenities, boat ramps and toilets;
- Destinations;
- Need for education for jet skis;
- · Stricter licensing and policing;
- Need for pump outs or wash out bays; and
- Need for better navigation aids.

3.6 Consideration of suggested projects

Extensive discussion in relation to metropolitan Adelaide is presented in Chapter 7 and as shown above, several actions will meet objectives to improve destinations and connectivity from Adelaide to other popular areas.

As noted above however, non-Adelaide councils expressed the need for funding allocations to consider the greater numbers of boating facilities with fewer ratepayers, particularly when used by boaters from the metropolitan region and to fund maintenance. This was recognised as an important issue that runs in parallel with the need to strategically plan for boating for the large numbers of Adelaide residents who go boating outside of the metropolitan area. Areas including the Yorke Peninsula such as at Marion Bay, Victor Harbor, the Copper Coast such as at Moonta and Port Pirie, and Kangaroo Island all attract boaters from Adelaide and other regions.

Marion Bay for example is seen as a strategic link and a connection point as a safe haven with Port Lincoln, while Kangaroo Island provides a combination of commercial and recreational access. Feedback and meetings with stakeholders suggested that improvements to Emu Bay boat ramp and breakwater for commercial, recreational and emergency use would assist emergency servicing north coast and reduce response time. Port Hughes boat ramp is another example of infrastructure dealing with the large influx of boating tourism. Whilst councils recognise the value of the tourists coming to their areas, funding assistance for maintenance

and modernisation of facilities were seen as key to improving the boating experience and increasing participation. Several of the State Strategic Actions will support meeting regional infrastructure requirements; moreover, the table of possible projects highlights several opportunities to consider funding for projects for the Central region.

Closer to the city, St Kilda and O'Sullivan Beach boat ramps were seen as key access points needing funding support as well as projects discussed in Chapter 7.

Other issues that were raised in feedback referred to boating behaviour both on-water and at access points such as boat ramps. Education campaigns for boating behaviour generally, that are specific to metropolitan areas and specific to boat ramp behaviour were suggested.

Signage was also an observed issue in all regions. As a state strategic issue, it was nevertheless recognised that while improving signage to be consistent and clear would improve the experience for boaters across the state, it was important to consider region specific issues to inform development of signage.

With fishing being one of the top boating activities, fish cleaning and boat wash-down facilities were also suggested as desired improvements. Under the South Australian Recreational Fishing Grants Programme administered by the Department of Environment, Water and Natural Resources (DEWNR), grants for up to \$100,000 are offered by the State Government to help boost recreational fishing in South Australia. It was suggested that councils and DPTI work more closely with DEWNR and representative fishing groups, to continue supporting funding for boaters.

3.6.1 Projects and actions for consideration in the Central Region

The following table provides a summary of key issues and potential solutions for the region as highlighted by stakeholders. The table provides an opportunity for stakeholders to provide further feedback and should be read in conjunction with Chapter 7.

Council feedback is shown separately to feedback from other stakeholder feedback for issues / sites. This is mainly the case where councils as potential or actual proponents have either been granted funding or are seeking funding. Feedback about issues / infrastructure from multiple stakeholders relating to the same issue / site is combined as a single entry.

Council	Site	Issue Category	Issue Summary	Feedback - Possible solution
Yorke Peninsula			Mooring facility for safe haven No pontoon	Breakwater and pontoon needed Dredging needed More launching facilities for rec fishing Mooring facility for cruising Adelaide to Pt Lincoln
		Safety Access	Need for safe haven Strategic link	New ramp, formalise car park, including foreshore protection Need a strategic safe haven for boaters crossing from Port Lincoln
City of Port Adelaide Enfield	Cruising Yacht Club	Access Capacity	Boat ramp - capacity	Key infrastructure for the region. Need to work together to maintain access
City of Salisbury	St Kilda	Navigation Aids Capacity Safety Education Amenity Events Access Destinations	Navigation aids - broken Navigation aids - missing Boat ramp capacity (waiting time) Behaviour - on water Channel too shallow Destination opportunity Boat ramp - capacity Pontoon - capacity Channel - shallow	Better navigation lights on the outer end of the St Kilda Channel Poles missing, some pole lights not working Boat ramp capacity (waiting time) Speed limits not enforced Channel needs dredging Consider placemaking

Council	Site	Issue Category	Issue Summary	Feedback - Possible solution
		Capacity Access	Boat ramp capacity Pontoon capacity Channel too shallow	Construct additional boat ramp lane Needs additional pontoon for temporary mooring and safe access Trailer parking areas needs resurfacing Provide additional trailer parking spaces
Onkaparinga	Onkaparinga O'Sullivan Beach		Boat Ramp - access Fish cleaning Other - infrastructure (emergency response) Trailer parking – capacity Boat ramp - capacity (No boat ramps from O'Sullivan Beach to Wirrina) Pontoon removed from the south east corner of the facility and never replaced. No short term boat mooring available.	Provide a small gentle ramp from parking area to sand New breakwater - suggest use old Stanvac wharf Build new 8-10 lane concrete ramp Add pontoons including dedicated pontoon for emergency vessel Consider as key site for a marina More sealed boat ramps required in metro Adelaide Increase capacity of existing boat ramps Needs a breakwater
		Capacity Parking Emergency Response	Boat ramp - capacity (waiting times) Car park - capacity Destination opportunity	Increase ramp - from 4 to 5 lanes Need to fund 100% Add pontoon
City of Port Adelaide Enfield	McLaren Wharf Cruickshank's Corner	Destination Connectivity Capacity	Insufficient public moorings	Supply and install new public berthing pontoon at Cruickshank's corner Supply new & relocate existing pontoons to/from McLaren's Wharf and west of Birkenhead Bridge Need to provide access (Pontoons / other)so boaters can use facilities such as on-land toilets as well as restaurants, other food service providers and to access parks, shopping, markets and museums and other land-based amenities
Yorke	Ardrossan	Condition	Boat ramp - condition (shallow)	Dredging needed
Peninsula		Capacity	Boat ramp - capacity Pontoon - capacity	Needs upgrade Increase capacity of pontoons and moorings Extend breakwater Extend boat ramp for low tide use

Council	Site	Issue Category	Issue Summary	Feedback - Possible solution
Yorke Peninsula		Capacity Parking	Boat ramp -condition (during adverse weather)	Needs breakwater Berthing pontoon needs fendering replacement Car and trailer park need improvement
		Condition	Boat ramp - conditions (during swell)	Improvements needed Extend breakwater to protect from the North
Copper Coast	Port Hughes	Access	Breakwater - location	Relocate breakwater to deeper water
		Amenity	Fish cleaning - none available	Needs fish cleaning station
		Parking	Car park - capacity	Improve capacity
		Navigational Aids	Navigation aids - maintenance (broken)	Port and starboard entry markers need to be repaired due to storm damage
		Emergency Response Safety Condition	Boat ramp -condition (shallow)	Dredge more often Current work underway
City of Port	North Haven Boat	Car parking	Car park - fees	Eliminate car parking fees
Adelaide Enfield	Adelaide Ramp	Capacity Education Signage	Boat Ramp - capacity Signage - no signage Behaviour - at boat ramp	Increase boat ramp capacity Specific lanes for launching/retrieving Provide consistent signage Provide education on boat ramp use Breakwater - Needs top up with more rocks to provide adequate protection Southern Breakwater - Needs a solution for safe access
		Navigation Aids	Navigation aids - maintenance (broken)	Fix navigation aids
		Condition	Boat ramp - condition	Dredging needed more regularly through ongoing maintenance contract. Needs monitoring to ensure minimum depth.
		Access	Boat ramp - condition (location)	Move the ramp to the south to enable better access
		Amenity	Washdown facility - condition	Increase pressure

Council	Site	Issue Category	Issue Summary	Feedback - Possible solution
Onkaparinga	Port Noarlunga	Destination	Destination opportunity	Needs restaurant and diving business
	Boat Ramp	Access Condition	Boat Ramp - condition (tidal access) Boat ramp - capacity	Upgrade ramp (*Note: upgrade in early planning stages)
Kangaroo Island	Emu Bay	Access Condition	Access - inadequate Boat ramp - condition (swell)	Improve access Needs rock wall for open water protection
		Access Capacity Emergency Response Parking	Boat ramp - capacity (emergency response)	Needs ramp and breakwater -Stage 1 (* Note funding application lodged) Stage 2 and 3 include car/trailer parking and breakwater
Kangaroo Island		Destination Access	Destination opportunity	Needs visitor moorings (courtesy)
Kangaroo Island	Baudin Beach	Access	No fair weather facility	Needs to be priority project for sea bed stabilisation post groyne removal
Port Pirie	Flinders Wharf	Capacity	Wharf - capacity	Open wharf to larger yachts and public fishermen
Port Pirie	Port Pirie Port Davis		Boat ramp - condition (too shallow) Car park - condition	Needs to be deeper Car park needs sealing
		Safety Access Amenity	Boat ramp - condition Access - inadequate (pontoon) Navigation aids	Ramp requires upgrade and a pontoon Dredging needed Channel markers needed
Barunga West	Port Broughton Boat Ramp	Access Amenity	Pontoon (access) - maintenance Amenity -toilets - none available Wash-down facility - none available Waste disposal facilities	Needs fenders Needs toilets, waste disposal and washdown facilities
Barunga West	Fisherman Bay Boat Ramp	Safety Access Amenity	Boat ramp - condition Wash-down facility - none available	Ramp requires upgrade - groyne either side Needs washdown facilities

Council	Site	Issue Category	Issue Summary	Feedback - Possible solution
City of Port Adelaide Enfield	Port River Moorings	Access Location	Access - inadequate (Port River) Moorings (berths or swing moorings) – destination (none available)	Renew Port Adelaide to better connect facilities and Gulf
Victor Harbor	Bluff Boat Ramp	Access Safety Condition	Boat ramp - condition (shallow, slippery)	Channel needs deepening Hands rails needed at Bluff pontoons Remove ramp and relocate when viable Need for new all weather facility on eastern side
		Capacity Access Education	Boat ramp – capacity Pontoon (access) – capacity Behaviour – at boat ramp	Increase boat ramp capacity Pontoons away from launching/retrieving Extend pontoon for two boats One lane as priority retrieval lane Provide education on boat ramp use
		Navigation Aids	Navigation aids - maintenance (broken)	Repair
		Amenity Parking	Wash-down facility - none available Trailer parking - capacity Car parking - capacity	Provide washdown facilities Provide additional trailer parking Extend parking on reclaimed land
Victor Harbor	Causeway Boat Ramp	Location	Boat ramp condition – (design & location)	Remove ramp and relocate when viable
West Torrens	·		Navigation aids - maintenance (missing / unmarked obstacles) Navigation aids - maintenance (broken)	Relocate navigation aids (channel markers) Provide new navigation aids Repair navigation aids
		Amenity Access Condition	Wash-down facility – condition Boat Ramp – condition Pontoon (access) - capacity	Improve water run-off from wash down facilities Fix potholes Regular dredging/maintenance Install floating boom to keep weed off the ramp Pontoon / mooring needed while waiting for retrieval
		Capacity Education Access	Boat ramp - capacity Trailer parking – fees Car park – condition Behaviour – at boat ramp	Increase parking capacity Increase launching capacity Move car park closer to launch Education on boat ramp behaviour

4. Western Region

4.1 Region overview

The Western region starts where the Central region stops and includes the western side of the Spencer Gulf, across the Eyre Peninsula and along the coast until the edge of Ceduna District Council. From the head of Spencer Gulf at Port Augusta, on the eastern side of Eyre Peninsula, lies Whyalla, Arno Bay, and Tumby Bay until Port Lincoln at the tip. It then goes around to Coffins Bay, Elliston and Streaky Bay.

The main waterways in the region are described in 4.4.1 below.

4.2 Overview of engagement with Councils in Region

Councils in the Western Region were consulted during Phase 1 of the engagement program. Each council was given the opportunity to provide feedback and input on boating infrastructure in their region and feedback on the funding model and process. During workshops, councils identified priority boating infrastructure projects and initiatives using a "Blue Sky" methodology, encouraging participants to identify any projects or initiatives that would increase boating participation and enhance the boating experience in their region.

10 councils from the Western Region were engaged as part of the process and all attended workshops, which were held at four locations in the region.

Details of the feedback received from councils is found below in 4.5.

Table 10 - Councils that attended workshops in this region

Councils	Councils
City of Whyalla	District Council of Lower Eyre Peninsula
Port Augusta City Council	District Council of Tumby Bay
District Council of Franklin Harbour	District Council of Streaky Bay
District Council of Cleve	District Council of Elliston
City of Port Lincoln	District Council of Ceduna

4.3 South Australian Marine Facilities Levy funded assets

A total of three projects have been funded in the Western Region over the last 5 years at a cost of \$511,000 for total project value of \$751,656. A breakdown of the projects, including current projects is shown in 4.5.

Table 11 - Projects funded in the Western Region

Year	Project	Council / Other applicant	Total Project Cost	Amount of funding
2012	Coffin Bay Boat Ramp	Lower Eyre	\$50,000	\$25,000
2013	Port Augusta (Carpenter's Landing) boat ramp	Port Augusta	\$541,656	\$406,000
2013	Port Lincoln (Billy Lights Point) Boat Ramp	Port Lincoln	\$160,000	\$80,000

4.4 Boating in the Western Region

4.4.1 Physical characteristics of the waterways

Spencer Gulf is the westernmost inlet on the southern cost. It is 322 km long and 129 km wide at its mouth. Within it, Spencer Gulf contains four aquatic reserves and five marine parks. On the western side lies the Eyre Peninsula. Port Augusta lies just south of the head.

Arno Bay is located on the eastern side of the Eyre Peninsula on Spencer Gulf. The coastline runs northeast/southwest and the opening to the existing harbour faces east. Various other ports are located along the eastern coastline of Eyre Peninsula including Port Lowly, Tumby Bay and Port Lincoln.

Port Lincoln is situated on the lower end of the Eyre Peninsula, on the shore of Boston Bay, which opens eastward into the Spencer Gulf.

Coffin Bay National Park is located the southernmost point on the Eyre Peninsula along the Southern Ocean coastline, with sheltered bays, channels and inlets for boating.

Past Coffin Bay, on the western side of Eyre Peninsula, facing the Great Australian Bight is Port of Thevenard, located near Cape Thevenard, which is used mainly by west coast region fishing operators. The coastline runs northwest/southeast.

4.4.2 Boating activities and destinations

Similar to other coastal regions in South Australia, fishing is the predominant boating activity; this was reflected in the survey with the vast majority of survey participants responding that fishing was their preferred activity. This is followed by cruising and sightseeing, but at significantly lower levels.

Fishing is popular across all of the Western Region, but some of the more frequented locations include Port Augusta, Whyalla, Cowell (Franklin Harbour), Arno Bay, Tumby Bay, Wedge Island, Thistle Island, Coffin Bay and Fowlers Bay.

Cruising is also popular in the Western Region the most popular route for all boats in this region is:

Port Lincoln > Reevesby Island > Tumby Bay > Franklin Harbour > Whyalla

Events in the region include the Spencer Gulf Cruise, Cockle Spit Cricket and the Tunarama Festival.

4.4.3 Boating registration and licence numbers / overall population

There are over 70,000 individuals residing in the Western Region as shown below in 12. From available data, more than 23,500 licence holders are from the Western Region, accounting for just over a third of the total population and over 6000 boat registrations in the region. Approximately 25% of all boats and licences list their primary location as Port Lincoln, followed by Whyalla at 15% of total registered boats and 17% of total licences. Further breakdown of these figures are shown in Table 13.

Table 12 – Cross Section of Western Region Population by Council from ABS 3218.0 Regional Population Growth 2014-2015

Council	2005	2014	2015	Growth 14-15
City of Whyalla	21890	22753	22759	0.0%
Port Augusta City Council	14108	14556	14522	-0.2%
District Council of Franklin Harbour	1240	1226	1234	0.7%
District Council of Cleve	1981	1808	1795	-0.7%
City of Port Lincoln	14012	14888	14984	0.6%
District Council of Lower Eyre Peninsula	4408	5078	5087	0.2%
District Council of Tumby Bay	2606	2642	2668	1.0%
District Council of Streaky Bay	2031	2250	2249	0.0%
District Council of Elliston	1172	10686	1066	-0.2%
District Council of Ceduna	3684	3696	3716	0.5%

Table 13 - Boat Registrations and Licences in the Western Region (as of July 2016)

Council	Number of registered boats	% of Western	Number of Licences	% of Western
Whyalla	809	13%	4018	17%
Franklin Harbour	180	3%	579	2%
Cleve	206	3%	765	3%
Tumby Bay	305	5%	994	4%
Port Lincoln	1657	27%	6145	26%
Lower Eyre	553	9%	1588	7%
Whyalla	809	13%	4018	17%
Kimba	89	1%	387	2%
Wudinna	134	2%	502	2%
Streaky Bay	476	8%	1156	5%
Elliston	91	2%	284	1%
Port Augusta	752	12%	3181	13%
Total	6061	100%	23617	100%

4.4.4 Boating infrastructure assets

Assets in this region are predominantly boat ramps, with associated infrastructure such as pontoons, car parking and amenities such as fish cleaning and toilets. The predominance of boat ramps reflects the proportion of trailerable boats across South Australia.

The list of known infrastructure assets for this region is shown in the following table:

Table 14 - Infrastructure assets in the Western Region

LGA *abbreviated	Asset	Formal lanes	Pontoon / Jetty	Groyne / Breakwater
Ceduna	Denial Bay Boat Ramp			
Ceduna	Denial Bay Jetty			
Ceduna	Ceduna Boat Ramp	1		

LGA *abbreviated	Asset	Formal lanes	Pontoon / Jetty	Groyne / Breakwater
Ceduna	Ceduna Jetty	lanes	Jetty	Dreakwater
Ceduna	Ceduna (Puckridge) Boat Ramp	3	Pontoon (2)	x
Ceduna	Thevenard Boat Ramp	1		
Ceduna	Smoky Bay Boat Ramp	2	Pontoon (1)	Х
Ceduna	Nadia Landing Beach Launch			
Ceduna	Ackermann's Creek Beach Launch			
Ceduna	Laura Bay Beach Launch			
Ceduna	Ceduna Sailing Club Boat Ramp			
Cleve	Arno Bay Boat Ramp	2	Pontoon (1)	x
Elliston	Venus Bay Boat Ramp	1		
Elliston	Elliston Boat Ramp	1		
Elliston	Wallaroo Boat Ramp			
Franklin Harbour	Cowell (Jetty) Boat Ramp	1		x
Franklin Harbour	Cowell Boat Ramp	1		
Franklin Harbour	Lucky Bay Boat Ramp	1		
Lower Eyre Peninsula	Farm Beach Boat Ramp			
Lower Eyre Peninsula	Mount Dutton Bay Boat Ramp	1	Pontoon (1)	x
Lower Eyre Peninsula	Coffin Bay (Esplanade) Boat Ramp	5	Pontoon (3)	
Lower Eyre Peninsula	Coffin Bay (Caravan Park) Boat Ramp			
Lower Eyre Peninsula	North Shields Boat Ramp	1		
Lower Eyre Peninsula	Louth Bay Boat Ramp			
Lower Eyre Peninsula	Tulka Boat Ramp – beach launch			
Port Augusta	Port Augusta (West Side) Boat Ramp	2	Pontoon (1)	
Port Augusta	Port Augusta (Ski Club) Boat Ramp	1	D / /0"	
Port Augusta	Port Augusta (Yacht Club) Boat Ramp	1	Pontoon (Off Ramp)	
Port Lincoln	Port Lincoln (Proper Bay) Boat Ramp	1		
Port Lincoln	Port Lincoln (Billy Lights Point) Boat Ramp	3	Pontoon (2)	X
Port Lincoln	Port Lincoln (Lincoln Cove Marina) Boat Ramp	1		
Port Lincoln	Port Lincoln (Snapper Rock) Boat Ramp	1		
Port Lincoln	Port Lincoln (Yacht Club) Boat Ramp	1		
Port Lincoln	Port Lincoln (Axel Stenross) Boat Ramp	2	Pontoon (1)	х
Port Lincoln	Kirton Point Boat Ramp		Jetty	
Streaky Bay	Haslam Boat Ramp	1		
Streaky Bay	Haslam Jetty			

LGA *abbreviated	Asset	Formal lanes	Pontoon / Jetty	Groyne / Breakwater
Streaky Bay	Streaky Bay (Slidy Ramp) Boat Ramp	1		
Streaky Bay	Streaky Bay (Moores Landing) Boat Ramp	2	Pontoon (2)	X
Streaky Bay	Sceale Bay Boat Ramp	1		
Streaky Bay	Beach Launch – Perlubie Beach, Baird Bay, The bushes, EBA Anchorage, Tractors Beach, Speeds Point, Yanerbie			
Streaky Bay	Sailing Club – Alfred Terrace (private)	1		
Streaky Bay	Streaky Bay Foreshore Tourist Park			
Tumby Bay	Tumby Bay (Trinity Haven) Boat Ramp			
Tumby Bay	Tumby Bay (Marina) Boat Ramp	2	Pontoon (1)	
Tumby Bay	Port Neill Boat Ramp	3	Pontoon (2)	X
Whyalla	Whyalla Boat Ramp	2	Pontoon (2)	X
Whyalla	Point Lowly Boat Ramp	2	Pontoon (1)	х

4.5 Feedback from engagement

4.5.1 Councils

Feedback received during workshops with councils and meetings with other stakeholders, as well as from submissions, highlighted the condition of the physical boating assets, safety, boating participation and the overall experience for boaters.

Feedback from this engagement phase include large destination projects, such as marinas, establishing new and upgrading existing boat ramps and pontoons, safety measures including break walls and prop-dredge, and increased car parking capacity to meet growing demands. A common thread that was heard from all councils was the need to increase amenity and facilities such as toilets, fish cleaning services, BBQ's and boat wash downs. Whilst many of these assets are the responsibility of councils it is opportune to review opportunities to work better together to deliver better outcomes to boaters and the community.

Councils also provided feedback on the funding process. This included ideas about blackspot style funding, streamlining approvals, local decision making, contributions in excess of 50% and forming a panel of consultants to standardise design and development.

Councils with smaller populations across all regions raised similar concerns that they do not have the number of ratepayers to fund boating projects and initiatives to meet the demands of current users and to establish greater boating attractions and destinations in the future.

Several councils, particularly in the Western Region, have large coastlines with many boating infrastructure assets, but small populations. Boating plays such an important component in the lifestyle, culture and economy in the Western Region, the smaller infrastructure cannot be lost. Councils stated that the cost of planning and the application is expensive and therefore acts as a deterrent, especially as there is no guarantee of funding. Suggestions on how to improve this included changing the current form to allow funding for concept designs and maintenance, and breaking down the funding to a two-staged process, so smaller councils can pursue these projects without requiring large amounts of capital.

Generalised feedback from councils included:

- More destinations and connectivity along the coast, especially the need for safe havens;
- Exploiting synergies between commercial and recreational marine facilities.
- Boating as a key economic contributor for coastal tourism;
- All-weather facilities;
- Accessibility (disabled);
- Travelling distances from Adelaide;
- Marketing and education regarding safety, boating behavior;
- Public amenities such as toilets, better lighting and fish cleaning facilities;
- Increase car park capacity;
- · Mitigate prop-dredge at boat ramps; and
- Temporary moorings and greater accessibility for tinnies.

Project specific submissions from council and stakeholders are detailed in 4.7.1.

4.5.2 Surveys

Generalised feedback from survey respondents included:

- Infrastructure: boat ramp conditions and quality, car and trailer parking at boat ramps, and breakwaters or groynes;
- Safety: Speed, on-water behaviour, vessels not observing correct distance, wash and navigation aids; and
- Suggested improvements: boat-cleaning or fish-cleaning amenities, boat ramps and toilets.

4.6 Consideration of suggested projects

Councils in the Western Region are challenged with having large coastlines. There is a disconnect between the cost and volume of infrastructure and a small population's ability to raise revenue locally for projects. As noted in the Central Region, councils outside of Adelaide recognise the importance of boating tourism to the local economy but are challenged with meeting infrastructure for these seasonal needs. Also as noted, many of the projects the western councils need to fund provide infrastructure for larger commercial, commercial fishing or port infrastructure. Often recreational boating assets are included as part of the larger infrastructure.

Councils and stakeholders all wanted to see improvements and maintenance for infrastructure and amenity such as toilets, fish cleaning tables, BBQ's and boat wash downs. Stakeholders also wanted more temporary moorings to connect safe havens and safe access for smaller vessels at boat ramps.

In addition to the cost to deliver projects once approved, the cost of pre-planning and the application was a barrier to seeking funding.

Councils also highlighted safety as an issue and life jacket wear was seen as important for regional boating education campaigns that are targeted to boating in the Western Region waterways and promoting safe havens were also seen as important ways to improve boating. Similar to other regions, consistent signage was needed to improve safety and provide clear information for boaters.

4.6.1 Projects and actions for consideration in the Western Region

The following table provides a summary of key issues and potential solutions for the region as highlighted by stakeholders. The table provides an opportunity for stakeholders to provide further feedback and should be read in conjunction with Chapter 7.

Multiple entries are used to show council feedback separately, especially where council as potential or actual proponents have either been granted funding or are seeking funding. Feedback about issues / infrastructure from multiple stakeholders is combined as a single entry.

Council	Site	Issue Category	Issue Summary	Feedback - Possible Solution
Tumby Bay	Tumby Bay Jetty	Destination Access	Moorings (berths or moorings) – destination Channel - condition (shallow)	Mooring facility in new location to direct boaters to centre of town Channel markers needed Channel needs dredging
Port Lincoln	Port Lincoln Proper Bay Boat Ramp		Moorings (berths or moorings) - capacity, no tie up area Car park - capacity & condition	Parking area needs to be opened up Need moorings to tie up along the breakwater Low cost solutions
	Proper Bay Boat Ramp	Safety Access	Boat ramp -condition (during adverse weather)	Upgrade will open up access for boaters in adverse weather conditions. Previously unsuccessful application
Port Augusta	Yacht Club Pontoon	Capacity	Pontoon (access) - capacity	Extend the boat parking capacity of the pontoon system (temporary public parking only)

Council	Site	Issue Category	Issue Summary	Feedback - Possible Solution
Ceduna	Thevenard (Slipway Boat Ramp)	Condition Safety Capacity	Safe haven - inadequate or no capacity	Major infrastructure projects that incorporates recreational boating infrastructure, including: - commercial offloading facility including breakwater, dredging, wharf and berthing pens (commenced - est. finish April 2018) - recreational /commercial boat ramp expected planning in late 2018 - Old slipway site for new slipping infrastructure - needs appropriate environmental controls
Port Augusta	New boat ramp	Amenity	Wash-down facility - none available Fish Cleaning Station	Provide wash-down (need to consult as there is a car /boat wash nearby) Increase lighting
Port Augusta	Carpenter's Landing	Car park	Car park – capacity	Provide increased parking facility at Carpenters Landing Carpark
		Access Capacity Amenity	Pontoon (access) - capacity	Provide temporary storage pontoon off existing jetty to improve access Access to restaurants and food on western side
		Amenity	Fish cleaning - none available Lighting - inadequate Amenity -toilets - none available	Upgrade to facilities at ramp area near toilet, including BBQ, shelter, table, playground
Whyalla	Point Lowly	Amenity	Fish cleaning - none available Lighting - inadequate	Provide fish cleaning facility Provide lighting
		Amenity Parking	Lighting - inadequate Car park - condition	Provide solar lighting in car park (solar lighting on breakwater already funded) Seal / formalise car park

Council	Site	Issue Category	Issue Summary	Feedback - Possible Solution
Whyalla	Whyalla	Destination Connectivity Condition	Moorings (berths or moorings) - destination capacity and condition	Upgrade floating berths at Whyalla and make destination for public boaters
Cleve	Arno Bay	Safety Condition	Boat ramp -condition (during swell)	Redesign boat ramp for adverse weather conditions / swell Breakwater needed
Franklin Harbour	Lucky Bay Boat Ramp	Access Condition	Boat ramp - condition	New boat ramp needed
		Safety Condition	Breakwater condition	Harbour breakwater upgrade - due in 2018
Lower Eyre	Farm Beach	Access Condition Safety	Boat ramp -condition (during adverse weather)	Need all weather ramp
		Access	Dredging	Dredging needs a longer-term solution
Franklin Harbour	Four Mile Boat Ramp	Condition	Boat ramp - condition	Upgrade in 2019
Franklin Harbour	"Boat Shed" - Port Gibbon area ramp	Condition	Boat ramp - condition	Upgrade in 2020
Tumby Bay	Peake Bay to Wisemans Beach	Access Safety	Boat ramp - capacity (No boat ramp)	Needs boat ramp and road

Council	Site	Issue Category	Issue Summary	Feedback - Possible Solution
Lower Eyre	Louth Bay Boat Ramp	Access Connectivity	Boat ramp - condition & capacity	Formalise boat ramp
Elliston	Anxious Bay Boat Ramp	Access Safety	Navigation aids - maintenance (missing)	Need a marker or remove the obstacles
			Dredging (Boat Ramp and Channel)	Needs regular dredging (launching channel dredged every six months) Build groynes to provide all weather access need dual lane ramp and pontoon access behind the sandhills
		Safety Condition	Boat ramp - condition (shallow)	Needs excavating / dredging or re-design
Ceduna	Smokey Bay	Amenity Capacity Safety	Fish cleaning - none available Boat ramp – capacity Lighting – inadequate Pontoons (access) – maintenance Pontoons (access) - design	Provide fish cleaning tables Provide additional concrete ramps Needs lighting Replace / maintain pontoons Need pontoon adjacent to ramp for small tinnies (less mobile people)- submitted for facilities fund funding
Franklin Harbour	Foreshore marina project and boat ramp modifications	Amenity Capacity Safety	Boat ramp – capacity and condition New marina infrastructure – berthings, moorings, destimation, safe haven	Upgrade due in 2017

5. Murray Region

5.1 Region overview

The Murray region starts just past Victor Harbor at Goolwa, just north of the mouth of the Murray. Along the coast, the Murray Region encompasses the Murray Mouth and terminates at the end of The Coorong. The region also includes along the Murray River, from Wellington and winding north up to Morgan then east to Renmark at the South Australian and Victorian border.

The main waterways in the region are described in 5.4.1 below.

5.2 Overview of engagement with Councils in Region

Eight councils from the Murray Region were engaged as part of the process. Seven out of the eight councils invited were able to attend workshops held in their areas.

Councils were provided an opportunity to give feedback and input through submissions and during the workshop on boating infrastructure in their region and feedback on the funding model and process. During workshops, councils identified priority boating infrastructure projects and initiatives using a "Blue Sky" methodology, encouraging participants to identify any projects or initiatives that would increase boating participation and enhance the boating experience in their region.

Details of the feedback received from councils is found below in 5.5.1.

Table 15 - Councils that attended workshops in this region

Councils	Councils
Alexandrina Council	District Council of Loxton Waikerie
Coorong District Council	Renmark Paringa Council
Mid Murray Council	Berri Barmera Council
Rural City of Murray Bridge	

5.3 South Australian Marine Facilities Levy funded assets

A total of 10 projects have been funded in the Murray Region in the last five years at a cost of \$1,034,000 for total project value of \$2,048,000. A breakdown of the projects, including current projects is shown below.

Table 16 - Projects funded in the Murray Region

Year	Projects – completed projects shown in brackets	Council / Other applicant	Total Project Cost	Amount of funding
2011	Lake Bonney (Barmera)	Berri Barmera	\$300,000	\$150,000
2012	Moorook riverfront (Completed)	Loxton Waikerie	\$140,000	\$70,000
2013	Berri Riverview Drive Marina boat ramp (Completed)	Berri Barmera	\$640,000	\$320,000
2013	Moorook riverfront Boating facilities (Stage 2)	Loxton Waikerie	\$100,000	\$50,000
2014	Qualco boat ramp (Murray River) (Completed)	Loxton Waikerie	\$40,000	\$20,000
2014	Rilli Reserve boat ramp	Loxton Waikerie	\$76,000	\$38,000
2016	Ngaut Ngaut	Mid Murray	\$19,000	\$19,000
2016	Cadell Boat Ramp	Mid Murray	\$180,000	\$90,000
2016	Mannum Riverbank Wharf	Mid Murray	\$253,000	\$127,000
2016	Wellington East Boat Ramp	Coorong	\$300,000	\$150,000

5.4 Boating in the Murray Region

5.4.1 Physical characteristics of the waterways

The Murray River is approximately 2750 kilometres in length. Followings its passage through NSW and Victoria, it continues from the border and flows through South Australia before discharging at Goolwa on the shores of Lake Alexandrina. The Murray River then flows through the islands at the Murray Mouth, including Hindmarsh Island and Mundoo Island, before discharging into the sea.

The Lower Lakes is an area south of Adelaide, near the mouth of the Murray, and comprises the largest fresh water lakes in Australia, notably Lake Alexandrina, the largest of the Lower Lakes, which empties into the sea at the Murray Mouth and Lake Albert. Lake Albert lies to the south east of Lake Alexandrina and they are connected by a narrow channel. The Murray River is the major river to flow into the lake along with the Bremer, Angas and Finniss Rivers. The lake is maintained as a freshwater lake through a series of five barrages - Mundoo, Boundary Creek, Ewe Island, Tauwitchere and Goolwa shown below in Figure 7 - Goolwa Barrage. Image from Hullwarren - Own work, CC BY-SA 3.0igure 7. The barrages prevent the seawater from entering upstream into the lakes and rivers during times of low river flows. The lake empties into the sea via a channel called the Murray Mouth. When river flow is low, sand bars often block the mouth and this inhibits boating in the area.

To the seaside of the Murray Mouth, there is a large area of salt water incorporating The Coorong which is a lagoon system, separated from Lake Alexandrina by the barrages. The Coorong stretches 130km and is divided from the Southern Ocean by large sand hills. The Coorong is recognised for its many species of birds as well as its fish and other animals.

The uniqueness of The Coorong as a body of water that mixes both salt and freshwater to provide these unique habitats make it popular for boaters, fishers and other tourists.

The drought that covers the period from 2000 (and earlier) has impacted freshwater flows in all the waters in the Murray region and this is discussed below and in Chapter 7.

The Murray River flows through the following main towns (listed alphabetically):

- Berri
- Blanchetown
- Kingston-on-Murray
- Loxton
- Mannum
- Morgan
- Murray Bridge
- Paringa
- Renmark
- Swan Reach
- Tailem Bend
- Waikerie
- Wellington
 Hindmarsh Island
 Murray Mouth
 Barrages
 Goolwa Barrage
 Mundoo Barrage
 Boundary Creek Barrage
 Ewe Island Barrage
 Tauwitchere Barrage

Mangroves along the coast of South Australia are confined to sheltered shores in the Gulf of St Vincent and Spencer Gulf and the protected bays on the Eyre Peninsula.



Figure 7 - Goolwa Barrage. Image from Hullwarren - Own work, CC BY-SA 3.0

5.4.2 Boating activities and destinations

Boating activities in the Murray Region are primarily characterised by river cruising and towing activities along with fishing. Cruising occurs primarily in, houseboats and other motorised boats but includes smaller sailing vessels. The predominant towing activities are water skiing and wakeboarding. Fishing, sightseeing and rowing are all still popular activities, but at a lower level in this region compared to the popularity of cruising and towing. Commercial cruising on larger boats, such as paddle steamers is also popular on the Murray River.



Houseboats and houseboat destinations

Houseboats are either privately owned or can be hired at several locations on the Murray River. These include at Murray Bridge, Mannum, Blanchetown, Morgan, Waikerie, Berri, Renmark and Paringa. Commercial houseboats are stored on the river at commercial marinas, at council owned marinas, or single moorings. Private houseboats are also stored either at commercial marinas or on single moorings.

An issue that has become a problem for the region is recent years is the number of predominantly private houseboats that are anchoring long-term on the Murray River, many of them with permanent 'liveaboards'. Feedback provided highlighted that a proportion of these boats are of a lower standard, that is are not maintained to an appropriate level. This issue is further discussed below and in Chapter 7.

Cruising on houseboats requires particular types of support infrastructure, such as power, refuelling, pump out facilities and water, as well as access to amenities including toilets, shopping and tourism facilities. Limited access to infrastructure, both at point of departure

and critically at destinations, can have an impact on the level of cruising activity and is described in the analysis in Chapter 7.

Cruising and fishing on the Murray River

Other cruising boats require similar infrastructure, and as with houseboats, the primary barrier is infrastructure, particularly at destinations.

Fishing as a past time can be undertaken on any type of boat, and the Murray is popular with fishers, particularly in the Coorong, Swann Reach and Renmark.

The most popular routes and destinations in the region for motorised cruising are:

- Goolwa > Coorong
- Goolwa > Lower Lakes > Murray River
- Goolwa

For sailing boats, the most popular routes are:

- Goolwa > Coorong
- Goolwa > Lower Lakes

Events in the region include the SA Masters – Murray Bridge, Floatfest, and the South Australian Wooden Boat Festival in Goolwa. Other popular events include the Riverland Dinghy Derby held in Renmark.

5.4.3 Boating registration and licence numbers / overall population

The Murray region consists of the second highest number of boaters in South Australia, after the Central region.

There are over 65,000 individuals residing in the Murray Region as shown below in Table 17. From available data, more than 32,000 licence holders are from the Murray Region, accounting for just approximately half of the total population and over 7400 boat registrations in the region. Approximately 20% of all boats and licences list their primary location as Alexandrina, followed by Loxton Waikerie at 20% of total registered boats and 16% of total licences. Further breakdown of these figures are shown in Table 18.

Table 17 – Cross section of Murray Region Councils population (From: ABS 3218.0 Regional population Growth 2014-2015)

Councils	2005	2014	2015	Growth 14-15
Alexandrina Council	20611	25132	25449	1.3%
Coorong District Council	5837	5584	5556	-0.5%
Mid Murray Council	8253	8261	8243	-0.2%
Rural City of Murray Bridge	17931	20740	20971	1.1%
District Council of Loxton Waikerie	12023	11475	11462	-0.1%
Renmark Paringa Council	9678	9290	9230	-0.6%
Berri Barmera Council	11190	10528	10419	-1.0%

Table 18 – Boat registration and Licence Numbers in the Murray Region (as of July 2016)

Murray	Number of registered boats	% of Murray	Number of Licences	% of Murray
Alexandrina	1477	20%	6683	21%
Mid-Murray	638	9%	4008	12%
Murray Bridge	892	12%	5312	16%
Coorong	383	5%	1720	5%
Southern Mallee	88	1%	556	2%
Karoonda East Murray	47	1%	428	1%
Loxton Waikerie	1465	20%	5045	16%
Renmark Paringa	1321	18%	4105	13%
Berri Barmera	1108	15%	4528	14%
Total	7419	100%	32385	100%

5.4.4 Boating infrastructure assets

Assets in this region predominantly include boat ramps, with associated infrastructure such as pontoons, car parking and amenities such as fish cleaning and toilets. The predominance of boat ramps reflects the proportion of trailerable boats across South Australia.

The list of known infrastructure assets for this region is shown in the following table:

Table 19 - Infrastructure assets in the Murray Region

LGA *abbreviated	Asset	Formal lanes	Pontoon / Jetty
Alexandrina	Goolwa (Aquatic Club) Boat Ramp	2	Pontoon (1)
Alexandrina	Goolwa (Regatta Yacht Club) Boat Ramp	2	Pontoon (1)
Alexandrina	Goolwa (Johnson Street) Boat Ramp	1	Jetty
Alexandrina	Goolwa (Beacon 19) Boat Ramp	2	Jetty
Alexandrina	Goolwa (Liverpool Road) Boat Ramp	1	Jetty
Alexandrina	Hindmarsh Island (Captain Sturt Parade) Boat Ramp	1	
Alexandrina	Hindmarsh Island (Valmai Reserve) Boat Ramp	1	Jetty
Alexandrina	Hindmarsh Island (Sugars Beach) Boat Ramp	1	
Alexandrina	Hindmarsh Island (Mundoo Channel) Boat Ramp	1	Jetty
Alexandrina	Finniss Boat Ramp	1	
Alexandrina	Clayton (Rankine Street) Boat Ramp	1	

LGA *abbreviated	Asset	Formal lanes	Pontoon / Jetty	
Alexandrina	Clayton Boat Ramp	1	Jetty	
Alexandrina	Clayton Boat Ramp		Jetty	
Alexandrina	Milang (opposite shacks) Boat Ramp		,	
Alexandrina	Milang (adjacent jetty) Boat Ramp	2	Jetty	
Berri Barmera	Overland Corner Boat Ramp	1		
Berri Barmera	Katarapko Creek (Murray River National Park) Boat ramp			
Berri Barmera	Barmera (Nappers Landing) Boat Ramp	1		
Berri Barmera	Barmera (adjacent Aquatic Club) Boat Ramp	1		
Berri Barmera	Barmera (opposite oval) Boat Ramp	2	Pontoon (1)	
Berri Barmera	Berri (Sandbar Bend) Boat Ramp	1		
Berri Barmera	Berri (Houseboat Moorings) Pontoon			
Berri Barmera	Berri (Riverview Drive) Boat Ramp	1		
Berri Barmera	Berri (Riverview Drive Marina) Boat Ramp	2	Pontoon (1)	
Berri Barmera	Barmera (Old Ski Club, Stoney Ridge Road) Boat Ramp	1		
Berri Barmera	Kingston on Murray (old ferry landing) Boat Ramp	1		
Berri Barmera	SA Water Slipway			
Berri Barmera	Private Moorings, Old Jacamat Marina			
Berri Barmera	Private & Commercial Moorings, Houseboat Adventure, Old Ferry Road			
Berrie Barmera	Bruno Bay (Cobdogla) Boat Ramp	2	Pontoon (2)	
Coorong	Narrung Landing Boat Ramp	1	Jetty	
Coorong	Narrung (adjacent ferry) Boat Ramp	1		
Coorong	Meningie (Caravan Park) Boat Ramp	1		
Coorong	Meningie (Lions Jubilee Park) Boat Ramp	2	Jetty	
Coorong	Coorong (Marks Point) Boat Ramp			
Coorong	Meningie (Sailing Club) Boat Ramp	1		
Loxton Waikerie	Qualco Boat Ramp	1		
Loxton Waikerie	Ramco Boat Ramp	1		
Loxton Waikerie	Waikerie Boat Ramp	2		
Loxton Waikerie	Waikerie (adjacent oval) Boat Ramp	1		

LGA	Asset	Formal	Pontoon /	
*abbreviated		lanes	Jetty	
Loxton Waikerie	Waikerie (Holder Bend) Boat Ramp	1		
Loxton Waikerie	Kingston on Murray Boat Ramp	1		
Loxton Waikerie	Kingston on Murray (old ferry crossing) Boat Ramp	1		
Loxton Waikerie	Moorook Boat Ramp	1	Pontoon (1)	
Loxton Waikerie	Pyap Boat Ramp	1		
Loxton Waikerie	Loxton Boat Ramp	2	Pontoon (2) (enclosure)	
Loxton Waikerie	Loxton Riverfront Mooring Area Pontoon			
Loxton Waikerie	Rilli Island Boat Ramp	2		
Mid Murray	Zadows Landing Boat Ramp	1		
Mid Murray	Caloote Boat Ramp	1		
Mid Murray	Mannum (Mary Ann Reserve) Boat Ramp	2		
Mid Murray	Mannum (Murray Street) Boat Ramp	1		
Mid Murray	Younghusband Boat Ramp	1		
Mid Murray	Bowhill Boat Ramp	1		
Mid Murray	Purnong Boat Ramp	1		
Mid Murray	Caurnamont Boat Ramp	1		
Mid Murray	Walker Flat (Riverfront Moorings) Boat Ramp	1		
Mid Murray	Walker Flat Boat Ramp	1	Pontoon (1)	
Mid Murray	Wongulla Boat Ramp	1	Jetty	
Mid Murray	Kroehns Landing Boat Ramp	1		
Mid Murray	Nildottie(Herrmans Landing) Boat Ramp	1		
Mid Murray	Nildottie(Greenways Landing) Boat Ramp	1		
Mid Murray	Big Bend Boat Ramp	1		
Mid Murray	Punyelroo Boat Ramp	1		
Mid Murray	Swan Reach Boat Ramp	1		
Mid Murray	Blanchetown (McPhee Avenue) Boat Ramp	1		
Mid Murray	Blanchetown (The Parade) Boat Ramp	1		
Mid Murray	Brenda Park Landing Boat Ramp	1		
Mid Murray	Morgan Boat Ramp	2	Jetty	
Mid Murray	Cadell Boat Ramp	1		
Murray Bridge	Wellington Boat Ramp	1		
Murray Bridge	Tailem Bends (Freds Landing) Boat Ramp	1	Jetty	
Murray Bridge	Monteith Boat Ramp	1		
Murray Bridge	Murray Bridge (Long Island Reserve) Boat	2		

LGA *abbreviated	Asset	Formal lanes	Pontoon / Jetty	
	Ramp			
Murray Bridge	Murray Bridge (Sturt Reserve) Boat Ramp			
Murray Bridge	Murray Bridge (Hume Reserve) Boat Ramp			
Murray Bridge	Murray Bridge (Thiele Reserve) Boat Ramp	2		
Murray Bridge	Murray Bridge (Avoca Dell) Boat Ramp	1		
Murray Bridge	Mypolonga (Hill Road) Boat Ramp			
Murray Bridge	Mypolonga (Woodlane Reserve) Boat Ramp	2		
Naracoorte Lucindale	Cockatoo Lake Boat Ramp	1		
Renmark Paringa	Lyrup Boat Ramp	1		
Renmark Paringa	Renmark (Plush Bend) Boat Ramp	1		
Renmark Paringa	Paringa Boat Ramp	1		
Renmark Paringa	Paringa (Lock 5 Road) Boat Ramp	1		
Renmark Paringa	Renmark (Patey Drive) Boat Ramp	1		
Renmark Paringa	Renmark (Jane Eliza Landing) Boat Ramp	1		
Renmark Paringa	Renmark Houseboat Moorings Pontoon			
Renmark Paringa	Renmark (Goolwa Street) Boat Ramp	1		
Renmark Paringa	Murtho Forest Boat Ramp			
Renmark Paringa	Chowilla Boat Ramp			
Renmark Paringa	Customs House Boat Ramp	1		

5.5 Feedback from engagement

5.5.1 Councils

Feedback received during workshops with councils and meetings with other stakeholders, as well as from submissions, highlighted the condition of the physical boating assets, safety, boating participation and the overall experience for boaters. During the regional visits, in addition to council workshops, the team was able to meet with several stakeholder groups including groups representing houseboat hirers, marina and other infrastructure owner/operators. Separate to the regional visit, a meeting was held with Murray River stakeholders to discuss a single river authority.

Councils provided feedback for new projects and upgrades to existing infrastructure, more comprehensive navigation-aid system and made suggestions improved amenities such as toilets, camping facilities and increased car parking capacity. There were also ideas for education campaigns for safety and the environment and better signage to inform boaters and tourists of undiscovered destinations.

Councils also took this opportunity to provide feedback on the funding model and process. The idea to have a One-River Authority was raised, along with issues that the planning process is a disincentive, suggesting improving governance by streamlining it. Other ideas included loans, funding in excess of 50% of project costs and funding provided for proactive measures against climate change.

Generalised feedback included:

- More destinations and connectivity along the Murray
- Camping facilities as a destination
- Opening up The Coorong and Lower Lakes and identifying this area as the "Kakadu of the south"
- Houseboat regulations
- Accessibility (disabled)
- Single Murray River Authority
- Better facilities, such as public toilets, and amenity for cruising vessels
- · Safety in the Lakes and locks
- Moorings for houseboats
- Marketing and education regarding safety, use and the region
- Events promoting boating
- Car park capacity
- Improve zoning
- Support to mitigate risks of climate change
- Better navigation aids and markers
- Utilise technology to enhance boating experience

5.5.2 Survey

Survey respondents provided comments about specific infrastructure or other issues in the Murray region. The main comments related to:

- Infrastructure: boat ramp conditions and quality, car and trailer parking at boat ramps, and breakwaters or groynes
- Safety: Speed, on-water behaviour, vessels not observing correct distance and wash
- Suggested improvements: pontoons, public moorings, boat ramps, car and trailer parking.
- Boat ramp capacity
- · Desire for a One River Authority
- Need for education for jet skis and wake boarders
- Reliability of Locks
- More houseboat regulations
- Need for better navigation aids

5.6.1 Projects and actions for consideration in the Murray Region

The following table provides a summary of key issues and potential solutions for the region as highlighted by stakeholders. The table provides an opportunity for stakeholders to provide further feedback and should be read in conjunction with Chapter 7.

Multiple entries are used to show council feedback separately, especially where council as potential or actual proponents have either been granted funding or are seeking funding. Feedback about issues / infrastructure from multiple stakeholders is combined as a single entry.

Council	Site	Issue Category	Issue Summary	Feedback - Possible Solution
Murray	Renmark Murray Bridge Mannum Swan Reach Blanchetown Morgan Berri Pomado Point Finnish River Currency Creek	Destination Connectivity Signage Access Education Navigational Aids Emergency Response Condition Capacity	Information – navigation Amenity – toilets Boat ramp – condition, capacity Lighting inadequate Behaviour – on water Signage – no signage Navigation aids – maintenance (broken, missing), connectivity & safety	Need for better information about water levels and navigating the waterways. Need to improve infrastructure at current / new destinations including the need to improve or install toilets, jetties, boat ramps and other amenities for short-term day or for overnight stays and longer term cruising Need for education for jet skis and wake boarders Need for navigation aids to improve safety and access Note: Several strategic Actions in this Chapter and in Chapter 7 refer specifically to the Murray River
Lower Lakes/ Coorong	Lake Alexandrina Lake Albert Goolwa Barrage Hindmarsh Island Meningie	Destination Connectivity Signage Access Education Navigational Aids Emergency Response Condition Capacity	Information – navigation Amenity – toilets Boat ramp – condition, capacity Lighting inadequate Behaviour – on water Signage – no signage Navigation aids – maintenance (broken, missing), connectivity & safety	Need to provide destinations and / or connect the bodies of water comprising the rivers, lakes and lagoons Need to improve infrastructure at destinations including the need to improve or install toilets, jetties, locks, boat ramps and other amenities for short-term day or for overnight stays and longer term cruising Need for navigation aids to improve safety and access Note: Several strategic Actions in this Chapter and in Chapter 7 refer specifically to the Murray River
Coorong	Tailem Bend Wellington	Destination	Moorings (berths or moorings) - capacity	Needs moorings to make it a destination

Council	Site	Issue Category	Issue Summary	Feedback - Possible Solution
Coorong	Wellington East	Safety Access	Safety – unmarked obstacles (rocks)	Need to remove rocks
		Destination Capacity Access	Mooring (berths or mooring) – capacity, no tie up Pontoon/Jetty (access) – none available	Install jetty adjacent to ramp to allow better access (Currently under construction) Provide moorings for houseboats
Murray Bridge	Thiele Reserve Boat Ramp	Condition Access	Boat ramp condition – (design) Pontoon (access) - capacity	Ramp extensions and drop-off budgeted but need funds to construct a floating pontoon / fixed jetty
Murray Bridge	Avoca Dell Boat Ramp	Capacity Signage	Boat ramp - capacity Pontoon (access) - capacity Signage - no signage	A floating pontoon/fixed jetty adjacent to the ramp. Additional houseboat mooring piles northern end of reserve Signage designating specific areas for each activity
Murray Bridge	Long Island Reserve Boat Ramp	Connectivity Condition Access	Boat ramp condition – (design) Pontoon (access) - capacity	Extend the boat ramp Provide pontoon for access
Murray Bridge	Riverfront between Toora and Swanport	Capacity Amenity	Other - infrastructure	Implement RCMB's Riverfront Strategic Plan
Mid Murray	Mannum Boat Ramp (Mary Ann)	Condition	Erosion	Install fibre piling 200m along riverbank, various heights to cater for swimmers and different types of boats mooring Design completed, Funding Required
		Amenity Condition Capacity	Boat ramp capacity & condition – (design) Lighting - inadequate Pontoon (access) - capacity Wharf - condition	Stage 1: 225k in 2018/19 - boat ramp upgrade and extension, lighting, addition pontoon Stage 2: 370k in 2021/22 - remove concrete landing, new pontoon, hinged gangways, toilets Stage 3: 206k in 2021/22 - minor stormwater upgrade, remove old wharf and build new structure

Council	Site	Issue Category	Issue Summary	Feedback - Possible Solution
Renmark	Jane Eliza wharf at BR	Destination Capacity Parking	Boat ramp - capacity Pontoon (access) - capacity Moorings (berths or moorings) - destination Car park - capacity	Business case being developed for increased capacity Commercial marina, boat slip and associated infrastructure
Renmark	Riverfront and Paringa Lock 5	Access Safety	Moorings (berths or moorings) - safe haven	Need a marina at Lock 5 to improve safety
Berri	Berri Riverfront Wharf	Access Capacity Condition	Wharf - condition & capacity	Funding application submitted
Berri	Lake Bonney	Access Condition	Boat ramp - condition	Upgrade ramp
		Condition	Erosion	Bank stabilisation needed
Berri	Berri (Houseboat Moorings) Pontoon	Capacity	Moorings (berths or moorings) - capacity	Pier guides scheduled for 2017
Loxton	Milich Landing Boat Ramp	Amenity Parking Education Signage	Car park - condition (unsealed) Signage - no signage Lighting - inadequate Boat ramp -condition (cracked)	Excavate existing boat ramp Earthworks for rock base Seal car park Signage Solar lighting needed (Funding application May 2016)
Loxton	Loxton Wharf	Safety Access Condition	Pontoon (access) – condition during river rise	Requires engineering solution. Currently funding in 2022/23 Pontoon extension needed

Council	Site	Issue Category	Issue Summary	Feedback - Possible Solution
Mid Murray	Mid Murray Blanchetown Boat Ramp	Destination Safety Access Amenity Parking	Pontoon (access) - capacity (no pontoon) Boat ramp condition – (design)- too steep Boat ramp -capacity Amenity -toilets - none available Parking	Pontoon needed Needs better location closer to town on council land and in houseboat friendly area such as Big4 Caravan Park Needs boat ramp and floating pontoon to support access, safety and make area a destination
		Access Connectivity	Moorings (berths or moorings) - capacity, no tie up area Signage – no signage	Need tie-up mooring areas at appropriate intervals Needs to be signposted for this use
		Capacity	Boat ramp - capacity Pontoon (access) - capacity - no pontoon	Funding allocated for 2018-19 for concrete ramp double lane, parking area and floating pontoon
Mid Murray	Morgan Boat Ramp	Access Parking	Moorings (berths or moorings) - capacity, no tie up area Car park – capacity (none)	Need large tie-up mooring areas adjacent to Morgan for houseboat hirers Need car park as support infrastructure
		Access Capacity Condition	Boat ramp - capacity Boat ramp - condition Pontoon (access) - capacity	Needs to be upgraded for better and increased access Needs pontoons as a minimum on one side
		Access Capacity Condition	Boat ramp - capacity Boat ramp - condition Pontoon (access) - capacity	Funding allocated for 2016/17 to install new concrete ramp and resurface approach to ramp Pontoon design in progress

6. South Eastern Region

6.1 Region overview

The South Eastern region starts at the edge of the Coorong and Coorong National Park, where the Murray region concludes. It continues down the coast through Kingston, Robe and Port MacDonnell until the Victorian border. This stretch of coast is also commonly known as the Limestone Coast.

The main waterways in the region are described in 6.4.1 below.

6.2 Overview of engagement with Councils in Region

Four councils from the South Eastern Region were engaged as part of the process. Councils were provided an opportunity to give feedback and input through submissions and during a workshop on boating infrastructure in their region and feedback on the funding model and process.

All councils were able to attend workshops held in the South Eastern Region. From this workshop, councils identified priority boating infrastructure projects and initiatives using a "Blue Sky" methodology, encouraging participants to identify any projects or initiatives that would increase boating participation and enhance the boating experience in their region.

Details of the feedback received from councils is found below in 6.5.

Table 20 - Councils that attended workshops in this region

Councils	Councils
District Council of Grant	Kingston District Council
District Council of Robe	Wattle Range Council

6.3 South Australian Marine Facilities Levy funded assets

A total of 5 projects have been funded in the South Eastern Region over the last five years at a cost of \$2,294,500 for total project value of \$3,439,000.

Table 21 - Projects funded in the South Eastern Region

Year	Project	Council / Other applicant	Total Project Cost	Amount of funding
2011	Donovans Landing boat ramp	Grant	\$20,000	\$10,000
2013	Port MacDonnell boat ramp and wharf	Grant	\$2,500,000	\$1,875,000
2014	Lake Butler (Robe) washdown facility	Robe	\$19,000	\$9,500
2014	Beachport Boat Ramp breakwater extension	Wattle Range	\$700,000	\$350,000
2016	Beachport Boat Ramp	Wattle Range	\$200,000	\$50,000
	Blackfellows Caves boat ramp	Grant		

6.4 Boating in the South Eastern Region

6.4.1 Physical characteristics of the waterways

The region's primary waterway is the coast, with a small number of lakes. The coast extends from the Victorian border and extends to the edge of Coorong.

The coast is covered by the following councils:

- District Council of Robe
- District Council of Kingston
- District Council of Grant
- District Council of Robe
- Wattle Range Council

The coast is part of the limestone coast where fishing and cruising along the coast are the predominant boating activities which take place in the region.

There are various lakes including Lake Fellmongery, which is a popular spot for wakeboarding. Lake Bonney located in Canunda has a surface area of over 5000 square kilometres and is one of the largest freshwater lakes in Australia. It is fed by the Benara Creek.

The South Eastern Region of South Australia has a rich cultural history with many Indigenous sites. After settlement, the towns were wheat producers, wool growers. Without a railway, almost all exports from the South East left Robe from one of the jetties. Soon after, when the wheat price began to fall, they exported from other ports including Port MacDonnell, Beachport and Kingston.

A short stretch of the Glenelg River flows through south-eastern South Australia at Grant. The river then returns to Victoria and discharges into Discovery Bay.

6.4.2 Boating activities and destinations

Fishing is the most popular boating activity in the South Eastern Region. Fishers usually head out from their local safe haven and then return directly after fishing. The most significant fishing spots for boaters are Robe, Beachport and Port MacDonnell. Cruising is only possible for large boats due to the challenges and gaps in between safe havens. Commercial cray fleets also operate out of selected ports.

6.4.3 Boating registration and licence numbers / overall population

There are over 23,500 individuals residing in the South Eastern Region as shown below in Table 22. From available data, more than 13,500 licence holders are from the South Eastern Region, accounting for more than half of the total population and over 3000 boat registrations in the region. Approximately 50% of all boats and licences list their primary location in Grant, followed by Wattle Range at 19% of total registered boats and 18% of total licences. Further breakdown of these figures are shown in Table 23.

Table 22 – Cross section of South Eastern Region Councils population From ABS 3218.0 Regional population Growth 2014-2015

Councils	2005	2014	2015	Growth 14-15
District Council of Grant	7585	8130	8235	1.3
District Council of Robe	1395	1431	1428	-0.2
Kingston District Council	2404	2367	2363	-0.2
Wattle Range Council	12250	11575	11460	-1.0

Table 23 – Registered Boats and Licence Numbers in South Eastern Region (as of July 2016)

Councils	Number of registered boats	% of SE	Number of Licences	% of SE
Naracoorte	371	12%	1912	14%
Wattle Range	602	19%	2437	18%
Tatiara	169	5%	1170	8%
Kingston	240	8%	818	6%
Robe	107	3%	435	3%
Grant	1710	53%	7029	51%
Total	3199	100%	13801	0%

6.4.4 Boating infrastructure assets

Assets in this region are predominantly boat ramps, with associated infrastructure such as pontoons, car parking and amenities such as fish cleaning and toilets. The predominance of boat ramps reflects to some extent the proportion of trailerable boats across South Australia.

The list of known infrastructure assets for this region is shown in the following table:

Table 24 – Infrastructure assets in the Murray Region

LGA *abbreviated	Asset	Formal lanes	Pontoon / Jetty	Groyne / Breakwater
Grant	Glenelg River (Donovans Landing) Boat Ramp	1	Jetty	
Grant	Glenelg River (Dry Creek)	1		
Grant	Eight Mile Creek Boat Ramp			
Grant	Port MacDonnell East Boat Ramp			x
Grant	Port MacDonnell West Boat Ramp	2	Pontoon (1)	X
Grant	Nene Valley Boat Ramp			
Grant	Blackfellows Caves Boat Ramp	2	Pontoon (1)	
Grant	Carpenter Rocks (south) Boat Ramp			
Grant	Carpenter Rocks Boat Ramp			

Kingston	Cape Jaffa Boat Ramp	4	Pontoon (2)	X
Kingston	Pinks Beach Boat Ramp			
Kingston	Wyomi Beach Boat Ramp			
Kingston	Kingston SE (Yacht Club) Boat Ramp			
Kingston	Kingston SE (Caravan Park) Boat Ramp			
Kingston	Kingston SE (Thorpeys Ramp Maria Creek) Boat Ramp	4	Pontoon (3)	
Kingston	Kingston SE (1st Long Beach) Boat Ramp			
Kingston	Kingston SE (2nd Long Beach) Boat Ramp			
Robe	Robe (Lake Butler) Boat Ramp	4	Pontoon (3)	
Robe	Robe (Long Beach) Boat Ramp			
Robe	Boatswain Point Boat Ramp			
Robe	Wrights Bay Boat Ramp			
Wattle Range	Southend (adjacent to jetty) Boat Ramp	2		
Wattle Range	Beachport Boat Ramp	2		X
Wattle Range	Lake Leake Boat Ramp			

6.5 Feedback from engagement

6.5.1 Councils

Councils were given an opportunity to provide feedback and input on the plan through submissions and a workshop held in the South Eastern Region. Feedback received during the workshop with Councils and meetings with other stakeholders, as well as from submissions, highlighted the condition of the physical boating assets, safety, boating participation, the value of boating and the overall experience for boaters. Priority projects and future plans for each council were identified during the workshop, as well as needs for increased car park capacities, and improved facilities and amenities.

Feedback was also given on the funding model and process. Councils raised concerns that the process to apply for funding is at times drawn out and expensive and highlighted the need to streamline the process. They also suggested compiling a panel of consultants to create consistent and quality boating infrastructure design, as well as ideas, better flexibility in funding model, such as allowing funding excess of 50% for smaller councils.

Generalised feedback included:

- Connectivity along the coastal destinations;
- Expert panel of consultants to create consistent and quality work;
- Accessibility (disabled);
- Need for an economic study to identify the value of boating to the local and regional economy;
- Exploiting synergies between commercial and recreational marine facilities.

- Marketing and education regarding safety, use and the region; and
- Public toilets and fish cleaning facilities.

6.5.2 Survey

Survey respondents provided comments about specific infrastructure or other issues in the South Eastern region. The main comments related to:

- Infrastructure: boat ramp conditions and quality as well as car and trailer parking at boat ramps;
- Safety: Navigation aids, hazards, emergency response and off-water behaviour such as at boat ramps;
- Suggested improvements: boat-cleaning or fish-cleaning amenities, access to fuel, and breakwater/groyne improvements;
- Amenities at launching facilities;
- · Car park capacity;
- Need for better navigation aids; and
- Speed restriction markers and buoys as well as additional policing.

6.6 Consideration of suggested projects

Similar to the Western Region, the South Eastern Region has challenges in relation to seasonal and weekend visitors that provide a boost to the economy but stretch existing capacity, in particular at car parks and through the use of amenities such as fish cleaning tables at launching facilities.

As noted in Chapter 7, South Eastern Councils stressed that it was important for the State agencies, including regulators, planning authorities and local communities to recognise the value of boating tourism to employment, lifestyle (health and recreation) and the local economy.

Councils and stakeholders highlighted the need for local destination infrastructure including powered sites at campgrounds and in relation to safety, navigation aids such as speed restriction markers and buoys should be complemented with education.

Similar to the Western Region, often recreational boating assets are included as part of the larger infrastructure and Councils suggested that there was a need to consider funding components of the infrastructure.

6.6.1 Projects and actions for consideration in the South Eastern Region

The following table provides a summary of key issues and potential solutions for the region as highlighted by stakeholders. The table provides an opportunity for stakeholders to provide further feedback and should be read in conjunction with all the actions in Chapter 7.

Multiple entries are used to show council feedback separately, especially where council as potential or actual proponents have either been granted funding or are seeking funding. Feedback about issues / infrastructure from multiple stakeholders is combined as a single entry.

Council	Site	Issue Category	Issue Summary	Feedback - Possible Solution
Robe	Marina	Parking Capacity Safety	Pontoon (access) - capacity Car park – capacity and condition	Upgrade car park Provide additional pontoon connecting marina for drop-off / pick-up of passengers
Kingston	Cape Jaffa	Safety Education Navigational Aids	Behaviour - on-water	Need markers /buoys on the water for speed restrictions Need education for on-water behaviour Increase policing
		Access Navigational Aids	Channel - condition (blocked)	Access blocked and needs cleaning up by marina Need channel markers need buoys to mark areas around the reef
		Connectivity	Connectivity between destinations	Need events to attract boaters to connect across different destinations in region
Grant	Port MacDonnell	Storage Access	Moorings (berths or moorings) - destination	Commercial marina needed. Need support from DPTI
		Capacity Education Condition	Boat ramp - capacity (waiting times)	Signage is appropriate but needs rigging bays to improve waiting times and behaviour
Grant	Glenelg River (Donovans)	Access Facilities Safety	Boat Ramp Lay by wharf Signage On shore facilities	Upgrade Ramp Include lay by areas to Ramp for safer entry/egress, and added use of non-powered vessels that utilise River (canoes, kayaks, etc Public convenience improvements

Council	Site	Issue Category	Issue Summary	Feedback - Possible Solution
Grant	Glenelg River (Dry Creek)	Access Facilities Safety	Boat Ramp Lay by wharf Signage On shore facilities	Upgrade Ramp Include lay by areas to Ramp for safer entry/egress, and added use of non-powered vessels that utilise River (canoes, kayaks, etc Public convenience improvements
Grant	Glenelg River (New – East side of River)	Access Tourism	Lay by wharf Signage On shore facilities	Wharf to provide entry/egress for powered and non-powered vessels that utilise River. Links to significant tourism trails (Great South Coast Walk) Tourist facilities
Grant	Carpenter Rocks (West)	Access Safety	Formal boat ramp Signage	Commercial fleet difficulty to safely (for general public and marine users) remove commercial vessels marine environment. Safe launching of tender vessels Safety signage
Grant	Glenelg River	Access Navigational Aids	Destination opportunity (inadequate)	Need destinations along Glenelg River Include powered sites Include campgrounds

7. Strategic planning for the future

7.1 Strategic priorities

In consideration of the research and consultation undertaken, this report proposes three key priorities, and three supporting priorities to underpin the strategic plan.

The three common priorities which emerged from our analysis and consultation are:

- Activating key boating hubs
- · Connecting key boating routes
- Improving safety outcomes

These three key priorities are underpinned by three supporting priorities:

- Boating safety and regulatory frameworks
- Delivery framework
- Boating information network

ACTIVATING KEY BOATING HUBS

Activating Key Boating Hubs involves identifying key strategic sites and projects for new and/or reinvestment that provide attractive destinations for boaters, including opportunities to disembark and take advantage of land based attractions.

This addresses DPTI corporate objectives:

- Marine infrastructure enables the safe and efficient movement of people and boats, with predictable and consistent travel times; and
- Marine infrastructure is appropriately maintained and marine infrastructure information is easily accessible.

The key actions that could support this priority are:

- Activation of the River Murray, and in particular the Lower Lakes and The Coorong waterways;
- Activation of the Port River, in particular Port Adelaide and the Inner Harbor; and
- Ensuring continued access to the major boat ramps on the Adelaide metropolitan coast, and maintaining their condition.

RIVER MURRAY, THE LOWER LAKES, AND THE COORONG

South Australian boating is centred on key coastal and riverine destinations. Boaters from Adelaide and its surrounding suburbs travel to the River Murray, the Lower Lakes, or The Coorong, and contribute to boating tourism in the State. Feedback is that 80% of River Murray boaters come from Adelaide and suburbs and around 14% are interstate visitors.

Stakeholders have labelled areas of the region as the '*Kakadu of the south*' and identified the need to provide destinations and / or connect the bodies of water comprising the rivers, lakes and lagoons.

There is also an identified need to improve infrastructure at destinations including for short-term day or for overnight stays and longer term cruising.

Improvements are also needed as a consequence of the effects of past droughts, with boating and tourism businesses in the region suffering from the long-term consequences of the drought.

The Lower Lakes and Coorong Tourism Boating Group, which incorporates mayors, CEO's and / or infrastructure managers for the relevant councils, has suggested numerous enhancements that will improve boating and increase boating participation including destination infrastructure, navigation aids and safety and navigation information.





THE PORT RIVER AND PORT ADELAIDE

The Port River and Port Adelaide, including the Inner Harbor, offer outstanding destinations for boaters and boating stakeholders. Any activation of the Port and Inner Harbor will provide employment, and land-based tourism opportunities, complementing redevelopment of port areas and providing an improved opportunity to connect boating destinations and hubs.

With over 75% of boaters residing in Adelaide and its suburbs, the potential to increase boating participation through activation of this area provides an outstanding opportunity.

One group, the Port Adelaide Renewal Project (PARP) team, has taken specific action towards the activation of Port Adelaide and the Inner Harbor. The PARP is working with the City of Port Adelaide Enfield Council to propose delivering a range of early activation projects aimed at revitalising the Port Adelaide Regional Activity Centre. These include:

- Cruickshank's Corner as a major waterfront public park, promoting increased use of the existing beach and boat ramp.
- Facilities on the southern side along the wharf on either side of the Nelson St Bridge with additional berthing pontoons.
- A floating walkway to connect berths and support personal safety, and potentially assist in minimising demand for the bridge to be raised.

This kind of project is not necessarily something that could be supported by the Facilities Fund as it would be part of a much a larger urban renewal strategy, however it is an example of where the interaction between boating and land based destinations could be enhanced.

BOATING INFRASTRUCTURE ACROSS THE ADELAIDE METROPOLITAN AREA

Infrastructure along the Adelaide metropolitan coast is needed to support over 190,000 licence holders who show their residence in Adelaide and its suburbs. Ensuring continued access to the current infrastructure, and keeping it in good condition, is essential to keeping open the popular destinations in the metropolitan waterways and in the Gulf. Easy access will continue to encourage boating and support domestic tourism.

The key locations are:

St Kilda boat ramp,

- O'Sullivan Beach boat ramp,
- West Beach boat ramp,
- Access from marinas including the Royal South Australian Yacht Squadron, Marina Adelaide, including the adjacent public boat ramp and Cruising Yacht Club; and
- Port Vincent as the first safe haven across the Gulf.

CONNECTING KEY BOATING ROUTES

Connecting Key Boating Routes involves providing infrastructure to allow for longer and more enjoyable journeys, by connecting destinations. It meets the DPTI corporate objective:

• Marine infrastructure enables safe and efficient movement of people and boats, with predictable and consistent travel times.

Our key actions that support connecting key boating routes:

- Connection of boating areas in the Lower Lakes and The Coorong;
- Enhancement of boating routes between the Port River, metropolitan boating areas and popular coastal tourism hubs;
- Connection / promotion of cruising areas between Port Lincoln, other boating destinations in the Eyre Peninsula, the Joseph Banks Group, Boston, Wedge and Thistle Islands; and
- Connection of Adelaide boating infrastructure from cruising bases at North Haven (CYC), the Royal South Australian Yacht Squadron, Marina Adelaide and from Port Vincent

Connecting places, in particular for cruising boats, yachts, recreational fishing boats, and houseboats is a strongly desired enhancement. Safe havens, and moorings at popular destinations, are a highlighted need in areas of the Murray Region and in the South Eastern and Western regions.

Other key issues are to allow for boating infrastructure within larger infrastructure developments; and to provide funds for important boating facilities in localities which have few ratepayers, but which are widely used by visiting boaters.

Key areas are:

- The Murray, Lower Lakes and The Coorong;
- The Port River, metropolitan boat ramps and connections with the Gulf of St Vincent cruising and fishing locations; and
- Port Lincoln and cruising destinations in the Eyre Peninsula and islands.







IMPROVING SAFETY OUTCOMES

Signage and navigation aids are important contributors to safety and the boating experience. Signage can indicate restrictions including speed limits, location of services and amenity, information about tides and weather, fishing limits as some of the main examples.

Safety infrastructure includes navigation aids, such as buoys, beacons and markers to assist boaters in identifying where they can navigate. This includes channel markers, and danger marks, for example, where there is an obstruction to safe navigation.

Amongst the considerable numbers of boat-launching assets for each region, safety is an important criterion in the design and maintenance. Maintaining and modernising local infrastructure, addressing slip and trip hazards, removing algae etc., are all best done at the local level.

At the state-level, destination moorings improve the boating experience and can provide a safe haven. Navigation aids, including buoys, beacons and markers were identified for improvement across all regions. Larger projects with a safety component include proposed developments at Marion Bay, which would provide a safe haven; and Emu Bay which would assist emergency servicing and reduce response time.

7.2 Priority projects

This study has identified a wide range, and significant numbers, of boating facilities in all regions, many of which have received funding from the facilities levy. With a state-wide plan, more expensive projects with a bigger impact can be achieved. It is proposed that grant funding for future infrastructure projects should address the strategic goals:

- Activate a boating hub or provide a new destination;
- · Connect key boating routes; and
- Improve safety outcomes.

These three goals provide a way of prioritising the many potential projects identified during the consultation for this report. Projects which meet the first two goals provide additional state-wide benefits, most directly in enabling boaters to have a better experience, and to take longer journeys. Projects which address the third goal should also be considered, particularly those which fill in gaps in safe havens. In addition it is essential to review the location and disposition of boating facilities more broadly to determine whether they are in the right location and meeting the right outcomes. Whilst there may be a proliferation of facilities in some locations other locations are left wanting and it is important that the gaps are identified and used to assist in the prioritisation of new projects.

Of the projects suggested during the consultation process, those following have the highest priority according to these goals.

Priority Addressed	Action	Region	Comment
Activating Key Boating Hubs Connecting Boating Routes	Activation of the Port River including Port Adelaide and the Inner Harbor	Central	A wide variety of boating experiences, close to the majority of SA boaters, connected to the revitalisation of the Port
Activating Key Boating Hubs Connecting Boating Routes	Activation of the River Murray and activation of the Lower Lakes and The Coorong waterways	Murray	Better stays, longer stays boost boating tourism, opening up river towns, and creating new cruising opportunities
Activating Key Boating Hubs	Secure and upgrade the Adelaide	Central	The busiest launching points for most SA boaters

Priority Addressed	Action	Region	Comment	
Connecting Boating Routes	metropolitan ramps			
Improving safety outcomes	Provide improved access at Emu Bay boat ramp	Central	Fills gap in access to Kangaroo Island coast	
Connecting Boating Routes Improving safety outcomes	Improvements to Marion Bay Boat Ramp	Central	Improve launching and provide safe haven for boaters crossing to and from Pt Lincoln	
Connecting Boating Routes Improving safety outcomes	Provide courtesy moorings at strategic locations	All regions	Many small projects best delivered at a state-wide level. Improves journeys, provides safe havens	
Improving safety outcomes	Navigation Aids	All regions	Many small projects best delivered at a state-wide level. Improves journeys, provides safe havens	
Improving safety outcomes	Marine Radio	All regions	Complete the modernisation of the marine radio network	

7.3 Supporting priorities

Apart from expenditure of the facilities levy, this report identifies three areas of related work:

- Boating safety and regulatory frameworks
- Delivery framework
- Boating information network

These areas of work are described below, and recommended for consideration by relevant agencies.

7.3.1 BOATING SAFETY AND REGULATORY FRAMEWORKS

The public consultation identified areas for improving both boating safety regulations, and the approval processes for infrastructure. Addressing these will meet the DPTI objective:

Marine infrastructure shall be managed to achieve the vision for marine safety.

Life jacket wear is attributed to lowering the number of boating deaths in recent years. Australia is a signatory to the *International Lifejacket Wear Principles*. Feedback to date is that regulations should be updated to *encourage* life jacket wear and keep mandatory wear regulations to certain conditions of heightened risk. Education ahead of regulation, including for on and off-water boating behaviour and speed, is an important approach. Key steps are consulting on any proposed changes and clarifying that it is not intended that life jacket wear is mandatory for houseboats.

There is a need to align planning and boating regulations so that boating access and participation can be sustained and improved.

Poorly maintained boats on the River Murray have become a problem in recent years and there is a need to review legislation and regulations concerning houseboats on the River Murray to improve standards and safety.

The potential to establish a single River Murray Authority to address any planning related matters such as strategic planning, land use controls, development opportunities, appropriate development related

policies, infrastructure and services provision, may be achieved under the State Government's current planning reforms which facilitate, among other things, the establishment of 'joint planning boards'. The combination of a joint planning board and local area planning would allow for a better integrated and coordinated approach to planning and boating issues. With the introduction of the Act, South Australia's planning system will be vastly modernised. For more information on the planning reforms please visit Plan SA

Specific initiatives could include:

Safety and Education

- Revising current safety regulations to encourage life jacket wear;
- Developing an education campaign for boaters, to be delivered off-water at access points, to cover speed, safe boating behaviour and life jacket wear, in consultation with councils and boating stakeholders; and
- Preference for resources to be applied to education at the ramp, rather than on-water compliance patrols.

Regulatory framework

- Establishing a single River Murray Authority through the current suite of planning reforms;
- Investigating opportunities to simplify planning approval processes for boating infrastructure identified in the Plan; and
- Improving access for boats at metropolitan beaches.

7.3.2 DELIVERY FRAMEWORK

Modernising the *Delivery Framework* through the plan, is a key element to the continuing success of the funding. It meets the DPTI objectives:

- Marine infrastructure shall be managed to achieve the vision for marine safety; and
- Marine infrastructure is managed in a way that optimises the use of available resources.

Support for the Marine Facilities Fund remains solid, with large numbers of projects funded since its inception (see map provided in Appendix A). Updating the process through alignment with the plan, ensures that funding is considered within a framework of long-term strategic considerations.

Improving project governance could be supported through a new approach, which could see the introduction of:

- Alternative governance frameworks or terms of reference with regards to the acquittal, allocation and management of marine facilities levy funds;
- Prequalified panel consultants engaged as part of project delivery to provide specialist design and constriction verification, and provide guidance on costs and maximising synergies;
- Standards and guidelines for infrastructure design that consolidate engineering standards for boating infrastructure including boat ramps, jetties and pontoons; and
- Closer integration with other agencies at the State and Federal level to align funding for strategic projects, including Regional Development Australia (RDA) Local Government, and the Department of Environment, Water and Natural Resources (DEWNR).

7.3.3 BOATING INFORMATION NETWORK

A Boating Information Network will support boaters and meet the DPTI objective:

 Marine infrastructure is maintained appropriately and marine infrastructure information is easily accessible.

Boaters, boating businesses and other stakeholders all highlighted the need for accurate and timely information as a key factor for improving the boating experience and increasing boating participation.

DPTI currently maintains an information hub for boaters on its website, which includes the "OnDeck' page, and the *South Australian Recreational Boating Handbook*. Stakeholders would like to see the information expanded to include information that is essential for safety, such as navigation maps, available electronically as well as hard copies. Boaters also want apps that can assist with boating information.

The radio network is an important tool for safe boating and participation in logging on and logging off can be increased through better information and promotion of the benefits of using the radio network.

Signage at boating access points needs to be consistent across agencies and councils.

Education needs to be targeted to specific issues and delivered at popular access points.

Providing relevant data in an open and transparent way that does not affect the privacy of individuals or businesses will support businesses and the industry to inform forward planning.

Specific initiatives could include:

Safety information

- Developing information including navigation maps to assist boaters
- Investigating opportunities to develop or use existing technology including apps to assist boaters
- Working with emergency groups and the Boating Industry to promote the radio network and encourage log-on / log-off practices by all boaters

Signage

 Working with Councils and agencies to provide consistent signage at boat ramps and other boating infrastructure

Technical information

 Publishing regular information about the boating sector and investigating the cost of allowing boaters to update non-critical information about their boats, where they go boating and where boats are primarily stored

Profile-raising information

- Working with Council and local tourism groups to develop material about boating in the region
- Investigating opportunities to improve promotion of cruising routes and the development of promotional material for key cruising areas for the State.

8. Conclusions and next steps

In consideration of the research and consultation undertaken, this report proposes three key priorities that will underpin the strategic plan.

These are:

- Activating key boating hubs
- Connecting key boating routes
- Improving safety outcomes

There are many projects and initiatives that stakeholders have identified and these have been collated and will form a comprehensive listing for consideration and prioritisation in accordance with these objectives. Whilst the study sought to identify all initiatives, at a point in time there will be new initiatives that will surface as a result of changing trends, demographics, community and government needs. The plan will be a fluid document that is a guide to optimise investment in our boating facilities for the future.

Following receipt of comments from consultation on this draft report, the *South Australian Boating*Facilities Strategic Plan will be finalised and a framework will be produced to assist in using the plan to assess and prioritise funding applications to the Marine Facilities Fund.

Appendix A State Map identifying boat ramp locations with a previous Marine Facilities Fund contribution

