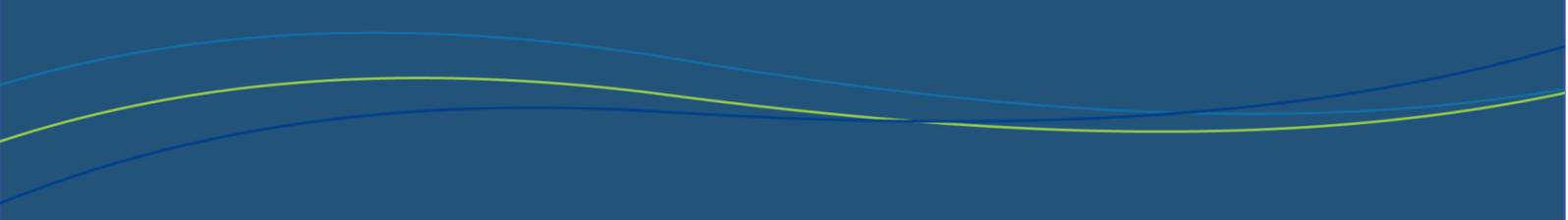




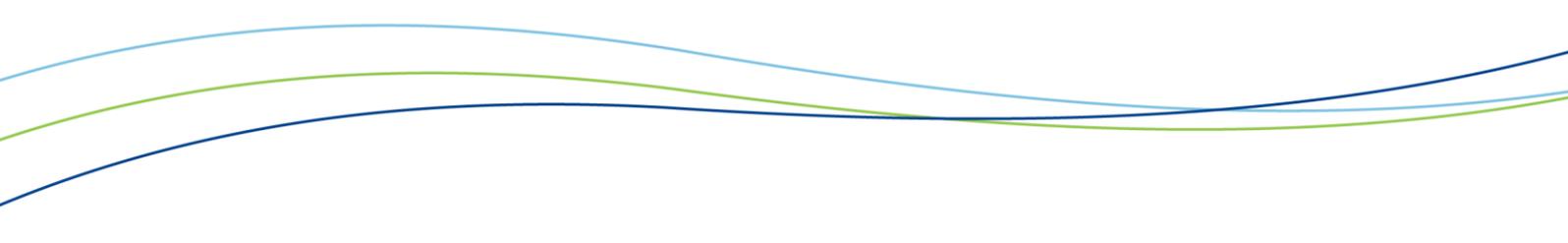
District Council of
Loxton Waikerie
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Houseboat Management Plan

Adopted by Council 20 May 2022



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REPORT

Houseboat Management Plan

District Council of Loxton Waikerie

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APPENDICES

APPENDIX A

Research and Investigations Report

1.0 INTRODUCTION

Golder Associates Pty Ltd (Golder) has been engaged by the District Council of Loxton Waikerie (Council) to prepare a Houseboat Management Plan which is intended to:

- Document the way in which Council's houseboat mooring sites and associated resources are currently used and managed; and
- Establish a clear way forward for future works and infrastructure renewal to optimise the use of Council's existing and future houseboat mooring facilities.

Given that the Council area provides a host of opportunities for people to access and use the River Murray for recreational and tourism-based activities, the efficient management of houseboat mooring sites is of critical importance to the local and regional economy. Council's desire to enhance the socio-economic benefits arising from the houseboat industry is shaped, nonetheless, by its objective to ensure that mooring sites and associated facilities are managed responsibly and in a fashion that supports the ongoing health of the River Murray. Adhering to this objective will help preserve the environmental attributes that attract residents and visitors to the region.

This Houseboat Management Plan (HMP) has been developed to provide Council with a robust and forward-looking strategy to sustainably manage the accommodation and movement of houseboats in and through the Council area into the future.

1.1 Plan Objectives

Council's key interests in developing the HMP are as follows:

- To manage its houseboat mooring sites and associated facilities sustainably with an emphasis on maintaining the health of the River Murray.
- To encourage tourist visitation and bring more commercial houseboat operators into the Loxton Waikerie district to facilitate economic development.
- To identify opportunities for upgrades of Council-operated mooring facilities at Waikerie, Loxton and Kingston-on-Murray, and potential expansion of facilities at Kingston-on-Murray.
- To establish budget priorities for work on mooring sites based on opportunities for upgrades/expansions.
- To assess mooring opportunities at Moorook and Ramco.
- To review conditions of current licence arrangements.
- To seek stakeholder/community views of future development opportunities at Council's mooring sites.
- To seek stakeholder/community views about encouraging development of private houseboat moorings adjacent private land as a way of increasing opportunities for houseboat owners to moor.

1.2 Approach

A range of investigative activities have been undertaken to support development of the HMP as follows:

- Site visit with Council staff.

Golder staff visited Waikerie and surrounds on Thursday 18 June 2020 to assess mooring sites identified by Council, including those at Waikerie, Holder Bend Reserve, Kingston-on-Murray and Moorook. While sites at Loxton and Ramco were not visited by Golder staff, Council have visited these sites on numerous occasions and a desktop assessment of these sites was undertaken and included in the detailed site analysis.

■ Research and investigations.

A desktop review of Federal, State and local government plans and policies considered relevant to the development of the HMP was undertaken to determine how these might shape Council's management of houseboat mooring sites and the ongoing health of the River Murray. The outcome of this review is presented in Section 2 below.

■ Site analysis.

An environmental assessment of established and potential mooring sites in the Council area was completed to:

- describe the existing environmental conditions at each site;
- document current houseboat use of each site; and
- discuss issues and opportunities associated with houseboat moorings on each site.

The results of this analysis are presented in Section 3 below.

■ Stakeholder/community survey

A short survey aimed at existing houseboat operators and interested members of the community was prepared to better understand how people view houseboats and mooring/marina sites within the Council area. Survey outcomes have been weaved into the analysis presented in Section 3 below.

■ Council workshops

Two interactive workshops with Council Elected Members were conducted during the course of the study. The first workshop took place on 5 November 2020 and focused on communicating the results of the site analysis and stakeholder survey. The second workshop was held on 25 May 2021 and reported the results of the stakeholder/community workshops discussed below. Feedback from Elected Members has been used to shape the outcomes presented in Sections 4 and 5 below.

■ Stakeholder/community workshops

Two stakeholder/community workshops were held in Waikerie and Loxton on 4 March 2021 which sought to:

- understand the experience and interests of houseboat operators using Council mooring sites;
- discuss issues and opportunities associated with existing mooring sites; and
- determine potential mooring opportunities at other mooring sites.

Workshop outcomes have been weaved into the analysis presented in Section 3 below.

2.0 STRATEGIC CONTEXT

2.1 Relevant Plans and Strategies

A desktop review of strategies, plans and policies considered relevant to the development of the HMP has been undertaken to provide an appropriate context to the HMP and demonstrate how Council's management of houseboat mooring sites might be shaped by these initiatives.

The following table summarises the outcomes of this review. A more detailed account is available in the Research and Investigations Report (attached as Appendix A).

Table 1: Relevant plans, strategies and policies

Commonwealth Government	
Plan/Strategy/Policy	Relevance to Houseboat Management Plan
Murray-Darling Basin Plan	<p>Developed in 2012 in the aftermath of the long drought, this plan seeks to limit the amount of water that can be taken from the Murray-Darling Basin system without compromising the health of the River Murray.</p> <p>Draws attention to the critical role the River plays in supporting local economies and communities along its reach and confirms that efforts to attract tourists and visitors to the region remain dependent on maintaining, and preferably enhancing, the health of the River Murray.</p>
Basin Salinity Management Strategy 2030	<p>This plan aims to enhance the health of the River Murray through improved irrigation, vegetation and salt interception regimes.</p> <p>Reinforces the importance of managing the health of the River to attract tourists and visitors to the region through increased houseboat use.</p>
South Australian Government	
Plan/Strategy/Policy	Relevance to Houseboat Management Plan
Budget Paper 2019-2020 State Infrastructure Strategy	<p>Highlights the importance of:</p> <ul style="list-style-type: none"> ■ promoting tourism to facilitate economic and employment growth. ■ ensuring the ongoing health of the River Murray. ■ maintaining/enhancing water-related infrastructure.
Boating Facilities Strategic Plan	<p>Identifies three key priorities: i) activating boating hubs, ii) connecting boating hubs and iii) improving safety. Identifies future funding streams for infrastructure to support houseboat operators.</p>
Guide to Marina and Mooring Structure Development along the River Murray	<p>Specifies standardised assessment criteria for new mooring opportunities along the River that Council is required to implement. The Planning and Design Code (Phase Two) provides updated criteria to that provided in the Guide but retains a focus on maintaining/improving the health of the River.</p>
Code of Practice for Vessel and Facility Management	<p>Assists houseboat operators to comply with their general environmental duty to fulfil obligations under the Environment Protection Act, particularly in relation to water quality.</p>
Water Quality Policy	<p>Notes compliance requirements to maintain and improve water quality, particularly through waste management and refuelling practices.</p>

Local Government – District Council of Loxton Waikerie	
Plan/Strategy/Policy	Relevance to Houseboat Management Plan
Loxton Waikerie Strategic Plan 2015-2020	Key initiatives include i) development of a caravan park on the Waikerie Riverfront, ii) implementation of the Boating and Riverfront Facilities Plan (see below) and iii) implementation of outcomes sought by Council's Houseboat Mooring Management Committee.
Boating and Riverfront Facilities Plan	Prioritises boating and riverfront facility projects so that further funding applications can be made.
Allocation of Houseboat Mooring Policy	Determines how the allocation of houseboat moorings are managed.
By-Law 2: Manage and regulate access to and use of Local Government land and public places	Specifies where launching, retrieving and mooring houseboats is allowed, including land adjacent to or on any Local Government land or foreshore for which Council is responsible.
Renmark Paringa Council Houseboat Management Plan	Seeks to provide clarity and guidance to houseboat operators of Council's role in the industry.

The key points to emerge from the review of plans, strategies and policies considered relevant to the HMP are as follows:

- 1) Realising local and regional economic benefits through growing the tourism and houseboat industries is fundamentally dependent on the ongoing health of the River Murray. It is imperative that this HMP strikes an appropriate balance between promoting houseboat activities on the one hand and managing the riverine environment in a way which preserves the very attributes that attract houseboat use on the other. The potential conflict between encouraging greater use of houseboats and maintaining, or preferably enhancing the health of the River Murray is significant and will require careful management and ongoing oversight by Council.
- 2) While there is general recognition across all levels of government of the importance of the River Murray to the communities and environments through which it passes, there is little formal acknowledgement of the potential impacts of the houseboat industry on those communities and environments aside from issues of water quality. As a result, there may be a host of missed opportunities to directly connect houseboating activities with initiatives promoting river health. It is considered that exploring such connections in the Loxton Waikerie Council area and in the Murray-Mallee region more generally would be of some benefit.
- 3) The South Australian Government provides a range of funding opportunities for maintenance and enhancement of the infrastructure supporting water activities and riverine health along the River Murray, some of which could be accessed by Council to promote environmentally responsible practices amongst houseboat operators.

2.2 Riverfront Redevelopment

The *Waikerie Riverfront and Trails Masterplan* has been developed by Council in partnership with the Waikerie Delivers Committee to respond to the needs of the Waikerie community and enhance the experience of the River Murray for visitors to the town. The project to bring the masterplan into effect is nearing completion and has created:

- Lawned amphitheatre event space with raised wall seating;
- Water play zone connected to the sandy beach on the riverfront;
- Public shelters, barbeques, and seating areas;
- Wayfinding signage; and
- Landscape plantings, lawns, and lighting.

Completion of the project is likely to boost commercial, recreational and place-making activity in and around the Riverfront, attracting more tourists to Waikerie and providing an economic boost to the town and the region more generally. It is also likely to make the Waikerie riverfront a more desirable location for mooring houseboats. For this reason, it is recommended that Council consider how best to improve houseboat mooring sites on the Waikerie riverfront to optimise the potential community benefits arising from the Riverfront project. Potential improvements are discussed in ensuing sections.

3.0 SITUATIONAL ANALYSIS

This chapter discusses the results of the desktop investigations, detailed site analysis and engagement with houseboat operators.

3.1 Baseline Conditions

Data on baseline conditions of relevance to the HMP was provided by Council and is discussed in the following sections.

3.1.1 Mooring Sites

Council currently operates three (3) on-river mooring sites at Waikerie (Edgar Barlett Drive), Loxton (Habel Landing) and Kingston-on-Murray (River Terrace) offering a total of 67 individual moorings. There is a high level of occupancy across all three locations and the demand for mooring sites remains high with some 49 people currently on the waiting list.

Council has identified the potential to establish future mooring sites at Moorook and Ramco where a small number of houseboats are currently moored despite there being no formalised mooring sites available. The capacity of these sites to accommodate houseboats is discussed in Section 3.2.2 below.

3.1.2 Houseboat Operators

There are two principal houseboat user groups that this HMP seeks to address: commercial users and private users. Commercial houseboat operators are generally owners of houseboats available for hire used primarily by visitors and tourists. Commercial operators play an important role in bringing tourism to the region and providing a positive economic boost to businesses across the Council area. In order to optimise these economic benefits, it is considered that commercial mooring sites should be located in close proximity to township facilities and services to encourage visitors to spend money at local businesses.

Private houseboat operators are predominantly local residents / ratepayers who own a houseboat for recreational use. These operators generally require sites for secure and long-term mooring that allow for convenient use of the river as well as safe storage of the houseboat asset. Key locational requirements for private houseboat operators are the availability of secure parking and easy vehicle access to the site.

However, it is worth noting that in more recent times private houseboat owners are increasingly looking to hire out their houseboats to meet short-term accommodation demand in the Council area. The short-term hiring of private houseboats would be considered on an individual basis, with the responsibility of ensuring all legislative and regulatory requirements were up to date falling on the individual owner. This gradual commercialisation in the use of private houseboats, presents an opportunity to attract more visitors to the region in order to boost economic development.

3.1.3 Licences

The allocation of mooring sites is currently managed through a licensing system on a 'first-come, first-served' basis. In allocating these licences, Council is mindful of the need to strike an acceptable balance between catering for local residents / private houseboat operators on the one hand, and visitors whose use of mooring sites occurs primarily via commercial houseboat operators on the other. At present, all licences for mooring sites are offered for a 12-month tenure which is consistent across all mooring locations for both commercial and private houseboat users within the Loxton Waikerie council area. As licences are able to be automatically renewed on payment of an annual fee, most licence holders have secured long-term leases of Council's mooring sites with an estimated 66% having leased a mooring site for five (5) years or more. Licences are generally transferred when the houseboat is sold, exchanged or replaced.

Table 2: Summary of site attributes

	OCCUPANCY				FACILITIES				ISSUES & OPPORTUNITIES
	Private use	Commercial use	Vacant / unuseable	TOTAL / (waiting list)	Power, water, fuel	Solid & liquid waste	Parking, lighting, toilets	BBQ, picnic, play	
Waikerie	28	10	7	45 (23)	√√√	√√	√x√	√√√	High demand; poor signage; good access to facilities; user conflicts; inconsistent quality of mooring sites.
Loxton	7	-	-	7 (12)	√xx	x√	xxx	xxx	High capacity; limited facilities; limited access; distance from town.
Kingston-on-Murray	9	1	-	10 (15)	√xx	√x	√x√	√√√	Attractive location; capacity to expand; limited facilities; low water depth; user conflicts.
Potential mooring sites									
Moorook	2 temporary mooring sites; some capacity				xxx	√x	xx√	√√√	Attractive location; low water depth; limited capacity; limited facilities; local resident disquiet.
Ramco	No formal mooring sites; significant capacity				xxx	xx	√xx	√√√	Popular location; limited access; limited facilities; user conflicts; potential flooding issue.
Holder Bend	No formal mooring sites; some capacity				xxx	xx	√xx	xxx	Proximity to Waikerie; limited facilities; bank erosion/flooding issues; user conflicts.

3.2.1 Existing Mooring Sites

There is clearly a strong demand for mooring sites across the Council area with all existing sites fully occupied and a significant number of houseboat operators on the waiting list at each site. However, there are significant inconsistencies in the level of facilities provided at each site, which in the context of having a 'one-size-fits-all' licensing fee, raises issues of fairness in facility provision.

The results of the survey indicated that the most desirable facilities at mooring sites, in order of priority, are:

- Secure parking;
- Solid waste disposal;
- Lighting;
- Liquid waste disposal;
- Potable water supply;
- Power; and
- A boat ramp.

The following sections discuss the site attributes, level of service provision and capacity of each mooring location to accommodate an expansion in houseboat use. This analysis includes information drawn from the stakeholder/community survey and stakeholder workshops.

3.2.1.1 Waikerie

The Waikerie Riverfront is an extensively lawned bank with some patches of trees and vegetation. The area is divided into two sections: the Riverfront Development area and the Riverfront Redevelopment area (Figure 2) which together provide houseboat operators with access to the most comprehensive set of facilities of all Council's mooring locations (Table 2). The Waikerie riverfront has recently been significantly upgraded and provides an attractive location for visitors and local people to enjoy the river.

Around 16% of sites are currently vacant and unusable along the Waikerie riverfront, however, with upgrades needed to make these sites suitable for use. Survey respondents and workshop participants indicated that existing tie-up points are poor and that the riverbank is eroding in places, making access to mooring sites increasingly difficult. Despite these limitations, the Waikerie riverfront is clearly seen as the most desirable location for houseboat users across the Council area.

The near completion of the Riverfront Masterplan project provides an ideal opportunity to improve the quality of mooring sites along the Waikerie riverfront, particularly for commercial operators. As some houseboats, generally commercial houseboats, are larger and require more mooring space, it may be advantageous to convert a small number of mooring sites along the riverfront to wider mooring sites for use by houseboat operators with larger vessels. For instance, the sites that are currently vacant and unusable could be de-commissioned with a view to making improvements to remaining sites and widening a small number of sites that could be allocated to operators with larger vessels. Making sites more attractive to houseboat operators would confer similar economic and social benefits to those expected from the Masterplan in that visitors and residents would be encouraged to spend more time and money in the town, boosting visitation, tourism and business development across the Council area.

Specific improvements proposed by survey respondents and workshop participants include:

- Providing mooring posts of consistent quality;
- Installing clear signage to guide riverfront users of what uses are allowed in particular areas;
- Widening the access road;
- Providing improved access for mobility-impaired people;
- Establishing power and mains water access at all mooring sites; and
- Improving access to the existing solid waste area at the pump-out facility.



Figure 2: Waikerie Riverfront Mooring Sites

Workshop participants were particularly concerned with the conflicts between the various users of the river, namely houseboat operators, skiers, swimmers and rowers. There was general agreement that areas should be set aside for different activities as follows:

- Locate swimmers and rowers adjacent to the Ferry (after consultation with the Waikerie Ski Club);
- Locate houseboat operators immediately downstream of the area for swimmers and rowers; and
- Locate skiers further downstream alongside the existing boat ramp.

3.2.1.2 Loxton

The riverfront area at Loxton accommodates seven (7) houseboat mooring sites with an additional twelve (12) sites recently returned to Council after cessation of a lease previously provided to a commercial operator. However, these mooring sites are located approximately three (3) kilometres downstream to the west of the town making access to local shops and facilities difficult. Despite this constraint, an additional five houseboats have been purchased recently by people within the local community, indicating the need to expand the provision of mooring sites at Loxton.

Survey respondents and workshop participants identified the following issues with mooring sites at Loxton:

- Narrow width of river;
- Poor tie-up points;
- Inconsistent condition of mooring posts;
- Reed build-up tends to fray mooring ropes, increasing the risk of houseboats becoming insecure;
- Narrow access road allows only one car to use the road at any time, has no turnaround area and requires upgrade;
- Stormwater migration through the site causes erosion and a build up of silt which makes mooring difficult; and
- Inconsistent provision of services between Council managed moorings and the leased area (noting that the existing long-term lease was returned to Council management in late 2021).



Figure 3: Loxton Mooring Sites

Council has recently received funding for a Loxton river tourism project that will be used to address these issues, by upgrading the area (including paths and access to boats), providing access to electricity and beautifying the mooring area at Loxton. Survey respondents and workshop participants indicated that the provision of temporary/short-term mooring locations at the Wharf/Landing area within Loxton would provide opportunities for houseboat users to access the town centre, in turn boosting tourism and economic development.

3.2.1.3 Kingston-on-Murray

The Kingston-on-Murray riverfront area has ten (10) permanent mooring sites set within an attractive area of mature trees and lawns providing barbeques, toilets, power, solid waste facilities and a boat ramp. Most of these sites are occupied by private houseboat operators with four (4) temporary mooring sites available for passers-by.

Survey respondents noted a number of issues with the existing mooring sites including:

- Few (insufficient) tie-up points;
- Lack of signage;
- Partial collapse of the embankment;
- Shallow depth of mooring sites which require regular dredging;
- Nearest pump-out station (which is not a Council asset) is out of order; and
- Increased use of ski boats and jetskis with users showing little regard for river rules (4 knot speed limit within 50 metres of a mooring site).

Despite these issues, houseboat users regarded Kingston-on-Murray as a favourable location with easy access to mooring sites and to the local general store for supplies. The site has capacity for expansion (towards the existing caravan park) in the future although this would require some attention to the site constraints noted above. Should such expansion occur, commercial houseboat operators may be attracted to Kingston-on-Murray which would boost business for the local store while enhancing the sense of security of other houseboat operators based there.



Figure 4: Kingston-on-Murray Mooring Sites

3.2.2 Potential Mooring Sites

There is potential to establish additional mooring sites across the Council area given that all existing sites are fully occupied and there are significant number of houseboat operators on the waiting list at each site. That said, it is considered that new mooring sites should only be established where demand exists and facilities are available.

The following sections discuss the site attributes and level of service provision at three (3) potential alternative mooring locations which includes information drawn from the stakeholder/community survey and stakeholder workshops.

3.2.2.1 *Moorook*

Moorook currently contains two (2) temporary (48-hour) mooring sites adjacent to a well-maintained and attractive public riverfront space with shelters, barbecues, toilets, solid waste facilities and a designated swimming area. Despite the limited number of moorings, Moorook is a popular destination for houseboat users as evidenced by houseboats mooring illegally in the area on a regular basis.

Council has recognised the potential to establish both temporary and permanent houseboat mooring sites to the east of the riverfront area at Moorook. This area is heavily vegetated at present, although this has not discouraged people from mooring boats there.



Figure 5: Moorook Mooring Area

It is considered that around three (3) mooring sites could be established on the Moorook riverfront with minimal vegetation clearance. As Moorook is relatively isolated compared to other mooring locations and the water is quite shallow at this location, these sites would be better suited to accommodating private houseboat users rather than commercial operators.

Survey respondents and workshop participants support the establishment of new mooring sites at Moorook and offered the following ideas for Council consideration:

- Provide a small number of temporary ‘stop and shop’ mooring sites (maximum half day parking limit) next to the existing pontoon to allow houseboat users to purchase fuel and supplies from the local store; and
- Provide for temporary mooring sites (maximum 72-hour limit) further upstream away from the pontoon and existing recreational area.

Establishing mooring sites on this basis would encourage increased visitation and tourism to the town which would facilitate economic growth in the area.

However, several concerns were raised in relation to the shallow riverbed in Moorook and potential user conflicts between skiers, jetskiers, swimmers and houseboat operators. There is also some disquiet amongst local residents about formalising houseboat moorings in the area.

3.2.2.2 *Ramco*

Ramco is located approximately eight (8) kilometres downstream to the west of Waikerie. The riverbank at this location is lined with vegetation exhibiting a varying degree of density in trees and shrubs (Figure 6). Ramco is a popular site for skiing and other water-based activities along the grassed area of the riverfront adjacent the existing boat ramp. Other facilities include a picnic area, barbeque and car park associated with a nearby campground.



Figure 6: Ramco Mooring Area

While there are no formal mooring sites located at Ramco, Figure 6 indicates that there is some potential to establish moorings along a significant stretch of the riverbank. Over one-third of survey respondents indicated that Council should establish mooring sites at this location. Workshop participants were less endeared to this idea, however, due to the following concerns:

- Flooding of the lagoon in this area limits access to the riverfront at times when houseboats need to be moved;
- Existing access tracks are unsealed;
- User conflicts; and
- Previous deliberations of Council's Houseboat Committee (approximately ten years ago) which indicate that Ramco is unsuited to accommodating houseboats on a permanent basis.

Given the significance of these issues, it is considered that Ramco should be promoted as a site for skiing and other water-based activities rather than for mooring of houseboats.

3.2.2.3 *Holder Bend*

Holder Bend Reserve is an attractive, well vegetated camping area located approximately two (2) kilometres upstream to the east of Waikerie (Figure 7). The area has no formal mooring sites; in part because Holder Bend is located on a bend in the river where the water flows rapidly and erodes a low lying bank, creating a flood risk. There are also potential issues associated with the area's proximity to the Waikerie Ski Club.

Although 10% of survey respondents indicated Council could establish mooring sites at Holder Bend, it is not considered a suitable mooring site for houseboats due to the risk of inundation and the potential for user conflict with skiers.



Figure 7: Holder Bend Potential Mooring Area

3.2.2.4 *Other Potential Locations*

Council has proposed a potential alternative initiative to reduce the pressure on existing mooring sites to accommodate an increased number of houseboats. This initiative would involve the development of private houseboat mooring sites adjacent to private land which would, if realised, provide for a significant increase in available mooring sites for private houseboat operators. It would also provide an opportunity for operators who own land along the river to develop mooring sites much closer to their residence, reducing the requirement to travel long distances to access their houseboat.

Workshop participants responded favourably to this proposal when it was raised during the workshop discussions. While the development of private mooring sites on private land would require Council to establish a suite of regulatory requirements in consultation/collaboration with State agencies, such as the Department for Infrastructure and Transport and the Planning and Land Use Services division of the Attorney-General's Department, it would increase opportunities for private houseboat operators to moor boats permanently at a location of their choice rather than being restricted to a limited number of mooring sites.

4.0 PROPOSED FUTURE

The investigations undertaken to inform the development of this HMP for the Loxton Waikerie Council area have sought to provide Council with a range of options for both managing its existing houseboat mooring sites and developing new houseboat mooring sites in a manner that is likely to encourage increased tourist visitation to the district while maintaining the health of the River Murray.

A number of options for Council consideration are presented in the following sections.

4.1 Existing Mooring Sites

Currently, there are three formalised houseboat mooring locations in the Council area at Waikerie, Kingston-on-Murray and Loxton. Given the existing constraints at each of these locations, expanding and improving the provision of mooring sites may require Council to invest in improved facilities at each mooring location. A consistent approach should be taken between locations, with a focus on:

- Providing mooring posts/tie-up points of consistent quality;
- Providing wider mooring sites to cater for larger houseboats;
- Improving access roads to each site, particularly at Loxton;
- Providing improved access for mobility-impaired people;
- Providing clear and consistent signage at each site that indicates:
 - where houseboat operators can moor;
 - where facilities for houseboat operators are located;
 - where other river users can engage in activities (to avoid user conflict); and
 - what speed limits apply in particular areas of the river.
- Providing and/or enhancing access to power, mains water and waste management facilities at all mooring sites.
- Investigate dredging of sites at Kingston-on-Murray.
- Changing the available mix of permanent and temporary mooring sites at each location.

4.2 New Mooring Sites

While there is some potential to establish additional mooring sites at Moorook, the analysis has indicated that there are significant constraints at Ramco and Holder Bend. Council could nonetheless consider the following options:

- Provide a modest number of permanent and temporary mooring sites at Moorook.
- Allow for the development of private houseboat mooring sites adjacent to private land. This would require the preparation and implementation of regulatory policy or criteria aimed at:
 - establishing minimum standards for mooring infrastructure (e.g., mooring posts, tie-up points, waste management); and
 - protecting the health of the riverbank and the River Murray more generally.
- In the long term, conduct a more detailed environmental and economic assessment of the potential to establish mooring sites at Ramco in the future.

4.3 Licence Arrangements

In addition, the analysis has indicated that Council would derive significant benefits by changing its approach to the issue of licences. Potential initiatives include:

- Allowing for short-term stays on houseboats that are not conditional on operators undertaking a *bona fide* journey.
- Developing a stratified licencing (and fee) system that distinguishes between:
 - annual licences for private houseboat operators who do not intend to hire their houseboats out to other parties;
 - annual licences for private houseboat operators who intend to hire their houseboats out to other parties for short-term stays; and
 - annual or long-term leases for commercial houseboat operators.
- Establishing new and flexible criteria for temporary mooring across the Council area.
- Allowing for licences to be swapped temporarily amongst houseboat operators to encourage those from outside of the Council area to visit the district.

Implementing all or some of the options put forward in sections 4.1 and 4.2 would greatly assist Council in meeting its key objectives for this HMP; specifically to boost tourism and economic development opportunities through an increase in houseboat use and visitation to the district. And by providing upgraded services and facilities at each mooring location, Council would be in a more favourable position to increase mooring and licencing fees to help offset the costs of these service and facility enhancements.

The following section proposes a suite of recommended actions for each mooring location that would give effect to this HMP.

5.0 RECOMMENDATIONS AND CONCLUSIONS

This HMP documents the way in which Council's houseboat mooring sites and associated resources are currently used and managed and proposes a way forward for future works and improvements to houseboat infrastructure and licencing arrangements across the Council district. As noted, the South Australian Government provides a range of funding opportunities for infrastructure supporting water activities and riverine health along the River Murray, which could be accessed by Council to implement some of the options presented in section 4 above.

5.1 Mooring Locations

Houseboat users – both private and commercial - are an important contributor to the economic development of the Loxton Waikerie Council area and this HMP aims to bring more houseboat operators into the district to encourage tourism and facilitate economic growth. Given their capacity to bring greater numbers of tourists to the district, Council is particularly interested in attracting more commercial houseboat operators and, to this end, is prepared to preference these operators in putting in place initiatives associated with this HMP.

The investigations have shown that in general, more mooring sites (including temporary mooring sites) are required across the Council area, and that these sites need to be provided with improved facilities, better access and clear signage.

To these ends, the following recommendations for the management of houseboats at mooring locations across the Loxton Waikerie Council area are made.

5.1.1 Waikerie

- De-commission sites that are currently unusable along the riverfront.
- Increase the number of temporary mooring sites available.
- To capitalise on the Waikerie Riverfront Masterplan project, enhance the quality of mooring sites along the riverfront by:
 - Replacing existing mooring posts/tie-up points with new mooring posts/tie-up points of consistent quality;
 - Ensuring that each mooring site has easy access to waste management facilities;
 - Providing wider mooring sites capable of accommodating larger houseboats\; and
 - Providing clear signage to guide houseboat operators and other river users of where they can access facilities, where they can engage in particular riverine activities and where speed limits around mooring sites apply.
- Provide improved access to the riverfront for mobility-impaired people.
- Set aside and designate specific areas of the river where different user groups have priority (pending consultation with each group) to address user conflict.

5.1.2 Loxton

- Provide a small number of wider mooring sites capable of accommodating larger houseboats.
- Create additional short-term mooring sites at the Wharf/Landing for both commercial and private houseboat operators to allow easy access to the town centre.
- Replace existing mooring posts/tie-up points with new mooring posts/tie-up points of consistent quality.
- Provide improved access for mobility-impaired people.
- Upgrade site access, including roads, paths and access to boats.
- Provide each mooring site with access to power, mains water and waste management facilities.
- The 12 mooring sites have been returned to Council following the cessation of the lease. Council has received a grant from the Federal Government for upgrades to the Habel Landing Marina. Following these works, the allocation of the moorings will be considered based on the outcome of the review of the *Allocation of Houseboat Moorings Policy*.

5.1.3 Kingston-on-Murray

- Provide a small number of wider mooring sites capable of accommodating larger houseboats.
- Expand the provision of mooring sites in the direction of the existing caravan park.
- Replace existing mooring posts/tie-up points with new mooring posts/tie-up points of consistent quality.
- Provide each mooring site with access to waste management facilities.
- Provide improved access for mobility-impaired people.
- Seek funding support from the South Australian Government to undertake a feasibility study on the conditions of the riverbank and enhance the stability of the embankment.
- Establish clear signage to ensure river users comply with speed limits around mooring sites.

5.1.4 Moorook

- Establish a small number of temporary 72-hour mooring sites upstream of the existing recreational riverfront area with access to waste management facilities.
- Establish 1 - 2 temporary 'stop and shop' half-day mooring sites adjacent the existing pontoon.
- Provide each mooring site with mooring posts/tie-up points of consistent quality.
- Investigate the provision of up to five (5) private houseboat mooring sites.

5.1.5 Ramco

- Undertake a detailed environmental and economic assessment of the potential to establish mooring sites at Ramco in the future.
- Encourage ski boat users and skiers to use Ramco by undertaking minor infrastructure upgrades to shelters, BBQs, lighting and toilets.

5.1.6 Holder Bend

- It is recommended that no mooring sites should be created at Holder Bend.

5.1.7 Other potential locations

- Provide for and encourage the development of private houseboat mooring sites adjacent to private land across the Council district.

5.2 Licencing

Given that commercial and private houseboat operators have different service requirements and location preferences, it is considered that fit-for-purpose licence conditions should be considered. Commercial houseboat operators, for instance, should be given priority at mooring sites in close proximity to services and facilities in order to promote economic development while private houseboat operators should be able to establish and occupy purpose-built mooring sites on private land along the river.

The following recommendations for licencing arrangements are made for Council consideration:

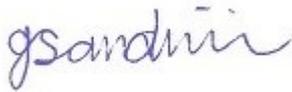
- Conduct a review of the Houseboat Mooring Policy into the allocation, fees and regulation of licences across the Council area.
- Consider developing a stratified licencing (and fee) system that distinguishes between:
 - private houseboat operators who do not intend to hire their houseboats out to other parties;
 - private houseboat operators who intend to hire their houseboats out to other parties for short-term stays; and
 - commercial houseboat operators.
- Establish new and flexible criteria for temporary mooring across the Council area.
- Allow for licence holders to swap mooring sites temporarily.
- Allow for short-term stays on houseboats that are not conditional on operators undertaking a *bona fide* journey.
- Increase allowable time spent on houseboat while moored at a permanent mooring site to be in line with camping regulations (7 days in 21 days).
- Disallow the transfer of mooring licences when houseboats are sold or transferred.

In conclusion, it is considered that Council should devote more resources to improving, upgrading and increasing capacity at existing sites rather than establishing new sites, especially given stakeholder support for the sustainable management of houseboat mooring sites and associated facilities and maintaining the health of the River Murray. A consistent approach across all current mooring locations should be taken, with priority given to the essential facilities (i.e. mooring posts/tie-up points, signage and access). Council would prefer that new mooring sites are established adjacent to private land by private houseboat operators. Council would not be supportive of privately owned mooring structures being constructed within Council's mooring sites.

It is also recommended that Council continue to meet with houseboat owners and operators as the Plan is implemented to ensure that open lines of communication are maintained.

Signature Page

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APPENDIX A

Research and Investigations Report



REPORT

Loxton Waikerie Houseboat Management Plan

Research and Investigations Report

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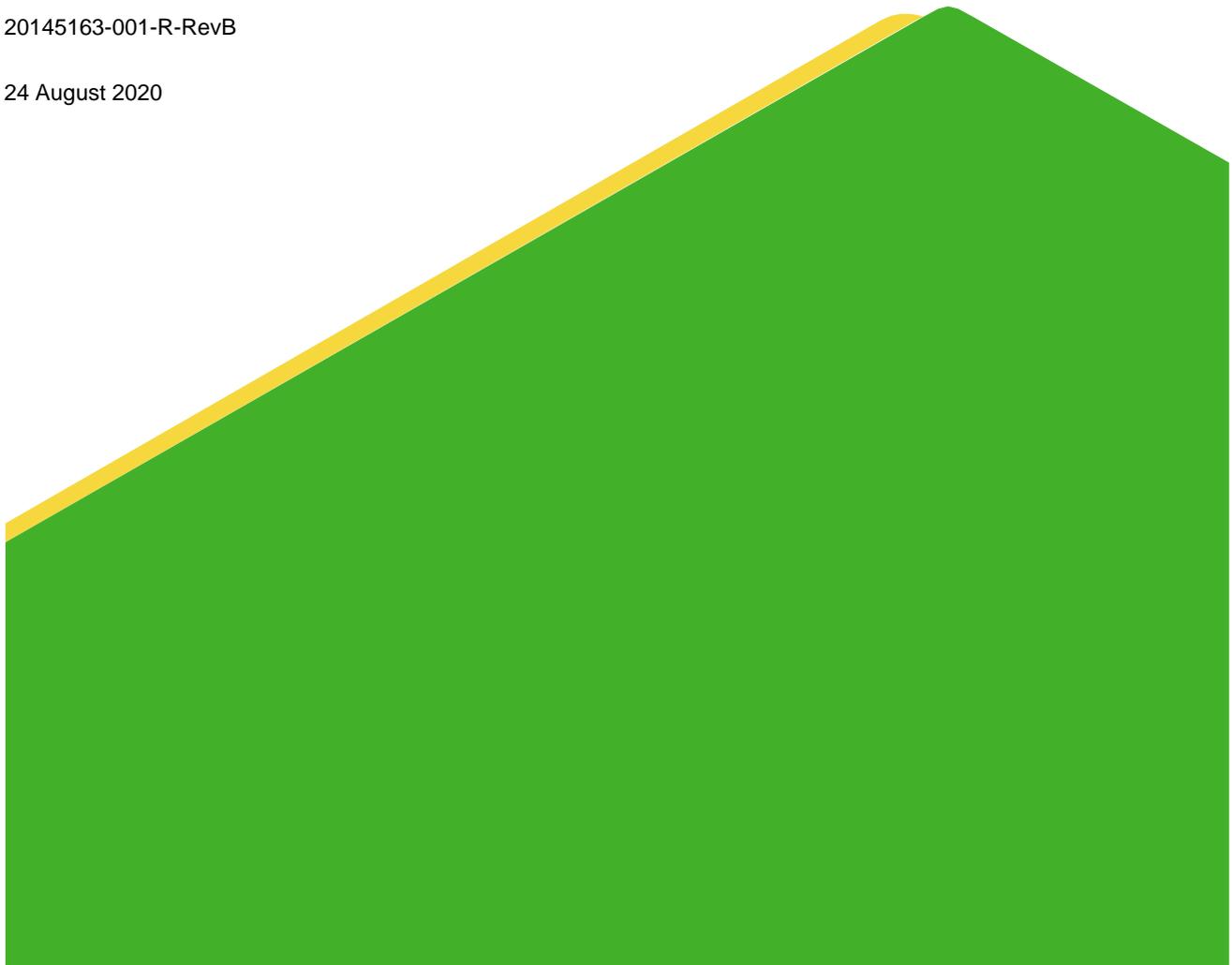
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APPENDICES

APPENDIX A

Important Information

1.0 INTRODUCTION

In the development of a Houseboat Management Plan (HMP) for the District Council of Loxton Waikerie (Council), research and investigations were undertaken relating to the current and future management of houseboat mooring and marina sites at Loxton, Kingston-on-Murray and Waikerie. This report documents the information gathered by Golder to date through desktop assessments and site investigations and aims to provide Council with:

- A review of the strategies, plans and policies implemented by Council, Commonwealth and State Governments, neighbouring Councils and the relevant Natural Resource Management (NRM) Board which are considered to be relevant to the development of a HMP;
- An audit of existing houseboat mooring sites and the facilities provided at these sites;
- An environmental assessment of existing and potential mooring sites to aid in identifying potential opportunities and constraints for future expansion;
- An analysis of the potential impact of Council's implementation of the Waikerie Riverfront Masterplan on the availability and location of houseboat mooring sites;
- An analysis of the potential to introduce houseboat mooring sites at several alternative locations, including the Loxton and Moorook riverfronts; and
- An account of potential data gaps in the assessment of mooring sites.

1.1 Site Visit

Golder staff visited Waikerie and surrounds on Thursday 18 June 2020 to assess the mooring sites identified by Council, including sites at:

- Waikerie riverfront;
- Holder Bend Reserve;
- Kingston-on-Murray riverfront; and
- Moorook riverfront.

While potential sites at Loxton and Ramco (downstream of Waikerie) were not visited, a desktop assessment of these sites has been undertaken and included in the analysis below. Figure 1 shows both the existing and potential houseboat mooring locations discussed in this report.

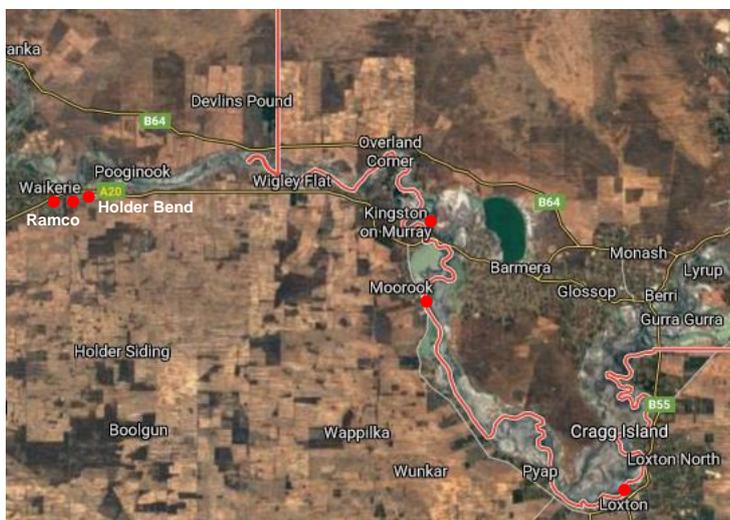


Figure 1: Existing and Potential Houseboat Mooring Sites (Source Google Maps)

1.2 Houseboat Operators

There are two principal houseboat user groups: commercial users and private users. Currently, all leases for houseboat mooring sites are offered to both user groups for a 12-month tenure which applies across all mooring locations within the Loxton Waikerie Council area. The allocation of mooring sites is managed through Council's Houseboat Mooring Policy which operates on a 'first-come-first-served' basis and, like the lease arrangements, does not differentiate between commercial and private users.

1.2.1 Commercial Users

Commercial users are generally owners of houseboats available for hire, used primarily by visitors and tourists to the area.

Commercial houseboats are important in bringing tourism to the region and boosting economic development. Given the integral part commercial houseboats play in generating revenue for local businesses, there is a tangible link between the location of commercial houseboat mooring sites and ease of access to township facilities and services.

1.2.2 Private Users

Private users generally consist of local residents / rate payers who own a houseboat for recreational use. These users require sites for secure and long-term mooring that allow for convenient use of the river and reliable storage of the houseboat asset. Council does not permit houseboats to be lived in whilst moored, except for two days preceding a *bona fide* journey.

A small number of private user mooring sites are allocated for short-term / temporary use. These mooring sites are available for a maximum period of 48 hours, free of charge, primarily to cater for houseboat users travelling up and down the River Murray. It is unclear precisely how many houseboat mooring sites at each location are allocated to short-term mooring at this time although there may be some potential to increase the number of short-term mooring sites to encourage passing houseboat users to spend more time in Waikerie.

It is considered that the expectations of private and commercial user groups should be assessed separately in order to better understand and accommodate their different requirements in terms of the facilities to be provided at houseboat mooring sites. This may require some reconsideration of how mooring site leases are allocated and costed for different user groups.

2.0 STRATEGIC CONTEXT

A desktop review of strategies, plans and policies considered relevant to the development of the HMP has been undertaken. The following sections document the key objectives of these strategies, plans and policies and indicate how they might shape Council's management of houseboat mooring sites and the ongoing health of the River Murray.

2.1 Commonwealth Government Context

Table 1 details the plans/strategies/policies of the Commonwealth Government and how they potentially relate to the HMP.

Table 1: Relevant Commonwealth Government Plans, Strategies and Policies

Plan/Strategy/Policy	Key Objectives	Relevance to Houseboat Management Plan
Murray Darling Basin Authority: Basin Salinity Management 2030 Strategy	This plan aims to enhance the health of the River Murray through improved irrigation infrastructure and practices, reduced groundwater levels, establishment of deep-rooted vegetation and reduction in salt entering the river through construction of salt interception schemes in the lower reaches.	Managing the ongoing health of the River Murray is of vital importance in attracting tourists and visitors to the region, which will subsequently increase houseboat use.
Murray Darling Basin Authority: The Basin Plan	This plan sets the amount of water that can be taken from the Basin each year without compromising the amount of water required for the ongoing health of rivers, lakes, wetlands and the plants and animals that depend on them.	Preservation of river system health is vital in continuing to attract tourists and providing sufficient water to support and protect the ecosystems which depend on it.

2.2 State Government Context

Table 2 details the plans/strategies/policies of the South Australian Government and how they potentially relate to the HMP.

Table 2: Relevant State Government Plans, Strategies and Policies

Plan/Strategy/Policy	Key Objectives	Relevance to Houseboat Management Plan
State Government Budget Paper 2019-2020	Outlines how the government is going to build a strong economy, grow jobs and provide a secure future for South Australians.	State Government supports tourism as a key sector to grow the economy and jobs.
20 Year State Infrastructure Strategy	Sets strategic direction and initial priorities for infrastructure development and aims to achieve the following objectives: <ul style="list-style-type: none"> - sustained economic and jobs growth - planned population growth - connected and productive regions - a vibrant, global Adelaide - enviable liveability 	This Strategy identifies the need to support tourism within South Australia, including the ongoing maintenance of water related infrastructure. It also identifies the importance of the River Murray and ensuring its health for South Australians.
Department for Infrastructure and Transport (DIT): Boating Facilities Strategic Plan	Sets out strategies for the effective use of levy funding in three key priorities areas: <ul style="list-style-type: none"> - Activating key boating hubs - Connecting key boating routes 	Provides an opportunity for Council to align the HMP to this plan and identify future funding streams for infrastructure to support the houseboating community.

Plan/Strategy/Policy	Key Objectives	Relevance to Houseboat Management Plan
	<ul style="list-style-type: none"> - Improving safety outcomes. <p>These priorities are underpinned by three supporting initiatives:</p> <ul style="list-style-type: none"> - Boating safety and regulatory frameworks - Delivery framework; and - Boating information network 	
<p>DIT:</p> <p>Marina and Mooring Structure Development along the River Murray in SA</p>	<p>Assists proponents to prepare, and authorities to assess, development applications for marina and mooring structure development.</p>	<p>Provides Council with standardised assessment criteria for new mooring opportunities. These criteria will need to be updated on full implementation of the Planning and Design Code (as part of the Planning, Development and Infrastructure Act 2016).</p>
<p>Environment Protection Authority (EPA):</p> <p>Code of practice for vessel and facility management (marine and inland waters)</p>	<p>Encourages best environmental management practices for owners, operators and users of vessels, vessel construction and maintenance facilities (including slipways and launch facilities), and vessel storage facilities (including dry dock boat yards, marinas, moorings, boat and yacht clubs) within or adjacent to state waters of South Australia.</p>	<p>Assists houseboat users to comply with their general environmental duty to fulfil obligations under the Environment Protection Act and associated environment protection policies, in particular the Water Quality Policy.</p>
<p>EPA:</p> <p>Water Quality Policy</p>	<p>Declares environmental values for the protection of streams, rivers, oceans and groundwater. Encourages better management of wastewater, promotes best practice environmental management and allows for establishment of discharge limits for activities.</p>	<p>Houseboat use may impact on water quality through waste management and refuelling practices. This policy details compliance requirements to maintain and improve water quality.</p>

2.3 Local Government Context

Table 3 details the plans/strategies/policies of neighbouring Councils along the River Murray and local / regional organisations seeking to promote the river for tourism purposes and how they potentially relate to the HMP.

Table 3: Local Government and Regional Organisations Relevant Plans, Strategies and Policies

Plan/Strategy/Policy	Key Objectives	Relevance to Houseboat Management Plan
Renmark Paringa Council (RPC): Houseboat Management Plan	<ul style="list-style-type: none"> - Seeks vibrant and sustainable houseboat industry. - Clarifies RPC's role in managing the industry in the council area. - Addresses the Renmark Community Plan priority to provide the houseboat industry with clarity and guidance on RPC's ongoing involvement and participation in the industry 	It will be important to ensure that the HMP complements and does not conflict with this management plan.
Mid-Murray Council: Community Plan	<p>Identifies actions under key themes:</p> <ul style="list-style-type: none"> - Natural and Built Environment - Community Wellbeing - Economic Development & Tourism - Infrastructure & Community Facilities 	Seeks to grow the tourism (houseboat) industry and balance this with the need to protect the River Murray.
Alexandrina Council: Tourism and Visitor Strategy 2017-2022	Sets a strategic direction for tourism industry growth which is vital to retaining current visitor preference for the region, attracting new visitors and increasing spend in the region.	Highlights the need to grow the tourism industry (including houseboats) along the River Murray.
Coorong District Council: Strategic Plan 2016-2020	Sets out the strategic direction for the Council and identifies key targets to achieve.	Targets include improving River Murray health and increasing tourism opportunities on the Murray River.
Berri Barmera Council: Strategic Plan and Annual Business Plan	Provides guidance on where the Council will be directing funds in line with its strategic long-term view.	Identifies that economic development to support tourism is important for the Council which includes the commercial houseboat industry.
Berri Barmera Council: By- Law 3 – Manage and regulate access to and use of Local Government land (other than roads), and other certain public places	<p>Seeks to regulate access to and use of Local Government land (other than roads), and certain public places:</p> <ul style="list-style-type: none"> - to prevent and mitigate nuisance; - to prevent damage to Local Government land; - to protect the convenience, comfort and safety of members of the public; - to enhance the amenity of the Council area; and - for the good rule and government of the area. 	Similar to Council's By-Law 2, this outlines where launching, retrieving and mooring houseboats are allowed, adjacent to or on any Local Government land or foreshore for which Council is responsible.
The Rural City of Murray Bridge: Riverfront Strategy	Seeks to identify opportunities for rejuvenation along the Murray River Corridor that encompasses future potential for, and sustainable management of, residential and recreational land uses.	Identifies development opportunities along the River Murray to ensure economic benefits are realised while balancing the health of the river.
The Rural City of Murray Bridge:	Allows Council to issue permits to houseboat owners who wish to moor	This by-law and permitting system is a key management tool for managing short term

Plan/Strategy/Policy	Key Objectives	Relevance to Houseboat Management Plan
By-Law 1	at a Council mooring site for no longer than 48 hours.	casual mooring of houseboats at Council's mooring sites.
The Rural City of Murray Bridge: By-Law 2	Regulates access to and use of Local Government land (other than roads), and certain public places: <ul style="list-style-type: none"> - to prevent and mitigate nuisance; - to prevent damage to Local Government land; - to protect the convenience, comfort and safety of members of the public; - to enhance the amenity of the Council area; and - for the good rule and government of the area. 	Similar to Council's By-Law 2, this outlines where launching, retrieving and mooring houseboats are allowed, adjacent to or on any Local Government land or foreshore for which Council is responsible.
Destination Riverland Tourism Plan 2020	A 5 year plan that aligns with the SA Tourism Plan 2020 and focuses on 5 key priority areas: <ul style="list-style-type: none"> - driving demand; - creating a collaborative culture; - supporting Riverland businesses; - increasing awareness of the value of tourism; and - using events to drive visitation. 	Identifies houseboats as a key tourism attraction which plays an important part in increasing tourism within the region.
SA Murray Darling Basin Natural Resources Management Plan	Creates a regulatory framework for the management of natural resources in the region.	Identifies the need to ensure the health of the river and the ecosystems which it supports.

2.4 District Council of Loxton Waikerie Context

Table 4 details the plans/strategies/policies of Council and how they potentially relate to the HMP.

Table 4: Review of Relevant Plans, Strategies and Policies

Plan/Strategy/Policy	Key Objectives	Relevance to Houseboat Management Plan
Loxton Waikerie Strategic Plan 2015-2020	Provides the community with a clear picture of what Council's strategic direction will be in the next five years.	Key initiatives from the Plan of relevance to the HMP include: <ul style="list-style-type: none"> - Develop a Caravan Park on the Waikerie Riverfront; - Implement the Boating and Riverfront Facilities Plan 2015-2023; - Implement outcomes sought by the Houseboat Mooring Management Committee.
Annual Business Plan 2019-2020	Sets out the key directions and projects for the coming year and how they will advance the overall strategic direction for the district.	Identifies the current project to develop a houseboat management plan that provides guidance on future management of mooring sites at Loxton, Kingston on Murray, Moorook and Waikerie.
Boating and Riverfront Facilities Plan 2019-2024	Seeks to prioritise future boating and riverfront facility projects so that further funding applications can be made.	Outcomes for the current project will be included in this plan.

Plan/Strategy/Policy	Key Objectives	Relevance to Houseboat Management Plan
Service Range Policy	Classifies Council services as statutory, core or optional and guides Council's approach to service levels.	Identifies houseboat moorings as an optional service Council provides.
Allocation of Houseboat Mooring Policy	Provides a policy for the allocation of houseboat moorings in Council administered marinas.	Manages the allocation of houseboat moorings on a 'first-come-first-served' basis.
By- Law 2 – Manage and regulate access to and use of Local Government land (other than roads), and other public places	Regulates access to and use of Local Government land (other than roads), and certain public places: <ul style="list-style-type: none"> - to prevent and mitigate nuisance; - to prevent damage to Local Government land; - to protect the convenience, comfort and safety of members of the public; - to enhance the amenity of the Council area; and for the good rule and government of the area.	Outlines where launching, retrieving and mooring houseboats is allowed, adjacent to or on any Local Government land or foreshore for which the Council is responsible.

Key outcomes of the review of the strategies, plans and policies considered relevant to the development of the HMP are:

- Realising local economic benefits through supporting the tourism industry is fundamentally linked to the health of the River Murray.
- The State Government understands that ongoing maintenance of the infrastructure supporting water activities is important and is prepared to provide funding opportunities for such infrastructure. However, the importance of maintaining (and preferably enhancing) the health of the River Murray remains a significant State Government priority.
- Local governments through which the River Murray passes recognise the significance of the river in supporting and bolstering local economies by attracting tourists.

3.0 INVESTIGATIONS

Desktop assessments and site visits have been undertaken to assess the potential feasibility of a number of houseboat mooring sites suggested by Council. The following sections provide details of these sites, including existing houseboat licenses, facilities currently available at each site and the potential of each site to support additional houseboat moorings.

3.1 Audit of Existing Moorings

An audit of the existing houseboat moorings was undertaken for on-river mooring sites at the Waikerie, Kingston-on-Murray and Loxton riverfronts. Information required to conduct the audit was provided by Council and is presented in the following sections.

3.1.1 Occupancy

Table 5 below shows the current number and occupancy of houseboat mooring sites at Waikerie, Kingston-on-Murray and Loxton.

Table 5: Occupancy of Existing Council Operated Houseboat Moorings at Waikerie, Kingston-on-Murray and Loxton

Location	Total number of mooring sites	Site Occupation				Waiting list for houseboat moorings	Average size of houseboats L x W x H (metres)	Licencing arrangements	Cost of lease (\$)
		Private	Commercial	Unoccupied	Unusable				
Waikerie	45	28	10	4	3	23	15 x 6.3 x 3.1	Bond, cancellation, fees (annual), insurances etc equivalent for all moorings	1,550
Kingston-on-Murray	10	9	1	-	-	15	16.7 x 7.2 x 3.4		
Loxton	7	7	-	-	-	12	17.7 x 6.6 x 3.4		

**no dedicated temporary / casual mooring sites as per Danielle. No Council fees charged for 48hr mooring

There is a high level of occupancy of mooring sites at all three locations, with 55 houseboat users on the waiting list for moorings at Waikerie, Kingston-on-Murray and Loxton. Clearly there is a strong demand for sites at Waikerie which is likely to increase on completion of the Riverfront Masterplan project given that the area will provide access to a broader level of services and facilities than those that currently exist.

3.1.2 Available Facilities

Table 6 provides a comparison of available facilities for houseboat users at Waikerie, Kingston-on-Murray and Loxton.

Table 6: Comparison of Facilities at Current on-River Mooring Sites

Facilities Offered	Waikerie	Kingston-on-Murray	Loxton
Power	To commercial houseboat users only	Yes	To commercial houseboat users only
Boat ramp	Yes	Yes	No
Ferry	Yes	No	No
Waste facility – solid	Yes	Yes	No
Waste facility – liquid	Yes	No	Yes
Secure car parking	Yes, although this is to be removed as part of the Riverfront re-development	Yes	No
Lighting	No	No	No
Toilets	Yes	Yes	Unclear
Designated swimming area	Yes	Yes	No
Shaded areas / picnic area	Yes	Yes	No
Barbeques	Yes	Yes	No
Play equipment	Yes	No	No
Signage (including wayfinding)	Inadequate	Inadequate	Inadequate

Aside from the limited availability of power, Waikerie currently provides the most complete array of facilities for houseboat operators of all on-river mooring locations. The Waikerie riverfront also provides easy access to a diverse range of facilities in the Waikerie township that are likely to attract houseboat operators, in particular commercial operators, to the region for tourism purposes. However, there is limited signage available at Waikerie (as well as the other sites) that promotes the area for tourists or provides guidance for visitors wishing to use facilities and services available either on the riverfront or in the Waikerie township. It is considered that this constitutes a major limitation in promoting the region for tourism purposes.

3.1.3 Considerations

At present, all Council-owned houseboat mooring sites are funded through Council rates and licence fees. Each site is located on Crown Land under Council's care and control and individually licenced. All private and commercial houseboat operators incur the same licence fees, aside from short-term users (under 48 hours) who do not incur a fee for using mooring sites. In addition, Council allocates mooring sites to all houseboat operators on a 'first-come-first-served' basis, regardless of whether they are commercial or private users. If a mooring site is offered to an operator and it is refused, the operator is moved to the bottom of the waiting list.

It is apparent that Council manages the leases and allocation of houseboat mooring sites on a 'one-size-fits-all' basis even though it recognises that commercial and private houseboat may have different service requirements and locational preferences.

Given existing levels of occupancy and provision of facilities at each mooring location, Council could consider implementing the following initiatives to better manage houseboat use at these sites:

- 1) Adoption of a set of user pays guidelines/principles for houseboat operators that differentiates the fees charged by level of services available at each location.
- 2) Differentiating fees for private and commercial houseboat operators in a way which aligns with Council's aspirations for accommodating houseboats at each location.
- 3) Review the Houseboat Mooring Policy in relation to the allocation of mooring sites with a view to preferencing commercial houseboat operators who can support local businesses by bringing greater visitor numbers to the district while providing an economic boost to the Loxton Waikerie region more generally.
- 4) Provide opportunities for temporary moorings at all locations in order to attract greater visitor numbers and provide an economic boost to local areas. For instance, Council could consider charging a daily fee for temporary moorings up to a maximum number of days.
- 5) Provide adequate signage (including wayfinding signage) at all houseboat mooring locations as a means of promoting tourism, welcoming visitors to the region and providing guidance on how to access local facilities and services.

3.2 Environmental Assessment

An environmental assessment has been completed for both the established mooring sites considered in section 3.1 above as well as potential mooring sites as follows:

- Waikerie Riverfront;
- Holder Bend;
- Ramco;
- Kingston-on-Murray;
- Moorook; and
- Loxton.

This assessment describes the existing environmental conditions at each site, current houseboat use and the issues and opportunities associated with houseboat moorings on each site. While sites at Ramco and Loxton were not inspected during the site visit, a desktop review has been completed for each.

3.2.1 Waikerie Riverfront

Existing environmental conditions

The Waikerie Riverfront is an extensively lawned bank with some patches of trees and vegetation. The area is divided into two sections: the Riverfront Development area and the Riverfront Redevelopment area as shown in Figure 2 below.

The Riverfront Development area boasts the following facilities:

- Lawned riverbank;
- Shelters with picnic tables and seating;
- Barbeques;
- Boat ramp;
- Car parking;

- Toilets;
- Designated swimming area;
- Play equipment; and
- DIT waste facility – solid and liquid.

While this area does not currently contain houseboat mooring sites, it does accommodate the ferry which requires the imposition of speed limits for river craft accessing or traversing this area.



Figure 2: Waikerie Riverfront Development and Redevelopment Areas

The Riverfront Redevelopment area is the current location for private and commercial houseboat mooring sites. This area boasts the following facilities:

- Lawned riverbank which turns into a 'natural' bank with trees and shrubs;
- Electricity boxes providing power to commercial houseboats;
- Car parking;
- Refuelling facility for commercial houseboats; and
- Walking trails.

Existing Houseboat Use

There are 10 mooring sites for commercial houseboat operators and 26 permanent houseboat moorings sites and two temporary mooring sites for private use at the Waikerie Riverfront. There are two houseboat jetties within the area; one of which has been constructed without approval.

The two temporary mooring sites are located close to the ferry and designated swimming area.

Issues and Opportunities

The Redevelopment project will require careful management of houseboat mooring sites along the riverfront during construction works. Completion of the project will also boost demand for mooring sites at Waikerie as the riverfront area becomes increasingly attractive to visitors. Given this situation, Council is seeking additional alternative mooring locations that will suit the needs of both houseboat users within the district and the Waikerie community more broadly.

An additional issue is associated with the existing refuelling facility (owned by commercial houseboat operators) on the riverfront which will need to be relocated as the Redevelopment project includes a car park within this area. This refuelling facility is quite dated and may require further investigation to assess if it has leaked and caused contamination of the surrounding land.

3.2.2 Ramco

Existing Environmental Conditions

Ramco is located approximately 8 km downstream to the west of Waikerie. The riverbank at this location is lined with vegetation exhibiting a varying degree of density in trees and shrubs (Figure 3). There are several dirt road tracks in good condition leading from Ramco Point Road to the riverbank.

The site has the following facilities:

- Boat ramp;
- Car park;
- Picnic area; and
- Barbeque.

These facilities are associated with a free campground located approximately 200 metres north of the Ramco Primary School.



Figure 3: Ramco Riverfront

Existing Houseboat Use

While there are no formalised houseboat mooring sites within this area, Figure 3 indicates that there is some potential to establish moorings along a significant stretch of the riverbank given the number of available access points.

Issues and Opportunities

Ramco is a popular site for skiing and other water-based activities along the grassed area of the riverfront adjacent the existing boat ramp. Council's Infrastructure Department has indicated that the area to the east of this grassed area could be developed for use by houseboats. Should this option be pursued, it would require some management of the relationship between skiers (and the boats used to tow skiers) and houseboat users.

Council has identified the following future upgrades for Ramco planned for the 2023/2024 financial year:

- Sealed car park area with provision for trailer parks;
- Installation of solar lighting and signage; and
- Development of a floating pontoon for launching and retrieval facilities.

Given that existing access tracks to the riverbank are unsealed, the attractiveness of Ramco to accommodate permanent houseboat mooring sites would be enhanced if Council was prepared to invest in sealing these access tracks in order to enable better access to the river.

3.2.3 Holder Bend Reserve

Existing Environmental Conditions

Holder Bend Reserve is situated approximately 2km upstream to the east of Waikerie. The reserve is a cleared area of compacted earth with vegetation and trees along the southern side of the river (Figure 4). This area is utilised as a free camping area and has a boat ramp. The Waikerie Ski Club is located on private land directly opposite the camping area on the northern bank of the river.



Figure 4: Holder Bend Reserve

Existing Houseboat Use

There are no houseboats currently moored within this area and no formal houseboat mooring sites.

Issues and Opportunities

This area could potentially accommodate houseboat mooring sites given its proximity to Waikerie and the range of services readily accessible in the town.

However, as this location is on a bend in the river, there are potential issues associated with bank erosion and increased risk of flood events, especially as the river flows quickly through this area, is quite deep while the ground level of the bank is low. There are also potential issues associated with the area's proximity to the ski club.

Council has identified the following future upgrades for the site planned for the 2021/2022 financial year:

- Sealing of the existing car park;
- Installation of solar lighting and signage; and
- Development of a straight-out floating pontoon to improve the current launch and retrieval facility.

These improvements will make the Holder Bend site more attractive for the potential accommodation of private and commercial houseboats. Should Council decide to develop mooring sites at Holder Bend, consultation with the ski club will be necessary to ensure appropriate arrangements can be made to avoid any conflicts between houseboat operators and recreational skiers.

3.2.4 Kingston-on-Murray

Existing Environmental Conditions

Kingston-on-Murray riverfront area hosts a lawned area with the following facilities:

- Barbeques;
- Toilets;
- Power available for houseboats;
- Boat ramp; and
- Waste management (solid) facilities.

Figure 5 below shows the location of houseboats moored at the site.



Figure 5: Kingston-on-Murray Houseboat Mooring Sites

Existing Houseboat Use

There are 10 mooring sites for houseboats at Kingston-on-Murray. Each mooring site has access to power and waste bins, with the latter collected on a routine basis by the Council. There are 4 temporary mooring sites available which are physically separated from the permanent mooring sites.

Issues and Opportunities

There are more facilities available to each individual mooring at Kingston-on-Murray than at any of the mooring sites being considered in this report. Unsurprisingly, mooring sites at Kingston-on-Murray are popular with houseboat operators and leases are not generally given up at this location. There is some potential to expand the availability of mooring sites to the east of the current moorings despite the fast flow of the River at this location.

Council has identified the following future improvements for the site planned for the 2022/2023 financial year:

- Upgrade to the car park adjacent to the existing houseboat mooring area;
- Installation of four (4) park bench seats and tables along the riverfront;
- Provision of solar lighting; and
- Development of a floating pontoon.

3.2.5 Moorook

Existing Environmental Conditions

The Moorook riverfront area (Figure 6) hosts a lawned area with the following facilities:

- Shelters;
- Barbeques;
- Toilets;
- Waste management (solid) facilities; and
- Designated swimming area.



Figure 6: Moorook Riverfront

Existing Houseboat Use

There are two temporary (48 hour) houseboat mooring sites available at Moorook but no permanent houseboat mooring sites. Despite this limitation, two houseboats were observed during the site visit that had been moored for longer than the 48-hour limit east of the main riverfront area.

Issues and Opportunities

The Moorook riverfront is within a back water of the River Murray, providing a sheltered area for swimmers and houseboats away from ski boats that tend to operate on the main river channel. However, this area poses a number of challenges for establishing permanent moorings due the shallow depth of the river and limited space available for safe manoeuvring of houseboats.

Council has recognised the potential to establish both temporary and permanent houseboat mooring sites to the east of the riverfront area at Moorook. This area is heavily vegetated at present, although this has not discouraged people from mooring boats within the area. It is considered that around six (6) mooring sites could be established on the Moorook riverfront with minimal vegetation clearance. As Moorook is relatively isolated compared to other mooring locations and the water is quite shallow at this location, these sites would be better suited to accommodating private houseboat users rather than commercial operators.

It should be noted, however, that some local residents have indicated that they would not support houseboat mooring within the area.

Council has identified the following future upgrades to the site planned for the 2022/2023 financial year:

- Replacement of the existing shelters
- Installation of three (3) fire pits within the camping area.

3.2.6 Loxton

Existing Environmental Conditions

The riverfront area at Loxton accommodates houseboat mooring sites but these are some distance away from other riverfront facilities. The parking area is informal with compacted earth roads providing access to the mooring sites (Figure 7).

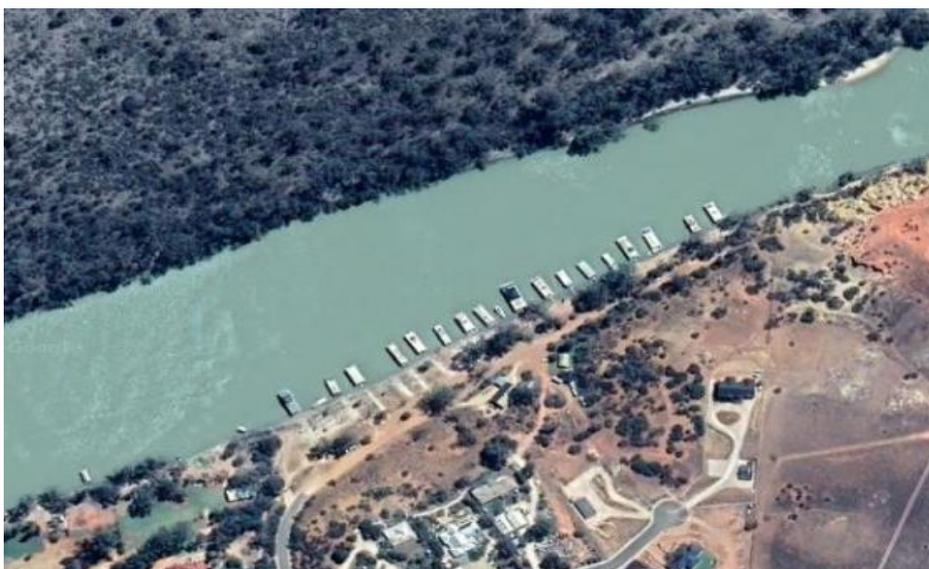


Figure 7: Loxton Houseboat Mooring

There are commercial houseboats available for hire which are located to the left (or west) of those depicted above in Figure 7. These boats are moored on private land not leased by Council. However, Council does have a long term lease with a private operator for moorings located to the right (or east) in Figure 7.

There is also a DIT wastewater facility near the houseboat mooring sites.

Existing Houseboat Use

There are seven (7) mooring sites currently available for lease from the Council with additional (non-Council) mooring sites adjacent to these which are currently leased by a commercial operator.

Issues and Opportunities

This area could be extended to allow for additional mooring sites despite no future plans for improvement to facilitate houseboat use and storage in this area of the riverfront.

4.0 ANALYSIS

The following sections discuss the likely implications of the Waikerie Riverfront Masterplan for the temporary and permanent accommodation of houseboats and potential feasibility of sites located close to Waikerie to accommodate houseboat moorings.

4.1 Waikerie Riverfront Masterplan

The Waikerie Riverfront Redevelopment Masterplan has been developed by Council in partnership with the Waikerie Delivers Committee to respond to the needs of the Waikerie community and enhance the experience of the River Murray for visitors to the town. As noted, the implementation of this project will require careful management of the existing houseboat moorings along the Waikerie riverfront which is a major driver for the development of this HMP.

The project will create:

- Lawned amphitheatre event space with raised wall seating;
- Water play zone connected to the sandy beach on the riverfront;
- Public shelter, barbeque, and seating area;
- Wayfinding signage; and
- Landscape plantings, lawns, and lighting.

It is envisaged that implementation of the Masterplan will:

- Provide quality public infrastructure that will attract visitors to the town to enjoy a vibrant and attractive riverfront space while facilitating economic sustainability and growth;
- Attract new commercial activity to the town, provide for place-making activities and spaces for social connections while showcasing Waikerie's distinctive and vibrant cultural life;
- Enhance the liveability of the town and encourage population growth; and
- Create civic pride and enable community inclusion.

Construction of the project is planned to commence in September 2020. Assuming that the key objectives of the project are realised, it will generate greater commercial, recreational and place-making activity, providing an ideal opportunity for Council to attract more tourists, including houseboat users, to Waikerie and the region more generally. This will not only increase the demand for houseboat moorings on the riverfront, it will further enhance the potential economic benefits arising from implementation of the Masterplan.

Should Council wish to optimise the economic benefits associated with maintaining and potentially enhancing a houseboat presence along the riverfront, it will need to carefully consider an appropriate mix of houseboat users and associated licensing conditions and service provision. These issues are discussed in more detail in section 4.3 below.

4.2 Feasibility Analysis of Sites Close to Waikerie

At present, all private and commercial houseboat moorings in Waikerie are located along the Waikerie Riverfront on Edgar Bartlett Drive; the site of Council's Waikerie Riverfront Redevelopment project. Council has determined that these moorings will be carefully managed during the redevelopment works so as not to negatively impact on houseboat lessees.

Nonetheless, a feasibility analysis of the potential for areas / locations in close proximity to Waikerie to accommodate houseboats is presented below. These locations include:

- The north bank of the River opposite the existing mooring sites at Waikerie;
- Holder Bend; and
- Ramco.

An analysis of possible functional, economic, community and environmental considerations was undertaken to present the benefits and limitations of each of these sites, detailed in Table 7 below.

One other location - a site to the north-west of boat ramp 2 downstream of the Waikerie riverfront - was discussed but not considered as it was deemed unsuitable due to the volume and quality of native vegetation on the riverbank.

Table 7: Feasibility Analysis of Potential Houseboat Mooring Sites in Close Proximity to Waikerie

Considerations	North Bank of Waikerie	Holder Bend	Ramco
Distance from Waikerie	Directly opposite Waikerie Riverfront Redevelopment	~ 3 km south-east (upstream) of Waikerie	~ 4 km west (downstream) of Waikerie
Land ownership	Crown land	Council managed Crown land	Council managed Crown land
Current land use	Stock watering	Free camping area	Township. Evidence of some (approximately 6) houseboats / boat mooring near town. Apex Park present with some facilities.
Land description	Mostly cleared. Compacted ground and sparse vegetation (established trees and shrubs) along bank	Mostly cleared. Sparse vegetation (established trees and shrubs) along bank	Various. Some areas of sparse vegetation, some dense vegetation. Dirt tracks scattered along bank. Ramco lagoon / wetland present to the south of Ramco township and to the south-west of the Murray Riverbank
Land area available to accommodate mooring sites	Unknown	Unknown	Unknown
Access	No roads currently leading into or along the northern side of the riverfront. Closest potential access point from Taylorville Road.	Dirt track (suitable for vehicles) leading to Holder Bend Reserve River frontage.	Well maintained dirt road following the river frontage to the west of Ramco.
Boat ramp(s) present	No	Yes	Yes
Facilities available	None	Refuse bin Parking (unsecured)	Toilet facilities Shelter Refuse bin Campsites Parking (unsecured)

The above analysis indicates that of the three sites in close proximity to Waikerie, Ramco offers the greatest potential to accommodate houseboats owing to the range of facilities available and the provision of a suitable access (requiring no further disturbance of the local environment) to the riverfront. Council's planned improvements for Ramco discussed in section 3.2.2 above will enhance its attractiveness for private houseboat operators in particular.

4.3 Options for Provision of Mooring Sites

The following sections discuss a number of options available to Council in providing mooring sites across the Council area.

4.3.1 Short-term Provision of Houseboat Moorings

The investigations conducted to date indicate that none of the alternative sites could accommodate a large number of additional mooring sites without major works being undertaken to significantly expand the provision of moorings. Given this situation, Council could consider a mix of the following options:

- Make additional mooring sites available at Kingston-on-Murray and Loxton; and
- Provide new, formalised mooring sites at Ramco, Holder Bend and Moorook where suitable access can be provided with minimal disturbance to the riverbank and local environment more generally.

Should Council wish to pursue these options, it will provide current houseboat lessees with a greater choice of mooring locations in the short-term. This could be of significant benefit during the Waikerie Riverfront Redevelopment works should existing mooring sites be affected during those works..

4.3.2 Long-term Provision of Houseboat Moorings

The potential benefits arising from the Waikerie Riverfront Redevelopment project provide a strong argument for retaining a strong houseboat presence along the Waikerie riverfront for the following reasons:

- The project will make the riverfront area highly desirable to tourists and visitors to Waikerie, including private and commercial houseboat operators;
- Houseboats are currently an integral part of the Waikerie riverfront and make a significant contribution to its sense of place; and
- Removing houseboats from the riverfront will not only reduce the potential social and economic benefits arising from the Redevelopment project, it will also compromise the capacity of the project to engender and enhance place-making activities along the riverfront.

For these reasons, it is recommended that Council consider how best to improve existing houseboat mooring sites on the Waikerie riverfront to optimise the potential community benefits arising from the Redevelopment project. This might include future facility enhancements that complement and add value to the facilities provided as part of the project, as well as careful consideration of the different requirements of commercial vis-à-vis private houseboat operators, and long-term vis-à-vis short-term houseboat operators. It might be appropriate, for instance, to provide commercial operators and temporary private operators with mooring sites located in close proximity to the Waikerie township while permanent private operators could be moored further away from the Redevelopment area (potentially at Ramco and Holder Bend).

Any decision to develop new houseboat mooring sites and improve existing sites should be made in association with changes to licensing conditions that take account of the different requirements of houseboat operators and provide greater flexibility for temporary moorings, such as the options presented above in section 3.1.3.

In order to optimise an increased houseboat presence at Waikerie (as well as other mooring locations) it is also recommended that Council develop and implement a wayfinding signage strategy geared towards informing and guiding houseboat visitors about the various services and facilities available in the town.

5.0 LIMITATIONS

A number of information gaps were discovered during the site visit and investigations undertaken to inform this report. In order to improve the use of Council's existing and future houseboat mooring facilities, the following limitations should be addressed:

- Provision of clear information and documentation for houseboat users, including:
 - information on the facilities and services available to private and commercial houseboat operators at each mooring location;
 - information regarding short term / temporary stays, including the number, availability and costs of temporary mooring sites at each location;
 - clear signage at all mooring sites.
- Licencing conditions, including the potential for:
 - licencing fees to be stratified to reflect the different service standards / facility provision at each mooring site;
 - introduction of short-term leases for temporary (< 3 days) mooring for private operators;
 - introduction of long-term commercial leases (>1 year) to reduce uncertainty and increase desirability for commercial operators.

6.0 CONCLUSIONS

The research and investigations undertaken to inform the development of a HMP for the Loxton Waikerie Council area have sought to provide Council with a number of options for developing new houseboat mooring sites and improving existing houseboat mooring sites across the Council area.

Currently, there are only three formalised houseboat mooring locations in the Council area at Waikerie, Kingston-on-Murray and Loxton. Expanding and improving the provision of mooring sites will require Council to consider providing mooring sites at other locations, including Moorook, Holder Bend and Ramco. While the analysis of each of these locations indicates that they have the capacity to accommodate mooring sites, some investment will be needed to ensure these locations provide suitable facilities and access.

It is understood that striking a balance between community sentiment, environmental suitability, functional usability and economic cost associated with mooring houseboats is fundamental to Council's aspirations. On the basis of these criteria, options for accommodating houseboat moorings across the Council area have been presented which will require further consideration by Council to determine the most favourable course of action.

Council have expressed interest in engaging the community to determine the values, needs and infrastructure upgrades of priority to current and prospective houseboat mooring licence holders as well as the wider community. This will be an important step in determining the potential future facility enhancements that could boost tourism and economic development opportunities and subsequently justify an increase in mooring and licencing fees, depending on the level of upgrades and services provided at each location.

Signature Page

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APPENDIX A

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