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Bath & North East Somerset Council

Bath and North East Somerset Boat Dwellers Accommodation Assessment 2022

Final Report

December 2022



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1. Introduction

The Study

- ^{1.1} The Bath and North East Somerset Boat Dwellers Accommodation Assessment (BDAA) considers the accommodation needs of households living on boats on the River Avon and Kennet and Avon Canal through Bath and North East Somerset Council area.
- The BDAA provides an evidence base to enable the Council to comply with their requirements towards Boat Dwellers under the National Planning Policy Framework (NPPF) 2021 and the Housing and Planning Act 2016.
- In addition, the revised NPPF (July 2021) sets out that in determining the minimum number of homes needed, strategic plans should be based upon a local housing need assessment conducted using the standard method in national planning guidance. Paragraph 62 then states that 'Within this context, the size, type and tenure of housing needed for different groups in the community should be assessed and reflected in planning policies (including, but not limited to, those who require affordable housing, families with children, older people, students, people with disabilities, service families, travellers, people who rent their homes and people wishing to commission or build their own homes).
- 1.4 The wider needs of boat dwellers are now starting to be specifically addressed as part new Local Housing Needs Assessments (LHNA) or Housing and Economic Development Needs Assessments (HEDNA).

The duty to provide for boat dwellers

Provisions set out in the Housing and Planning Act now include a duty (under Section 8 of the 1985 Housing Act that covers the requirement for a periodical review of housing needs) for local authorities to consider the needs of people residing in, or resorting to, their district with respect to the provision of sites on which caravans can be stationed, or places on inland waterways where houseboats can be moored. Draft Guidance¹ relating to this section of the Act has been published that sets out how the assessment should be completed.

Definitions of terms

- There are a number of terms which are particular to the boating world. Some of these are interchangeable terms that refer to the same thing. However, there is potential confusion because some boaters and others working in the boating world may refer to something by one word and not recognise other words that refer to the same thing.
- 1.7 The terms used in this report are:
- Online moorings are moorings on the bank of the waterway rather than a marina, usually alongside the bank with the tow path.
- ^{1.9} Permanent/licenced permanent moorings are moorings where a boat dweller can moor for an indeterminate time. Some will be very long term, others may be on some form of rolling contract, perhaps for a few months at a time.
- 1.10 Services for boat dwellers are the equivalent to bricks and mortar housing services and include essentials

^{1 &}quot;Draft guidance to local housing authorities on the periodical review of housing needs for caravans and houseboats." (March 2016)

such as access to fresh water, sewage removal, rubbish removal and recycling, access to electricity and others alongside other important needs such as Internet connection and storage for fuel, bikes and so on.

^{1.11} Temporary moorings are moorings for short stays, with time limits commonly set at 48 hours, 7 days, or 14 days.

Methodology

- $^{
 m 1.12}$ A mixed methodology was used for this assessment including the following:
 - » A desk based review of existing Needs Assessments and other relevant local studies and existing national and local policy, guidance, and best practice.
 - » Discussion with Julian House (Travelling Communities advice and engagement) and the Canal and Rivers Trust (CRT). Advice from Julian House.
 - Each of these fed into the methodology and questionnaire for a face-to-face 'doorstep' survey of boat dwellers living on the River Avon and Kennet and Avon Canal through Bath and North East Somerset. The questionnaire was agreed with the Council and Julian House. The interviews took place in early October 2022. Further details of the survey methodology are given below in the Survey chapter.
 - » The survey was advertised on the CRT Facebook site with a link to the online questionnaire.

2. Summary of main results

Key points from the survey of boat dwellers in Bath and North East Somerset

- Permanent moorings: Modelling based on the survey responses identified a need for an additional 6 licensed permanent moorings. These moorings should be planned for a range of sizes from 40ft to over 60ft if they are to accommodate existing boats.
- Temporary moorings: The evidenced net need on the River Avon between the Kennet and Avon Canal and Hanham Lock is for a total of 660ft of River bank to be developed as temporary moorings, divided into practical moorings lengths. The model uses 3 moorings of 220ft each for clarity, but other lengths are equally valid. The need on the Kennet and Avon Canal is for services rather than additional temporary moorings.
- ^{2.3} **Services:** Services should be developed with the additional temporary moorings on the River Avon. On the Kennet and Avon Canal, it would seem appropriate to provide additional services between the existing services at Dundas Warf, Bathampton and near the connection with the River Avon, along with increasing the services available at these points.
- On a rough estimate based on observation, there are around 100 live aboard boats outside of marinas on the River Avon and Kennet and Avon Canal through Bath and North East Somerset. This statement should be treated as indicative rather than firm evidence to be presented or addressed in the Local Plan process. During the summer months the number of boats can be expected to multiply, but most of these will be Summer visitors and therefore will require visitor rather than permanent moorings.
- ^{2.5} The majority of boats in the survey were narrow boats and broad beam canal boats; a total of 32 out of 35 responses.
- Boat sizes vary from 20-30ft upwards, but the largest numbers in the survey were either 50-60ft (22 out of 35 boats) or over 60ft (8 out of 35 boats).
- ^{2.7} 23 out of 35 boat dwellers responding said they were continuous cruisers without permanent moorings.
- ^{2.8} There are a variety of reasons for living on a boat. The two main ones are being unable to afford to buy or rent a house or flat, and by choice.
- Of the 29 boats with people living on them permanently, one third (10) are single person occupancy. Another 12 are occupied by two people, with 6 boats being occupied by 3 people and one with more than three people.
- ^{2.10} A large majority of boat dwellers in the survey were of working age with a small number of retirement age and 11 persons aged under 18. There were 31 male and 28 female occupants.
- ^{2.11} Over two fifths of the boat dwelling households included someone with a life limiting illness (13 households). Some moorings are difficult for disabled people.
- ^{2.12} Four fifths (26; 81%) of the 32 boat dwellers who responded were in employment, either full or part time or self-employed. Some found that living on a boat hindered their access to employment.
- ^{2.13} Some boat dwellers with a permanent mooring and some continuous cruisers found it difficult for their

children to attend school.

- ^{2.14} The majority (24 of 30) have lived on a boat in Bath and North East Somerset for at least a year, with 12 of those having lived here for over 5 years.
- ^{2.15} 7 out of 30 boating households are at risk of eviction.
- ^{2.16} Many services are difficult for boat dwellers to access. Notably, though a small number, 4 find it difficult to access fresh water. Examples of the more common problems include that 19 have difficulty accessing electricity hook up and 19 find it difficult to access compost toilet emptying facilities.
- ^{2.17} More car parking, bike storage and better internet connections are required.
- ^{2.18} It was found that access to work and access to shops and other services were what made location suitable for permanent moorings.
- ^{2.19} Over half of the boat dwellers (16 out of 29) consider that there are enough temporary moorings, though another 13 say that there are not enough. A majority (23 out of 29) consider those that exist to be in the right place.
- ^{2,20} Three quarters of boat dwellers interviewed said that relations with other local people were generally good.

3. Guidance on Assessing the Need for Boat Dwellers

Government guidance and previous surveys

- Draft DCLG² Guidance provides advice on how to consider the needs of people residing in or resorting to moorings for houseboats. The draft guidance was issued in March 2016 with no consultation attached to it and has yet to be issued as official guidance. However, it is understood to have been criticised by organisations representing boat dwellers for concentrating too much on identifying need from caravan dwellers.
- As far as need for boat dwellers is concerned, it cannot be assumed that all needs can be met through the provision of additional moorings as many boat dwellers do not seek permanent moorings and navigate waterways on a permanent basis. As such, other issues that should be considered include the availability and distance between facilities such as water taps, rubbish disposal, chemical toilet disposal and fuel pumps; the threat of eviction from moorings is seen as inappropriate; restrictions placed on boat dwellers through licence restrictions; and access to 'off-side' moorings i.e. those not on a tow path.
- As with Gypsies and Travellers who do not meet the planning definition of Travellers and wider caravan dwellers, permanent boat residents also form part of the Objectively Assessed Need (OAN) for housing because they will be included in the overall population and household projections.
- The Canal and River Trust (CRT)³ have reported that the total number of continuous cruiser licences was 4,400 in 2014. Out of those 4,400 boats 23% moved less than 5 kilometres, and 45% moved under 10 kilometres in a year, so a high number of boats are moving around relatively small areas of the canal network. The CRT suggest that this is due to affordability as much as preference, with many households moving onto houseboats to find cheaper accommodation.
- The current Draft Guidance is not particularly relevant or helpful when it comes to assessing need for boat dwellers. The first issue to consider is the definition of a houseboat. The Housing and Planning Act defines a "houseboat" as a boat or similar structure designed or adapted for use as a place to live. However, this conflicts with the definition of a houseboat under waterways legislation (for example Section 3 of the British Waterways Act 1971). This suggests that a houseboat is a static vessel and is not used for navigation, as opposed to more mobile boat dwellers who do travel either from permanent moorings or as continual cruisers.
- In terms of recent surveys of boat dwellers, the CRT undertook their latest annual national survey of Licensed boat dwellers and owners in 2021⁴. The survey was distributed to one third of all licence holders and in total they received 1,179 responses. In summary the survey found that:
 - » 23% of respondents to the survey say they use their boat as a permanent home.
 - 9% use their boat as a second home where they live for extended periods or as an alternative to their main residence.

² now the Department for Levelling Up, Housing and Communities

^{3 &}lt;a href="https://canalrivertrust.org.uk/media/library/2305.pdf">https://canalrivertrust.org.uk/media/library/2305.pdf

⁴ Press Release (canalrivertrust.org.uk)

Annual Boater Satisfaction Survey 2021 (canalrivertrust.org.uk)

- >> 58% use their boat to cruise the waterways in their leisure time.
- >> 78% have owned their boat for 4 or more years, including 32% who have owned their boat for 8 or more years.
- » 77% owned a narrowboat and 3% owned a wide beam; 18% owned a cruiser.
- » Issues which came to light in the survey include dissatisfaction with upkeep and maintenance, too much emphasis on other waterside users such as pedestrians and cyclists and too little focus on boating, navigation, dredging and clearing vegetation.
- In summary, a quarter of respondents reported that they live on a boat permanently; over three quarters own a narrowboat and another three quarters are long term owners of 4 or more years.
- 3.8 It is worth noting that the full 2021 survey explores attitudes to and options for achieving net zero carbon emissions on the waterways by 2050. These result may be useful for the Council.
- 3.9 CRT undertook a more detailed survey of London houseboat dwellers between September and October 2016. In total they received responses from 1,323 boat dwellers who had been recorded on London waterways in the previous year. Key points from the London survey include that:
 - » 58% of respondents to the survey say they use their boat as their primary place of residence.
 - » 50% of those who responded said that affordability/financial reasons were their motivation for living on a boat.
 - Over 70% of respondents to the survey said that they owned their boats outright, a further 11% said they owned their boat with a loan or mortgage.
 - » The top three specific improvement people want to see on the London waterways are (1) more mooring places, (2) more mooring rings, (3) more water points.
 - y 45% of respondents said they would have some or definite interest in a mooring if permanent or long-term moorings were more readily available in the London.
- ^{3.10} In summary, half of all London respondents reported that they lived on a houseboat because of affordability issues; nearly half of respondents would be interested in a permanent mooring if one was available; and the largest issues raised by boat dwellers was a lack of moorings.

 $^{\ 5\ \}underline{https://canalrivertrust.org.uk/refresh/media/thumbnail/30901-whos-on-londons-boats-survey-summary-report.pdf}$

4. Survey of Boat Dwellers

Interviews with boat dwellers in Bath and North East Somerset

- 4.1 This chapter presents the results of the major component of this study; a detailed survey of the boat dwellers along the River Avon and Kennet and Avon Canal through Bath and North East Somerset, including the base data used in the needs assessment along with a range of other data that can be used to inform policy.
- We achieved 35 valid responses to the questionnaire, mostly living permanently on their boats; 13 face to face interviews with boat dwellers and 22 on line and paper responses. We dropped 80 questionnaires on boats identified as being live aboard boats and estimate that there were at the time of the survey around 100° live aboard boats moored on the River Avon and Kennet and Avon Canal through Bath and North East Somerset. It is difficult to count live aboard boats accurately because in the absence of an owner, it is only possible to judge the accommodation status by external signs of permanent occupancy such as stocks of wood, canoes or other small boats, bikes, electricity hook up and water, storage facilities, plants or gardens, other towpath-side facilities and so on. However, none of these is conclusive evidence of the boat being a permanent dwelling.
- ^{4.3} Housing assessments need to be evidence based to be accepted at Examination by a Planning Inspector.
- ^{4.4} During the summer months the number of boats can be expected to multiply, but most of these will be Summer visitors and therefore will require visitor rather than permanent moorings.
- In addition to the River and Canal side moorings, there are three marinas in the study area. All three have websites. The marinas management confirmed the moorings status and further details in telephone conversations. Marinas provide leisure and permanent moorings. According to the company websites, two out of the three marinas in the BANES area only offer leisure moorings.
- ^{4.6} An interviewer gained partial access to Saltford Marina, but did not access either Bath Marina or Keynsham Marina, both of which provide solely leisure moorings.
- ^{4.7} Saltford Marina has 'long term live-aboard and non-live aboard moorings' with a total of 85 moorings in the Marina and on the River front⁸. However, in this case the term 'long term live-aboard' does not imply that the moorings provide a primary permanent residence. There are no 'main residence' live-aboards on Saltford Marina. Owners need to have and to prove that they have another full postal address. 50 out of 75 'long term' moorings have the status of 'care of' postal address. All Saltford Marina mooring contracts are for 12 weeks at a time, not any longer. While Saltford offers 'long term' permanent moorings, their website states that the Marina has full boat-living facilities including car parking and access to public transport. In the absence of evidence to the contrary, the residents cannot be assumed to be in need of additional long term residential services. Nor can any need for bricks and mortar housing be counted on affordability grounds because of the condition of having another evidenced address.

⁶80 dropped questionnaires plus 13 interviews, plus one or two who took the online survey address equals approximately 100

⁷Residential & Long Term Moorings | Aquavista

⁸ Saltford Marina | Close to Bath and Bristol

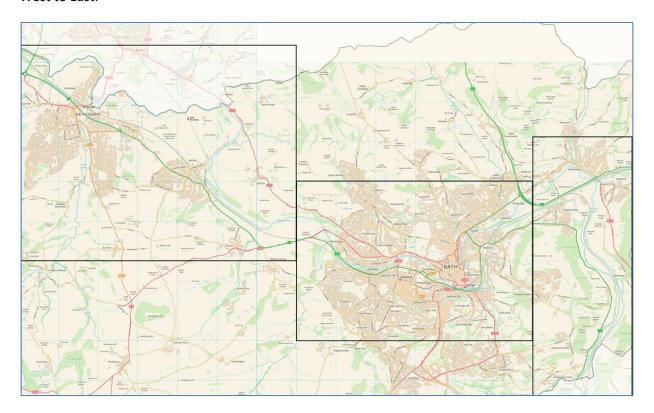
- ^{4.8} Bath Marina has 37 leisure moorings for spending "holidays and long weekends on your boat", while Portavon Marina, Keynsham has 84 leisure moorings for spending "holidays and long weekends on your boat".
- ^{4.9} A boat can be moored on a licensed permanent mooring without it being inhabited as a dwelling. Consequently there could have been more than 100 live aboard boats outside of marinas on the River and Canal through Bath and North East Somerset at the time of survey. Having noted the possible uncertainty, we are confident that 100 is a robust estimate of the number of lived on boats moored on the River or Canal bank at the time of interviews because of our method of walking the towpath.
- The interviews were carried out between 29th September and 13th October 2022 (inclusive), which included a weekend and covered the length of the River and Canal from Hanham Lock in the West (near Chandos Lodge at the North West of the map) to Dundas aqueduct in the East (near Monkton Combe at the South East of the map). The interviews were planned and executed using the Waterways Series map of 'Kennet & Avon Canal and River Avon'¹¹ to ensure maximum coverage combined with efficient use of entry and exit points to the waterways. Some of the questions are imprecise because of the geography of the River; less so the Canal. For example, a question such as 'How many boats do you have within Bath and North East Somerset Council area' is difficult to answer unless boat owners have some way of knowing for certain which local authority their boats are moored in, such as paying Council Tax.
- 4.11 The interviews were carried out by an interviewer walking the River towpath for the entire length of the two waterways within the designated area to identify and request an interview, with the exception of stretches where we were advised by the CRT of no boats being moored, usually because of the River not being navigable at that point. To ensure maximum take up, potential interviewees were offered a later appointment in place of the immediate interview and the alternative of completing an online questionnaire. Several requested the online questionnaire. Where permission was granted, the survey included boat yards, and islands on the River, that are within the Bath and North East Somerset Council boundary.
- 4.12 Continuous cruisers tend to moor between Dundas and Bathwick in the East of BANES as that is the last location which is large enough to moor up before going down to the river. At the Western end they tend to moor between Mead Lane at Saltford, and Hanham. There are a limited number of official moorings spots between these two areas. The river is not navigable above Pultney Weir. The need for temporary moorings for continuous cruisers is covered in more detail later.

⁹ Bath Marina & Caravan Park | Marina in Bath | Aquavista

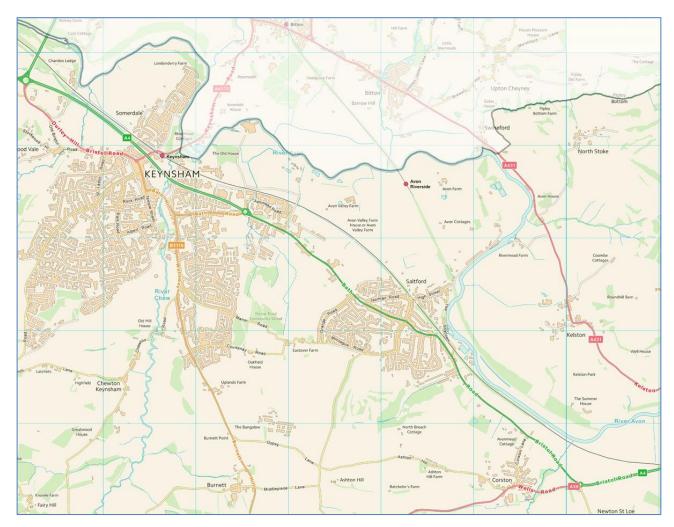
¹⁰ Portavon Marina | Marina Near Bristol | Aquavista

¹¹ map of the kennet and Avon canal and the river Avon | Heron Maps

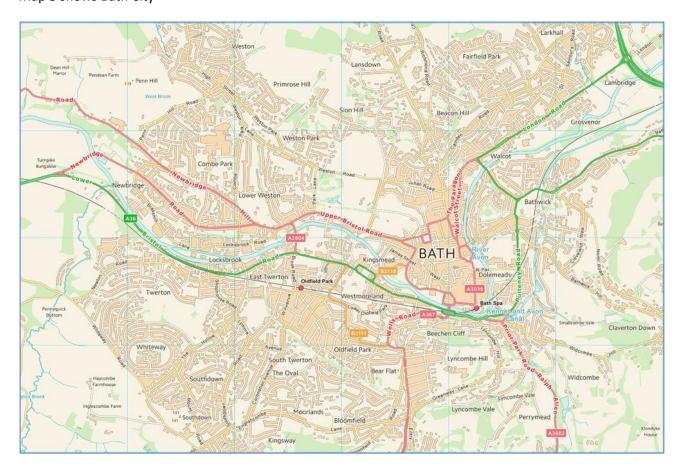
^{4.13} Map 1, below shows the entire area covered. It should be noted that the BANES/Bristol boundary and BANES/South Gloucestershire boundary run along the River above Keynsham. These parts of other council areas are shown in faded colours on the map below. The study area is shown by the three black rectangles. These three rectangular areas are shown below in three separate maps for clarity, reproduced in order from West to East.



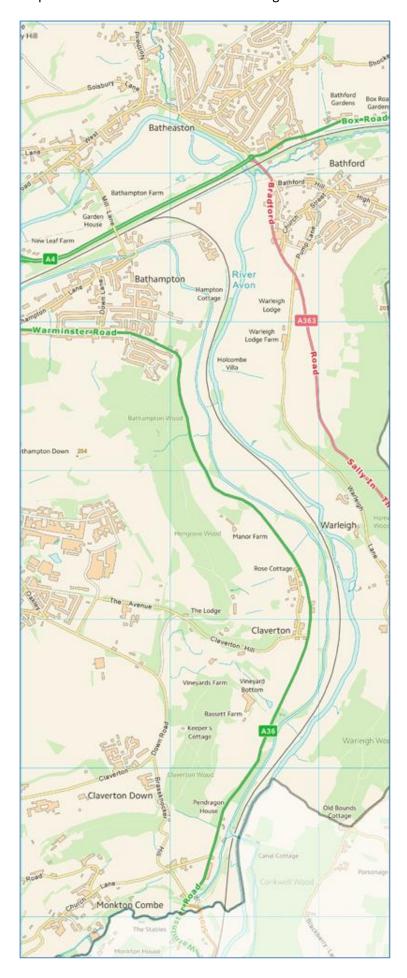
^{4.14} Map 2 shows the area covered from the western edge of the study area at Hanham Lock to the western edge of Bath City. The River can be seen to form the BANES/Bristol boundary above Keynsham.



4.15 Map 3 shows Bath City



 $^{4.16}\,$ Map 4 shows the area from the eastern edge of Bath to the eastern edge of the study at Dundas Aqueduct.

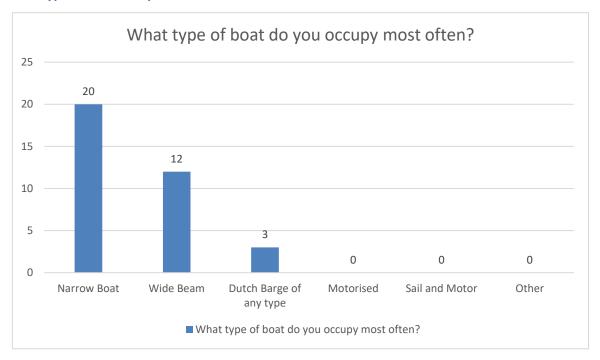


- ^{4.17} In general, boat dwellers were happy to give an interview; the survey response was often governed by the presence of a member of the household rather than refusals or other reasons.
- 4.18 The results of individual questions are presented under the headings:
 - » Profile of moored boats
 - » Profile of boat dwelling households
 - » Current and future accommodation
 - » Facilities and services
 - » Permanent Moorings
 - » Temporary moorings
 - » Relations with Other Local People.
- ^{4.19} Because of the small number of interviews it is best to consider the survey results using numbers rather than percentages, but percentages are also given in some places in case they are helpful to picture the relative scale of the responses.

Profile of moored boats

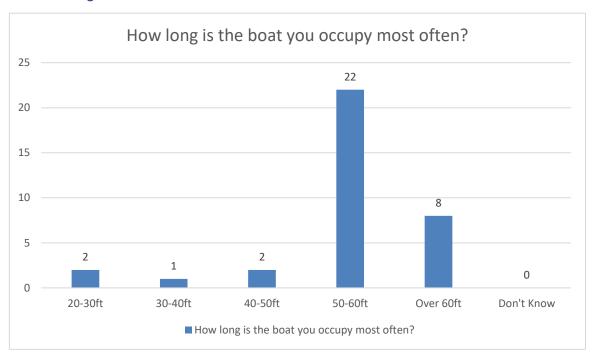
- ^{4.20} All boat owners (35 respondents; 100%) have one boat in the Bath and North East Somerset area. No interviewees had more than one boat in this area.
- ^{4.21} The most common types of boats occupied by respondents are narrow boats (20) and their wide beam equivalent (12). Three respondents occupied Dutch barges of one type or another, which are typically much larger, especially in the beam.

Figure 1: Type of boat occupied



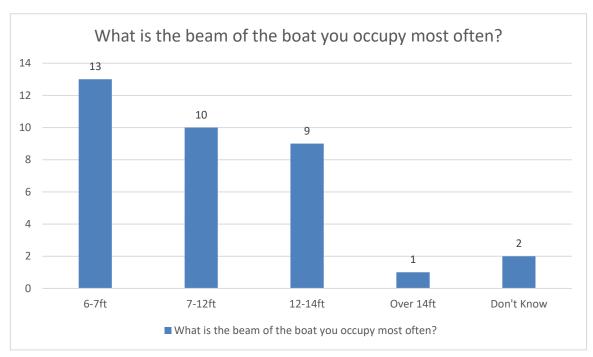
^{4.22} The largest number of respondents occupy boats that are between 50 and 60 ft long, which is what might be expected for live aboard boats, with another two using 40-50ft boats. Boats under 40ft were narrow boats, while boats of 40ft and longer included narrow boats, broad beam and Dutch barges. Excluding 'Don't know', 91% of boats are 40ft or over.

Figure 2: Boat lengths



^{4.23} The largest number of boats (13 boats; 39% excluding 'Don't' know') are narrow beam of 6-7ft, the standard width of a narrow boat. Another 9 (27%) are about double that width, being 12-14ft; the standard width of a broad beam canal-type boat and a common beam for Dutch barges.

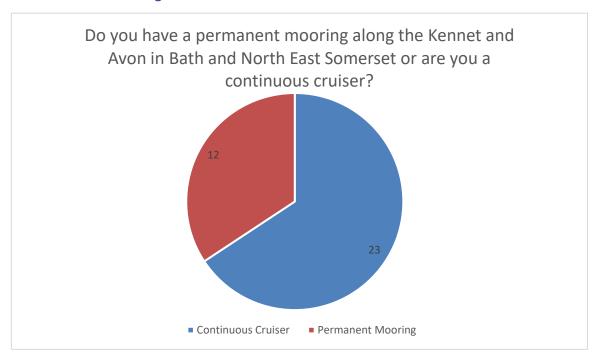
Figure 3: Boat beams



^{4.24} Out of the 35 responses, one third (12) had permanent moorings in the BANES area compared to two thirds (23) continuous cruisers₁₂.

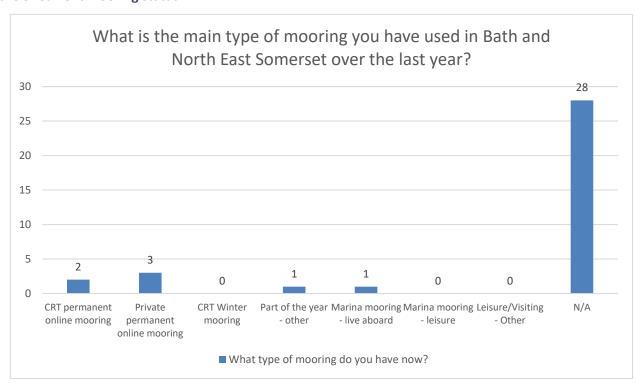
¹² The question asked: Do you have a permanent mooring along the Kennet and Avon in Bath and North East Somerset or are you a continuous cruiser?

Figure 4: Permanent Moorings and Continuous Cruisers



^{4.25} Only 2 boats dwellers with permanent moorings interviewed who answered this question have a CRT permanent online mooring with 3 boats having a private permanent online mooring. One boat dweller has a mooring for part of the year, and another has a marina mooring to live aboard. 28 other boat dwellers interviewed, 80%, did not answer this question.

Figure 5: Current mooring status



Profile of boat dwelling households

- ^{4.26} The most common reasons for living on a boat was being unable to afford to buy a house or flat; 18 respondents, just over half of all (51%). Of those, 9 respondents could not afford to buy but did not say they could not afford to rent. Some of these may be able to afford to rent. Another 9 said they could not afford to rent a house or flat and it can be assumed that these cannot buy and therefore have a housing need.
- ^{4.27} Of those who lived on a boat by choice, 11 said they chose to have a mostly moored boat, while another 11 said they lived on a boat to travel. Five gave both reasons; to be mostly moored, but also to travel.
- ^{4.28} Aspects of daily life were important reasons to live on a boat; access to work, children's school or nursery, health care and being close to family or friends. Note that respondents could choose more than one option; for example, the household that needs access to their children's nursery is also one of the four who need access to their children's school.

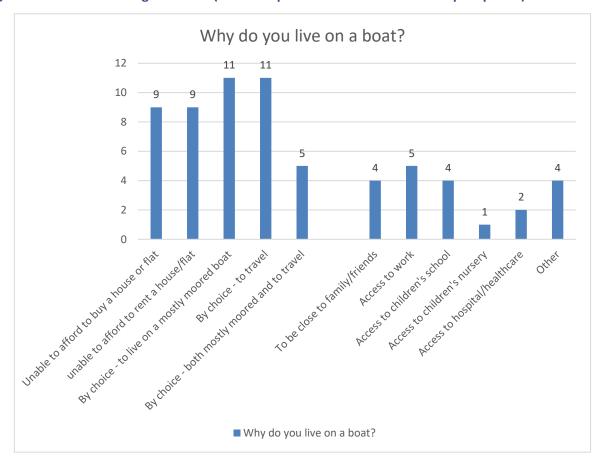


Figure 6: Reasons for living on a boat (Note: Respondents could choose multiple options)

- ^{4.29} Boat dwellers were asked if they had another home that they can use. The results of this question crossed with the reasons for living on a boat are shown in the table below.
- ^{4.30} Three respondents who lived on a boat because they could not afford to buy or could not afford to rent a house or flat already had a house or flat. Reasons for this or could be because their house or flat was in a different, probably cheaper area, or possibly because their existing property was so small that a boat gave them more space. One lived on another boat. A further one lived in a caravan or mobile. Of which these, 3 lived on a boat to travel or for 'lifestyle'. Of the 20 who live on a boat without intending to travel, 4 have access to a house or a flat that they use. This gives the following important results:

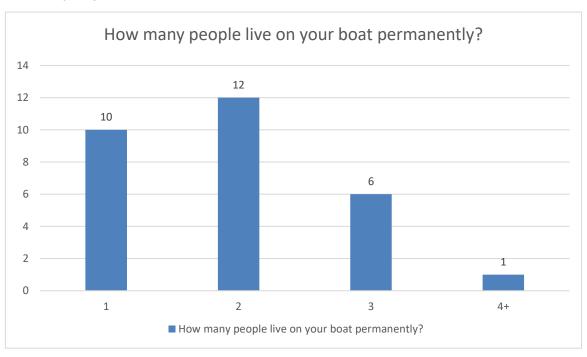
- » 18 households live on boats; 9 of these because of being unable to afford to rent and 9 unable to afford to buy bricks and mortar properties, and may need appropriate affordable housing to rent or affordable home ownership.
- 4 live on a boat for 'access to work', have no other home and report being unable to rent or buy a property. These may need appropriate affordable housing to rent or affordable home ownership.

Figure 7: Reasons for living on a boat and having another home

	No other home	Yes - Another boat	Yes - House or flat	Yes – Other	TOTAL
Unable to afford to <u>buy or to rent</u> a house or flat	15		3		18
By choice - to live on a mostly moored boat	6		4	1	11
By choice - to travel	10		1		11
By choice – both moored boat and to travel	3	1		1	5
To be close to family/friends	2		1	1	4
Access to work	4			1	5
Access to children's school or nursery	4				4
Access to hospital/healthcare	2				2

^{4.31} Of the 29 boats with people living on them permanently, one third (10 boats; 34%) are single person occupancy. Another 12 (42%) are occupied by two people, with one quarter (7 boats, 24%) being occupied by 3 or more people. The other 6 boats had someone living on them for part of the year.

Figure 8: Occupancy



^{4.32} The 29 permanently inhabited boats housed a total of 56 permanent residents. In addition, 17 boats had occupants who lived there for part of the year but not permanently (35 people in total). When asked for

occupants ages, 52 residents were recorded; some of these will be temporary rather than permanent residents. Nevertheless, the chart below gives a clear profile of residents. Of the 52 residents ages recorded, 38 (73% were of working age (25 to 64) with 11 being under 18, 3 being over 64¹³ and 5 preferring not to say. It is not clear why no one aged 18-24 lived on any boat.

^{4.33} No respondent said that their boat was overcrowded. Most boats have at most two permanent residents. The data shows that where there were three or 4 permanent residents, each boat was at least 55ft long narrow boat or broad beam. Two boats were recorded as 24ft long and broad beam. From the perspective of boat dwellers, it is likely that all these boats are a reasonable size, while seen from the perspective of house dwellers they may seem crowded. In terms of the number of bedrooms, many narrowboats of at least 55ft will have two double bedrooms, possibly with a third convertible in the dining area. The data suggests that there is currently no overcrowding based on the room standard and the ages and sex of children.

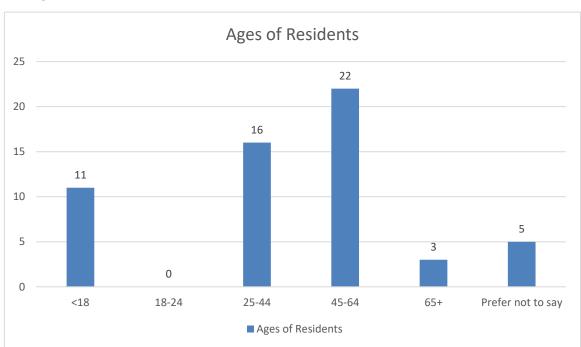


Figure 9: Ages of residents

^{4.34} Similar to the age question, the responses to the gender of residents include both permanent and temporary occupants; 59 in this case, of which over half (31 people; 53%) were male and under half (28 people; 47%) were female. No other gender identities were given.

¹³ The age question will be refined in future surveys

Figure 10: Residents genders

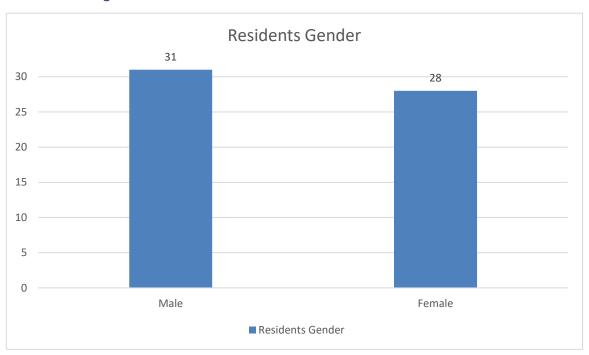
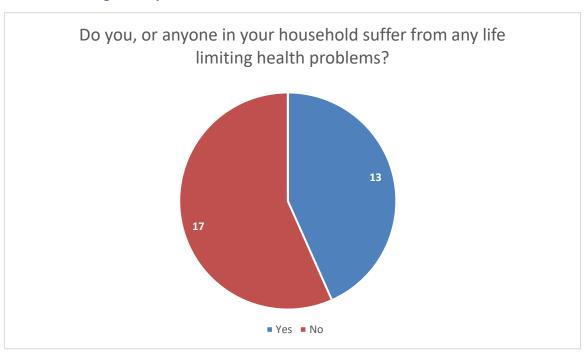


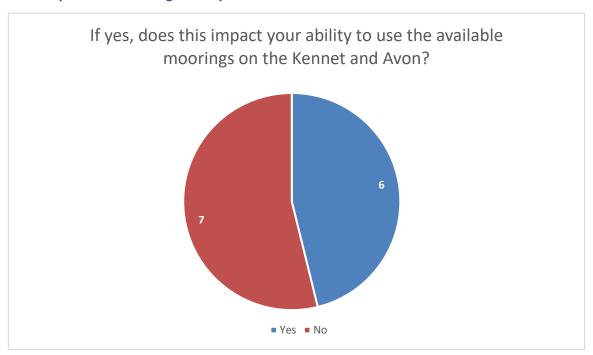
Figure 11: Life limiting health problems



^{4.36} Households that included someone with a life limiting illness were asked about the impact of that illness on using moorings. About half (6) said that the illness did have an impact on using moorings. This suggests that at least some moorings are potentially difficult for disabled people, depending on the disability.

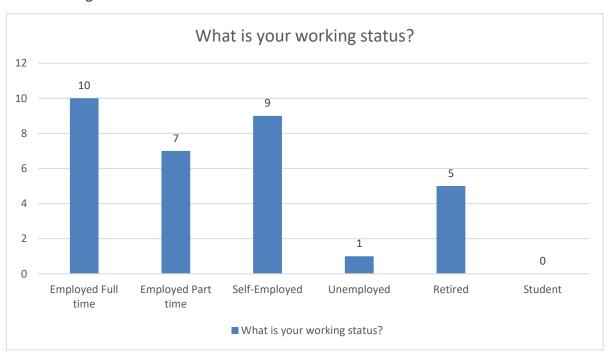
^{4.35} Over two fifths of the boat dwelling households included someone with a life limiting illness (13 households, 43%).

Figure 12: Impact of life limiting health problems



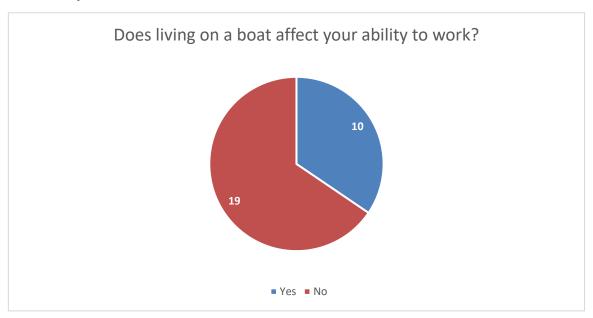
^{4.37} In total, 26 (81%) of 32 boat dwellers recorded were in employment, either full or part time or self-employed. One was unemployed and 5 were retired. No students were recorded, but the zero students have been left in the chart for completeness. The 32 included two people on some boats.

Figure 13: Working status



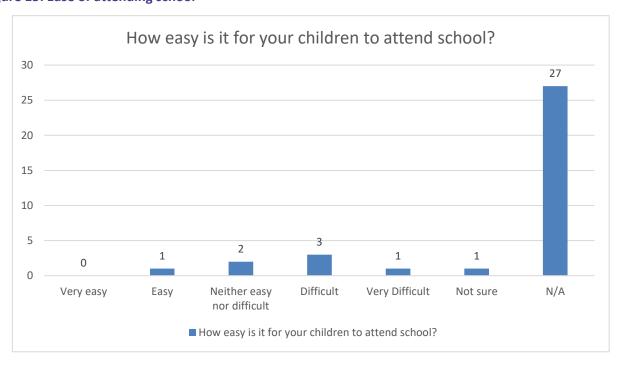
^{4.38} Ten respondents considered that living on a boat affects their ability to work.

Figure 14: Ability to work



- ^{4.39} Eight respondents answered the question 'How easy is it for your children to attend school?'. One found it easy for their children to attend school, whereas four found it difficult, one of which found it very difficult for their children to attend school. A further two found it neither easy nor difficult, and one respondent was not sure. The key point is that four boat dwelling households found it difficult for their children to attend school. This is 11% of the 35 respondents and can be summarised as: around 11% of boat dwelling households have children and find it difficult for their children to attend school.
- ^{4.40} There is much to unpack in this. The results by boat dwellers with a permanent mooring and continuous cruisers are shown below in Figure 16.

Figure 15: Ease of attending school



^{4.41} The survey provides little evidence on the reasons why it is difficult for children to attend school, but separating households with permanent moorings from continuous cruisers suggests that both can find it

difficult for their children to attend school, possibly because of the position of the moorings or transport issues.

Figure 16: How easy is it for your children to attend school – permanent moorings and continuous cruisers

	Permanent Mooring	Continuous Cruiser
Easy	1	
Neither easy nor difficult		2
Difficult	2	1
Very Difficult		1
Not sure		1

- ^{4.42} Several comments were attached to the responses about attending school. The most common problem is being able to moor in a convenient place for schooling:
 - » Ability to stay nearer school longer.
 - » Depends where family are on river.
 - » More moorings needed in BANES. More water points and stop threatening to take valuable bins away
- ^{4.43} Two highlighted problems with travel:
 - » As they go to secondary school in the coming years. Better transport options and safer places to cross the road.
 - » Nowhere to park close to canal to walk easily to car to drive him to school
- 4.44 The final comment is a reminder that support for home schooling needs to be considered:
 - » Not of school age yet and will probably home school.
- 4.45 It is important to note that this short discussion is based on information from only 7 households who expressed an opinion.

Current and future accommodation

^{4.46} The boat dwellers interviewed reside in the Bath and North East Somerset area for all or much of the year. One third (10 boat dwellers) moor in Bath and North East Somerset permanently, while just under a quarter (7 or 23%) reside in this area for at least 6 months of the year. Another 7 reside in the area for between 3 and 6 months with 6 boat dwellers for under 3 months of the year. Overall then, 57% moor in BANES for at least 6 months of the year.

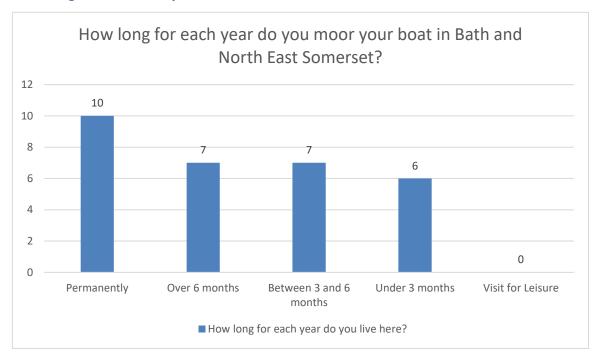


Figure 17: Length of time each year resident in the area

^{4.47} A total of 24 boat dwellers (71%) have lived in BANES for part or all of the year for at least one year, with half of those living in the area for over 5 years.

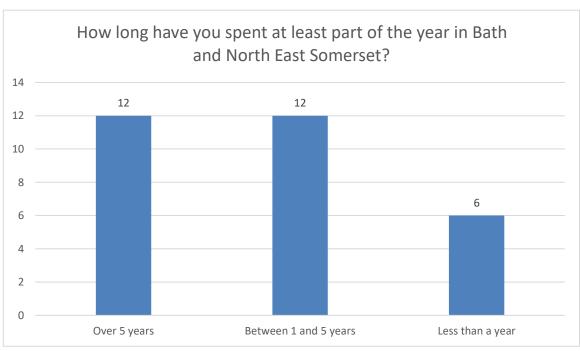
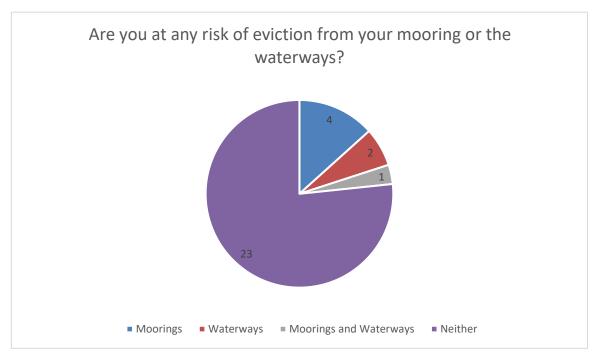


Figure 18: Number of years resident in the area

^{4.48} Almost a quarter, 7 out of 30, are at risk of eviction. Issues reported as causing the risk included the CRT requirement to travel, complaints from home owners along the waterways and other river and canal users, and 'Council and Government intervention'. One comment is worth noting:

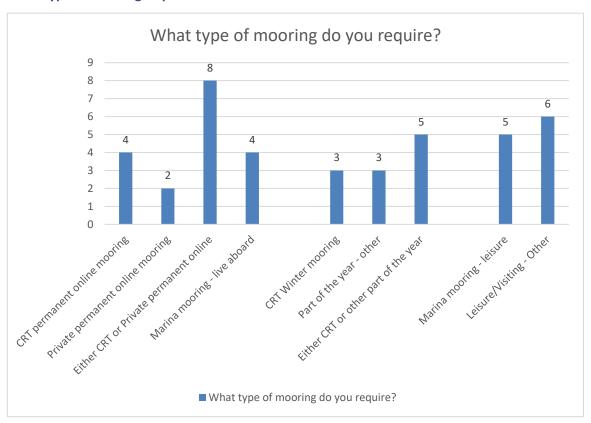
No security in tenancy as it is dependent on relationship with the owner of the mooring spaces.





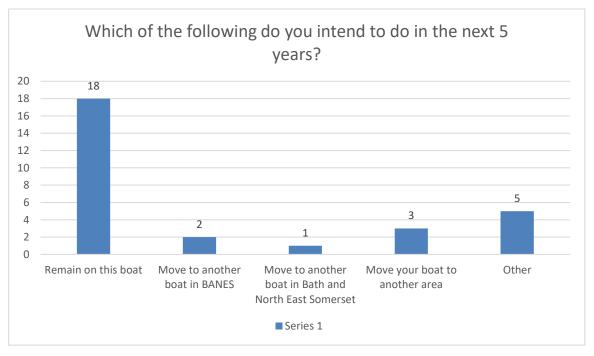
- 4.49 Nearly half boat dwellers said they required either CRT or private permanent online moorings (14 boat dwellers). 4 of the 14 specified CRT moorings, two specified private moorings and 8 specified either.
- ^{4.50} 4 specified 'Marina mooring live aboard'. All of these also specified CRT and private permanent moorings.
- ^{4.51} Of these 14 who specified a need for any kind of permanent mooring, 8 already have permanent moorings, leaving a need for 6 permanent moorings among the respondent boat dwellers. These 6 (17% of the 35 respondents) are continuous cruisers looking to settle.
- 4.52 Considering moorings for part of the year, 3 said they required CRT Winter moorings and 3 required other part of the year moorings; 5 are looking for either CRT Winter or other part of the year moorings. 6 Boat dwellers who are looking for part of the year moorings are not looking for permanent moorings, while 5 are also looking for permanent moorings.
- ^{4.53} In total, 6 (17% of the total of 35 respondents) require part of the year moorings and are not looking for permanent moorings.
- ^{4.54} There is some interest in leisure or temporary moorings either on marinas or elsewhere. Some of these are also looking for permanent moorings and some are looking for part of the year moorings.
- ^{4.55} One boat dweller is looking for disabled accessible leisure/temporary moorings, but not permanent or part of year moorings.

Figure 20: Type of mooring required



^{4.56} Boat dwellers moving intentions over the next 5 years are shown below. The majority, 20 boat dwellers (69%), intend to remain in BANES; 18 on their current boat and 2 on a different boat. Another 9 intend to move out of BANES.

Figure 21: Moving intensions over the next 5 years



Facilities and services

- ^{4.57} Figure 22 shows the ease of access boat dwellers have to facilities, ordered by boat dwellers having no access or finding it difficult to access. The key points from this table are:
 - » 4 find it difficult to access fresh water
 - » 19 find it difficult to access compost toilet emptying facilities
 - » 16 find it difficult to access recycling facilities
 - » 19 cannot access electricity hook up.
 - » 13 find it difficult to access laundry facilities.
 - » 18 find it difficult to access bike storage.
 - » 19 find it difficult to find appropriate storage for fuel and other necessities.
 - » 11 have difficult or no access to broadband.

Figure 22: Access to facilities

Do you have easy access to?	Easy Access	Difficult or No Access
Fresh water	27	4
Sewage Disposal - Pump out	14	7
Sewage Disposal - Chemical Toilet Disposal	18	9
Compost toilet emptying facilities	2	19
Rubbish disposal	24	6
Recycling	12	16
Electricity hook-up	5	19
Laundry facilities	13	13
Car Parking	19	8
Bike storage	8	18
Fuel and other necessities storage	8	19
Good quality local towpaths	22	4
Maintenance facilities - DIY	20	8
Maintenance facilities - Paid	19	9
Access to supplies of coal, diesel and bottled gas	29	1
Connectivity - Reliable high speed broadband	17	11

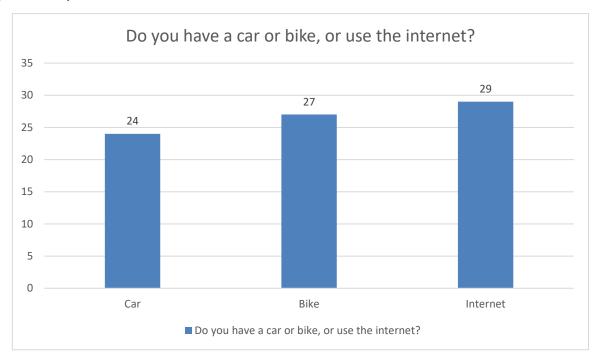
^{4.58} More of all facilities is needed; at least one third of respondents said that more was needed of each facility. At the same time a number of boat dwellers said that no more of each facility was needed. It is likely that it is a personal view whether more of anything is needed or not. Access to supplies of coal, diesel and bottled gas is a good example; 18 respondents said that no more was needed while 13 said more or much more is needed. These results do not appear to be affected by whether the respondent has a permanent mooring or is a continuous cruiser.

Figure 23: More facilities needed

Is more of this facility needed?	No more needed	More is needed	Much more is needed
Fresh water	10	17	3
Sewage Disposal - Pump out	3	14	4
Sewage Disposal - Chemical Toilet Disposal	3	17	6
Compost toilet emptying facilities	2	17	1
Rubbish disposal	7	18	5
Recycling	2	20	6
Electricity hook-up	8	14	2
Laundry facilities	7	18	2
Car Parking	3	18	5
Bike storage	8	15	2
Fuel and other necessities storage	10	12	2
Good quality local towpaths	7	16	3
Maintenance facilities - DIY	14	10	3
Maintenance facilities - Paid	13	11	3
Access to supplies of coal, diesel and bottled gas	18	10	0
Connectivity - Reliable high speed broadband	7	17	5

- ^{4.59} Considering the expressed need for three facilities against evidence of usage:
 - » 24 said they have a car; 23 said that more or much more car parking is needed.
 - » 27 said they have a bike; 17 said that more or much more bike storage is needed.
 - » 29 said they use the Internet; 22 said reliable high speed broadband was needed

Figure 24: Car, Bike and Internet Facilities



- ^{4.60} Boat dwellers expressed some concerns about licence or mooring enforcement. 7 considered that action is taken too readily and one third of all respondents (10) considered that action is inflexible. Against this, 6 considered enforcement to be too lax. 13 said there were no issues with enforcement.
- ^{4.61} A number of comments were received about enforcement from both sides.
- ^{4.62} The CRT 20 mile range was considered to be 'excessive and unlawful'; rules were thought to change constantly making it difficult for people to follow them, enforcement action against vulnerable people was criticised. Some boaters commented that enforcement was too lax. There are some practical aspects of daily life faced by continuous cruisers:

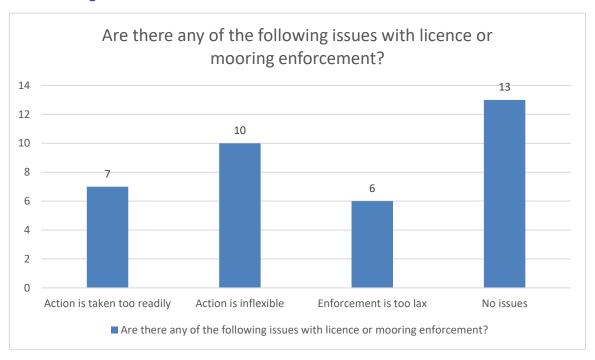
CRT slowly taken away the 14 day moorings near roads and replaced them with 2 day moorings, making it increasingly harder to get my son to school, especially in winter months.

There is no consideration for the needs of families with children who need to attend school, or people with fixed places of work

- 4.63 On the positive side, comments included that there are no issues to mention, CRT follow a 'happy medium' and are 'Polite unless you overstay'.
- ^{4.64} One suggestion for improvement was:

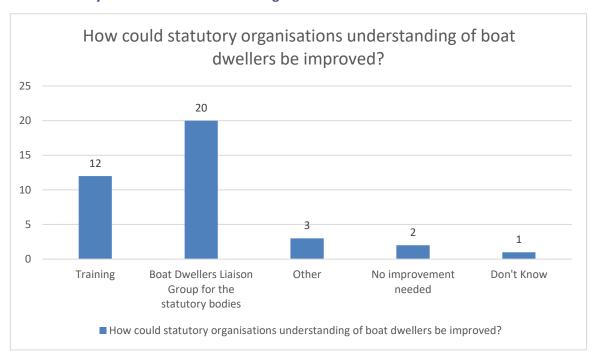
Licenses should have the option to be paid monthly. It is hard to afford a lump sum in one go.

Figure 25: Mooring and licence enforcement



^{4.65} When asked what would help increase statutory bodies' staff understanding of boat dwellers needs, 12 interviewees suggested that training would help understanding and 20 that a statutory bodies and boat dwellers liaison group would be helpful.

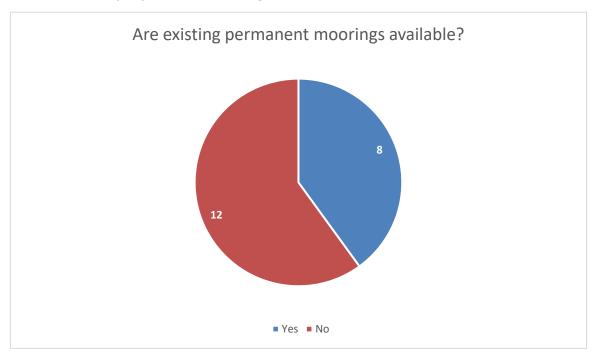
Figure 26: Statutory bodies better understanding of boat dweller needs.



Permanent Moorings

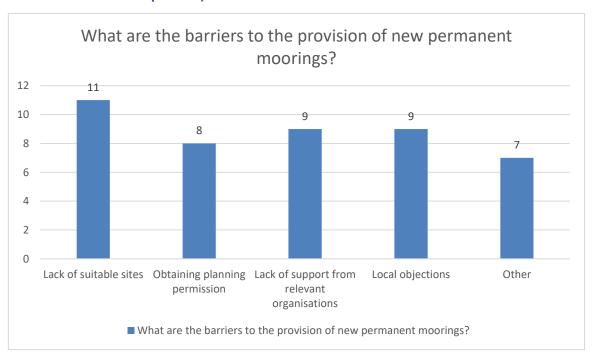
4.66 Three fifths of boat dwellers (12 out of 20; 60%) consider existing permanent moorings to be unaffordable, though the outstanding 40% consider them to be affordable. This result does not imply that moorings are unaffordable for all households and might best be viewed in a similar way to bricks and mortar housing costs; for example, housing costs are often defined as being unaffordable if they are above a certain percentage of a households income then the housing costs are unaffordable for that household.

Figure 27: Affordability of permanent moorings



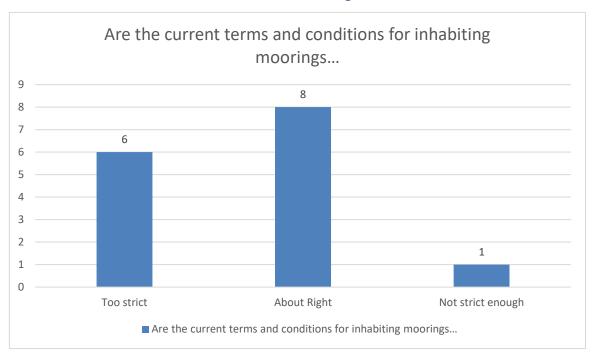
^{4.67} The main barriers to providing new permanent moorings seem to be broadly equally balanced between lack of suitable sites, obtaining planning permission, lack of support from relevant organisations and local objections (presumably often through the planning system). Three boat dwellers ticked all the barriers listed in this question. 'Other' reasons were landowners not being able to get permission for moorings, or not wishing to allow mooring (2 respondents), moorings being too expensive and the bidding system (1 respondent).

Figure 28: Barrier to providing permanent moorings (total number is 33, not 25, as 4 boat dwellers ticked all the barriers listed in the question)



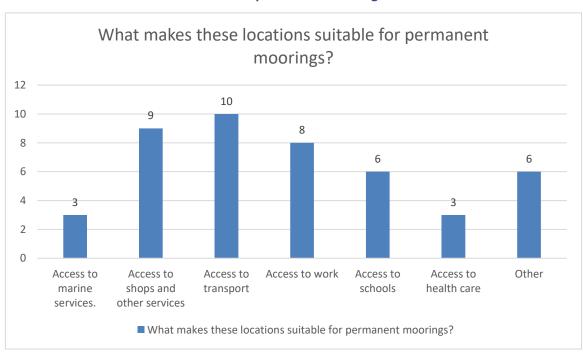
^{4.68} Just over half (8; 53%) consider the current terms and conditions for inhabited moorings to be about right, though 6 consider them to be too strict and 1 not strict enough.

Figure 29: Views on current conditions for inhabited moorings



- ^{4.69} When asked about their preferred locations for permanent moorings, the named preferences were Bath, Bathampton, Dundas, Keynsham and Saltford. Three expressed a preference for the River over the Canal.
- ^{4.70} The main things that made a location suitable for permanent moorings are access to transport, access to shops and other services, and access to work.

Figure 30: What makes a location suitable for permanent moorings



Temporary moorings

^{4.71} Over half of the boat dwellers (16 out of 29; 55%) consider that there are enough temporary moorings, though another 13 say that there are not enough. A shortage of temporary mooring is likely to affect leisure tourist boats who may need to moor overnight on unsuitable moorings or pass through Bath and North East Somerset to moor elsewhere, thereby not contributing to the local economy of the River. Issues exist between boat dwellers and visitors:

Yes. Liveaboard boaters permanently hogging the scarce number of visitor moorings for weeks/months on end. As they are not visitors at all, mooring there should be completely prohibited

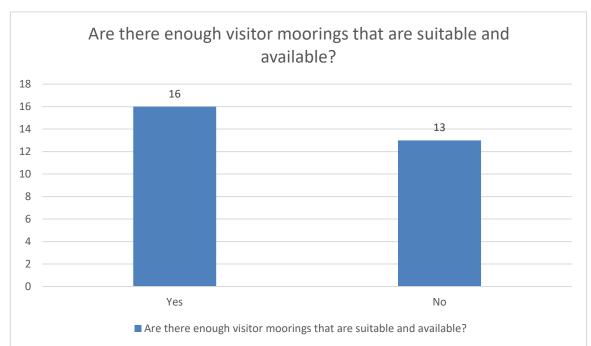
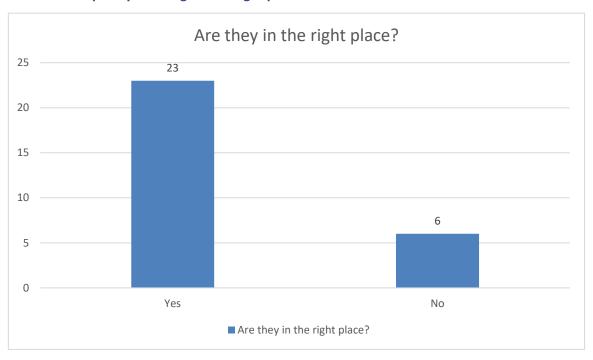


Figure 31: Are there enough temporary moorings

^{4.72} While a small majority think that there are enough temporary moorings, a large majority (23 out of 29) consider those that exist to be in the right place. There were no specific suggestions as to where to place new temporary moorings.

Figure 32: Are temporary moorings in the right place?



^{4.73} There was little consensus about how long a temporary mooring should be for. Just one respondent wants temporary moorings to be for longer than 3 weeks, but a third (9; 33%) said 2 weeks and under a quarter (6) said only 48 hours. The appropriate length of stay allowed may depend on where the temporary mooring is.

Figure 33: Length of time a temporary mooring should be for



Relations with Other Local People

- ^{4.74} Under half of boat dwellers (17; 46%) reported having generally good relations with other local people. Just over a quarter reported that relations were mixed, depending on the person.
- ^{4.75} Comments about relations with other local people varied from the negative:

There are isolated incidents of prejudice towards boaters, e.g. being called lazy/benefits scroungers if we are seen on our boats during 'normal' working hours, or having racial slurs referring to travellers shouted at us. There are also incidents of petty crime targeting boaters - usually theft of items stored on roofs, such as bicycles, generators, spare batteries, etc.

A lot of rude comments/general bad vibes about boat dwellers over the years with the odd exceptions. Comments from their lack of knowledge on how we dispose of our waste (they assume we throw it out of the window).

4.76 To the very positive:

I've had my mooring for 6 years and I have good relationships with other local people

Most people are friendly and curious about the boater lifestyle. They stop for a chat on the towpath and ask questions about our boats and our lives.

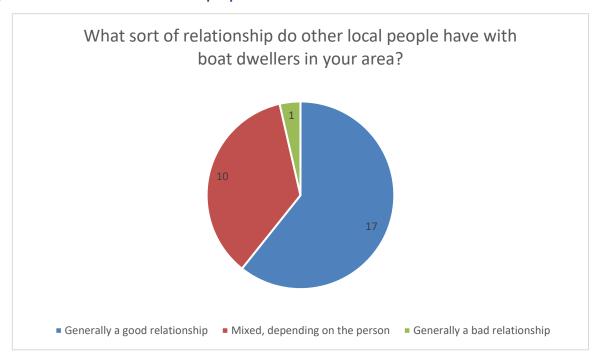


Figure 34: Relations with other local people

Improving understanding

^{4.77} A majority of respondents; 20 out of 35 (57%) said that having a liaison group for statutory bodies and boat dwellers would improve understanding.

Continuous Cruisers Mooring and Services Need

Geography and services

- Before considering what the survey data indicates about the need for temporary moorings, it is useful to understand the current situation.
- There is often a concentration of boats looking for moorings between Dundas and Bathwick in the East of BANES. In summary, this is because of there being few moorings and services through the approaches and City of Bath between Bathwick and the West of Bath at Saltford. The main issue preventing services from being developed is the amount of private riparian land. Winter moorings are required from Dundas to the River at Bath because the River can be dangerous to navigate in Winter.
- Dundas to Bathwick on the Kennet and Avon Canal is the last location that is large enough for boats to moor before heading for the River Avon. On entering the River after Bathwick heading west, most moorings through the centre of Bath are for two days (48 hours). There is a short stretch of 14 day unofficial mooring at The Round, just above Western Lock in the West of Bath City. The next official mooring spot after Weston Lock is the 14 day moorings at Mead Lane, Saltford. Continuing west after Mead Lane there is a pontoon at Bitton with 48 hours moorings then a pontoon in Keynsham with 24 hours moorings. The last moorings in BANES is the 48 hour moorings in Hanham. All the other potential places to moor are on private land.
- The extra moorings are primarily required between Bathampton (Bathwick) and Hanham. They are needed most in the summer because of the increase in boat traffic, largely from leisure boats, but also because most as the river can be unsafe to navigate during the winter, therefore limiting live-aboard continuous cruisers.

Figure 35: East to west location of temporary moorings

Location	Length of Stay	Notes	Capacity - number of boats
Bath Town Centre	48 hours	Throughout from around bath Top lock to Weston lock	
The Round / Weston Lock	14 day	Small stretch – unofficial. Unclear if this is tolerated by landowner	
Saltford, Mead Lane	14 day	The only official spot on the bank	12 of different lengths 8 x 60ft boats
Bitton	48 hours	Pontoon	4 of different lengths 2 x 60 ft boats
Keynsham	24 hours	Pontoon	2 boats of different lengths
Hanham	48 hours		

The available land for moorings on the river is predominantly privately owned, including the Dutchy of Cornwall, and boat mooring is at the discretion of the landowner. This has a number of consequences. There may be little incentive for landowners to develop moorings with services, especially if the land is already licensed to river users such as fishing clubs and rowing clubs who may be an important source of income and, in the case of fishing clubs, require little infrastructure development and maintenance. There can be conflict between boaters and these other river users; fishing clubs may not be able to execute their fishing rights if boats are moored, and rowers and boaters may compete for space. There may also be conflict with land owners if boaters moor on their land; while presumably the law supports the land owner, the boater may be

desperate for a place to stop that is at least safe.

- Absolute availability is not a general issue on the canal as boaters can moor in most places. The issue on the Kennet and Avon Canal through BANES is the number of continuous cruisers and other boaters looking for moorings from the east of Darlington Wharf around the Sydney Garden tunnels through to Dundas Aqueduct. This area can get particularly congested when there are large numbers of leisure boats. The popularity is partly because of services being available, in contrast to the limited moorings further west on the River, and being unsafe to navigate the River through the Winter. This area is popular with continuous cruisers looking for winter moorings; it is also possible to pay for CRT Winter moorings here.
- While there is no overall shortage of mooring space between Dundas aqueduct and the River at Bath. The problems in this area are the placement of services and, in Winter, CRT converting enough 48 hour moorings to Winter moorings to allow continuous cruisers to moor for a protracted period.
- ^{5.8} The following calculation is for illustration. It is purely to demonstrate three points; that during the summer months there is likely to be competition for moorings between hire craft and continuous cruisers, while during the winter there is not a shortage of moorings as such, as has been established above, and that services are required along the length of Canal involved.
- 5.9 Illustrative calculation: The distance between Dundas Aqueduct and the River Avon at Bath is about 3.75 miles¹⁴. As it is canal, boats can moor along most of the distance. From the survey, the average continuous cruiser boat is between 50ft and 60ft. There are 5,280 feet in one mile. Allowing for all boats to be 60ft, then nose to tail, 88 boats can moor on each mile. There are many spots on the Canal where it is either not possible or not desirable to moor such as bridges, bends and unsuitable banks. Therefore, assuming that it is appropriate to moor on only 1.8 to 1.9 miles of the 3.75 mile stretch would allow 160 boats of length 60ft to moor along the full stretch from Dundas Aqueduct to the River at Bath.
- The illustrative calculation demonstrates that while continuous cruisers may be able to moor, many are likely to be some distance from services and take considerable time to access those services. This may not be feasible for employed people and others. For example, 17 of the 25 continual cruisers are employed either full time, part time or self-employed. Taking several hours out of a day to access services could be difficult for some of these working boat dwellers and others.
- ^{5.11} Winter Moorings are currently available at the following, the first three between Dundas and Bathampton and the second two on the stretch approaching the River at Bath:
 - » Dundas West Winter Mooring
 - » Claverton Winter Mooring
 - » Bathampton S5 Winter Mooring
 - » Darlington Wharf Winter Mooring
 - » Horseshoe Walk Winter Mooring

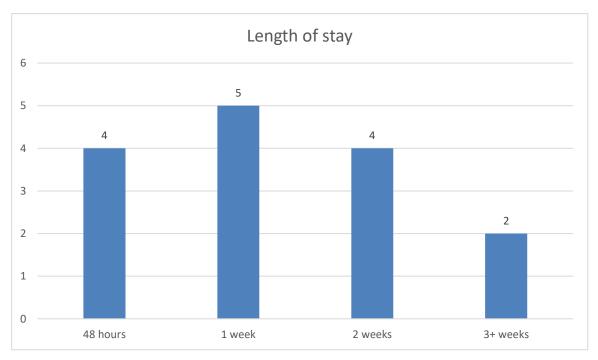
Temporary mooring need - evidence from the survey

There were 25 continuous cruisers in the survey. Of these, 15 live on a boat by choice in order to travel. The evidence points to the majority of continual cruisers wanting to travel and therefore be looking for temporary moorings at various points on the waterways.

¹⁴ Measured on the Heron Maps Waterways series: Kennet & Avon Canal and River Avon

- ^{5.13} There were around 100 live-aboard boats identified and 35 survey responses in total. From this, the total number of live-aboard continual cruisers could be in the region of 25*100/35=71. Temporary moorings through BANES need to accommodate between 25 and, possibly 70 continuous cruisers. This calculation will allow an assessment of the minimum number of temporary moorings and an indication of the maximum to cater for continuous cruisers.
- 5.14 It would seem pragmatic to assume that all 25 continuous cruisers who stay in the BANES area for a considerable part of the year will need temporary moorings at some point. It is useful to consider the 13 who answered the question to assess the type of moorings needed, especially CRT winter moorings:
 - » 2 want CRT winter moorings and did not request other temporary moorings;
 - » 6 want other temporary moorings and did not request CRT winter moorings;
 - » 5 want both CRT winter moorings and other temporary moorings;
 - » In total, 7 want CRT winter moorings.
- ^{5.15} Continuous cruisers are looking for temporary moorings from 48 hours to 3+ weeks, but the most sought after are 1 to 2 weeks. CRT winter moorings are likely to be required for longer than this.

Figure 36: Length of stay required on temporary moorings (respondents could cross multiple options)



The length of continuous cruisers boats vary from 24ft to 74ft, but most are between 50ft and 60ft. The mean average boat length for continuous cruisers is 55ft.

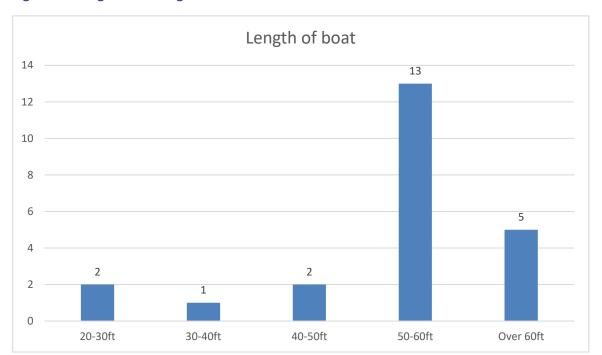


Figure 37: Length of existing continuous cruiser boats

- 5.17 When asking where temporary moorings should be placed, it is useful to know whether continuous cruisers find existing temporary to be well placed. The majority of respondents (15 out of 18) say that existing temporary moorings are in the right place, with the remaining 3 saying they are not in the right place. Overall, it is pragmatic to assume that the existing temporary moorings are reasonably well placed even though they do not suit everyone.
- A final important consideration is that it is possible to travel the length of the River Avon from the end of the Kennet and Avon Canal in the east to Hanham Lock in the west in one long day or two relaxed days (Source: CRT).

Temporary mooring need

- 5.19 The temporary mooring needs assessment for the River Avon through Bath from the Kennet and Avon Canal entry point to the River (around Bath Deep Lock) in the east to Hanham Lock in the west is shown in Figure 38. An appropriately simple modelling methodology is used. The benefits of simplicity are that the model is clear and transparent, along with uncertainty being reduced by keeping the number of assumptions to a minimum. The model is evidenced based.
- 5.20 The evidenced net need on the River Avon between the Canal and Hanham Lock is for a total of 660ft of River bank to be developed as temporary moorings, divided into practical moorings lengths. The model uses 3 moorings of 220ft each for clarity, but other lengths are equally valid. The need on the Kennet and Avon Canal is for services rather than additional temporary moorings.
- ^{5.21} The model provides an estimate of the length of River bank that is required to allow continuous cruisers to stop on a journey along the whole stretch of the River Avon from leaving the Kennet and Avon Canal to Hanham Lock. For clarity, in the model the length of each mooring is 220ft, which is enough for 4 boats of 55ft length to moor nose to tail. In practice it would be equally valid to provide moorings of different sizes but which sum to the same total length; 660ft. Some numbers in the model are rounded so as to avoid false precision in the results.

- ^{5.22} It is not feasible to suggest with any precision where temporary moorings should be placed. That is a planning decision and will be based on where suitable riparian land is available among other considerations. Factors such as existing use, land ownership, River conditions for mooring safety, and access to services will need to be considered. However, the longest stretch of River without enough moorings is between the Canal and Mead Lane at Saltford. At the same time, adding more temporary moorings close to Saltford could help but would not be ideal.
- ^{5.23} The model considered total demand and supply of River bank footage required to provide the net need for temporary moorings required.

5.24 The gross demand calculation works in this way:

- » Identify the number of continuous cruisers that require temporary moorings (25).
- » Identify the length of time continuous cruisers are looking to moor for on temporary moorings (14 days).
- » Identify the average length of boat used by continuous cruisers (55ft).
- » Identify how many stops a continuous cruise might wish to make on a journey through the full stretch of River under consideration, noting that the journey is possible in a single, long, day (1 stop).
- » Identify the total number of stops required by all the identified boats if each boat travelled the full stretch of the River under consideration (25 boats times 1 stop each = 25).
- » Calculate the total footage of River bank that would be needed at any one time if all the identified boats travelled through the stretch of River under consideration at the same time (25 boats, each stopping 1 time and each boat being 55ft long = 1,375ft).
- Assuming each mooring takes 4 boats of 55ft each, then the total demand is for 6 moorings of 220ft each. This assumption is made for clarity; providing moorings of different lengths would be equally valid.

5.25 The **supply** calculation works in this way:

- » Identify the existing supply of 14-day moorings on the stretch of the River under consideration (a single area at Saltford providing 12 boat moorings of 60ft each).
- » Convert this supply to the same format as the demand calculation using a pragmatic conversion rate so as to avoid false precision of the footage of River bank involved (3 moorings of 220ft).

^{5.26} The **net need** calculation is simply:

» Subtract the supply from the gross demand (gross demand for 6 moorings of 220ft each minus supply of 3 moorings of 220ft each equals a net need of 3 moorings of 220ft each, or 660ft of River bank).

Figure 38: Temporary mooring need – The River Avon from the Kennet and Avon Canal entry point in the east to Hanham Lock in the west

Step	Number	Reference	Effect	Rational
Gross demand - boats				
(1) Continuous cruisers identified in the survey	25 boats	Survey analysis, text in this chapter	Base number of boats without taking account of possible boats	Evidenced continuous cruiser boats requiring temporary moorings
Gross demand - moorings				
(2) Length of time required on moorings	2 weeks	Figure 36	Feed into size and type of mooring calculation	In general continual cruisers require temporary moorings for 1 to 2 weeks. Available moorings are 48 hours or two weeks, therefore 2-week moorings are the most in demand (though may often be used for shorter periods)
(3) Length of boat (average length)	55ft	Figure 37	Feeds into the size of mooring calculation	Moorings need to be able to accommodate the right number of boats of an average size
(4) Number of stops for continual cruiser travelling from the start of the River in the east to Hanham Lock in the west	1	Text in this chapter - CRT	Feeds into the number of moorings calculation	At least some continual cruisers will need a stop within the stretch between the start of the River and Hanham Lock
Mooring need calculation				
(5) Maximum number of continuous cruiser boat-stops requiring temporary moorings	25	Step (1) times step (4) 25 x 1=25	Baseline – maximum number of individual boat mooring	Assuming all 25 continuous cruisers are travelling between the start of the River from the Canal and Hanham Lock at one time
(6) Maximum length of the River bank that will need to be converted to moorings	1,375ft (0.26 miles)	Step (3) times step (5) 55 x 25=1,375ft	Shows the total length of moorings needed; divided into practical lengths in step (8) and (9)	Note: if all boats are 55ft, this assumes mooring nose to tail
(7) Length of each mooring	220 ft	Assuming 4 boats of 55ft at each mooring 4 x 55=220ft		Continuous cruisers will wish to stop at different points along the River
(8) Number of mooring places to accommodate the total length required	6 x 4-boat moorings	Step (6) divided by step (7) 1,375/220=6.25		Continuous cruisers will wish to stop at different points along the River
Supply				
(9) Supply of 14 day moorings at Saltford	Equivalent to 3 x 4-boat moorings	12 x 60ft spaces = 3 x 4- boat moorings	Identifies the existing supply in the same format as the demand; moorings for 4x55ft boats	This assessment is for moorings for up to 2 weeks. Up to 12 x 60ft boats can moor at Saltford at the same time. Therefore there is an existing supply of the equivalent of 12 x 60ft boats at Saltford
Net need				
(10) Need	3 x 4-boat moorings		Stage (8) minus stage (9)	
Net need for new moorings: evidence based actual number	6 moorings of 220ft each	Evidenced need		Allows for 4 boats of 55ft on each mooring.

Services for continuous cruisers and others

- ^{5.27} Services should be developed with the additional temporary moorings on the River Avon. The remainder of this section provides some general points on the need for and possible placing of services. The available evidence does not support a more sophisticated analysis.
- 5.28 There is a "severe lack of facilities" on the River Avon; a private water point and pump out at Bath Marina which continuous cruisers can use at a cost, a Wessex Water water point and elsan emptying point at Swineford, and a waterpoint at Hanham Lock. There are no CRT bins along the river and toilet facilities are either private or scarce.
- On the Kennet and Avon Canal, there are services at Dundas Warf, and fresh water points and refuse disposal at Bathampton and near the connection with the River Avon. Based on the evidence that more are needed, it would seem appropriate to provide additional services at these points (perhaps sewage disposal at Bathampton to give one example) and some services spaced between these points (perhaps at least recycling and rubbish disposal, but also fresh water and sewage if it is feasible).
- ^{5.30} The survey responses to the need for services are shown in Figure 23 and reproduced in the table below reordered by the most common requested services.
- ^{5,31} The most commonly requested service was car parking, with 18 respondents saying that more is needed and 5 that much more was needed. Parking close to the River and Canal is difficult for much of the length of the waterway. It is reported that many of the roads close to the River or Canal are for residents only and boaters are not allowed to apply for a permit because they are not classed as residents. This leads to parking hotspots where boat dwellers know there is parking.
- ^{5.32} The main day to day essentials of fresh water points and more of all kinds of sewage, rubbish and recycling disposal were requested.
- ^{5.33} However, recycling and rubbish disposal were the two most commonly cited services. These are examples of services which could be provided with little additional infrastructure if they were to be provided at all existing mooring spots on the River and spaced along the Canal and intervals. Of course, these services would need workers to collect them. Alternative approaches could be considered in place of providing bins, such as collection from boats, but this suggestion is for example only and may not be feasible to implement.

Figure 39: More facilities needed – in order of requested need

Is more of this facility needed?	No more needed	More is needed	Much more is needed
Recycling	2	20	6
Rubbish disposal	7	18	5
Car Parking	3	18	5
Laundry facilities	7	18	2
Sewage Disposal - Chemical Toilet Disposal	3	17	6
Connectivity - Reliable high speed broadband	7	17	5
Fresh water	10	17	3
Compost toilet emptying facilities	2	17	1
Good quality local towpaths	7	16	3
Bike storage	8	15	2
Sewage Disposal - Pump out	3	14	4
Electricity hook-up	8	14	2
Fuel and other necessities storage	10	12	2
Maintenance facilities - Paid	13	11	3
Maintenance facilities - DIY	14	10	3
Access to supplies of coal, diesel and bottled gas	18	10	0

On a specific point, it is reported that the banking at Bathampton could be improved to improve safety and access. The condition of the banking makes accessible mooring difficult, especially for people with limited mobility. The bank degradation makes it difficult to secure pins and keep them stable. However, the responsibility for improvements lies with the CRT as the landowner.

6. Need for Permanent Moorings

Introduction

- This section focuses on the moorings that are needed in the study area currently and for the next five years. This time period is based on existing need; at this stage it is not possible to produce robust forecasts of the requirements for longer term future provision because of the uncertainties surrounding migration and new household formation. There are a number of reasons for this. Some examples are that it is difficult to predict how many households will decide to live on a boat as a lifestyle choice, how many will move to a boat because they are unable to afford bricks and mortar (rather than remaining living with parents, moving out of the area, or other options) among others. It shows the total provision licensed permanent moorings which is required in the area and discusses the need for any temporary moorings.
- The evidenced net need on the River Avon and Kennet and Avon Canal through BANES is for a total of 6 permanent moorings.
- ^{6.3} The survey took place at the very beginning of cost of living crisis; before most households were affected to a major extent. There are two effects of increased cost of living. Firstly, for boat dwellers, the cost of fuel will be a particular concern alongside general living costs. Secondly, the increased cost of living, and housing costs in particular, could lead to more boat dwellers who might otherwise have moved to bricks and mortar to remain living on their boat alongside an increase in households looking to live on boats as a more affordable alternative to bricks and mortar. If households do look to boat dwelling as an affordable alternative then it is likely to increase the demand for moorings, but this is an unknown and cannot be measured at the moment.
- An appropriately simple modelling methodology is used for the BDAA based on the supply and demand of licenced permanent moorings. The benefits of simplicity are that the model is clear and transparent, along with uncertainty being reduced by keeping the number of assumptions to a minimum. The model is evidenced based.
- ^{6.5} On the demand side of the model are:
 - The number of boat dwellers requiring permanent moorings in the area as expressed in the survey. These are only counted it they do not have an existing secure mooring in the area, such as being at risk of eviction from a mooring, or being continuous cruisers. Ten boat dwellers say they are looking for permanent moorings, with 6 of these meeting the conditions.
 - Any increase in demand which will arise in the next 5 years. Two kinds of demand are considered, which are broadly the same as standard demographic modelling but on a small scale; new household formation (natural growth) and in-migration. New household formation would be from boat dwellers' adult children who are likely to form new households and who wish to continue their boat dwelling life. There is no evidence of any demand from new household formation in the near future. In-migration is measured by new boat dwelling households moving into Bath and North East Somerset, or Bath and North East Somerset residents moving from other accommodation in the Council area to live on boats that are moored in the District. One boat dwelling household moved into the area in the previous year and is not already counted in the demand (the 6 identified in the previous paragraph).
- 6.6 On the supply side of the model are:

- Out-migration. In LHNA demography, out migration means households moving out of the area. But in terms of boat dwellers, out migration refers to households moving off the waterways in the area, either to another area or to other forms of accommodation in the same area; that is, moving away from boat dwelling. These two are covered by owners moving their boats out of the area and boat dwelling households who intend to sell their boats and move to other accommodation. One household with a permanent mooring intends to move out of the area and would thereby free up 1 permanent mooring for another boat.
- ^{6.7} The resulting number is the evidenced net need for permanent moorings for the next 5 years.
- ^{6.8} The model then takes a further step. Our best, rough estimate based on waterside observation is that there are up to 100 live aboard boats moored outside of marinas on the River Avon and Kennet and Avon Canal through Bath and North East Somerset. This final step applies a multiplier to multiply up the need based on the robust evidence of the 35 boat dwellers surveyed to the potential 100 boat dwellers. This step is shown for completeness, but is based purely on observation and should be treated as indicative rather than firm evidence to be presented or addressed in the Local Plan process.

Licensed permanent moorings

6.9 The licensed permanent mooring needs assessment is shown in Figure 40.

Figure 40: Licensed permanent mooring need

Step	Number	Running total	Reference	Effect	Rational
Total demand					
(1) Expressed demand for permanent mooring	6	6	Figure 19 and Figure 20	Base number without taking account of any additional supply or increase in the number of households	Boat dwellers on moorings at risk from eviction, or are continuous cruisers, and who are looking for a licensed permanent mooring in the area
(2) Add new households (natural growth)	+0 (zero)	6	Individual age data behind Figure 9	Increases demand	New households formed by the adult children of boat dwellers. Based on the current household members ages, there is no evidence for any need for new households in the near future
(3) Add in-migration and growth from households moving to boat dwelling as a new form of accommodation and boat dwellers moving their boats into the area to live	+1	7	Data behind Figure 18	Increases demand	Current need from new boat dwellers is assumed to have been caught in those having lived on a boat for less than a year, have not been counted above, do not have a permanent mooring and do not intend to move out. It is not possible to estimate future growth.
Supply					
(4) Subtract the number of boat dwellers on licensed permanent moorings who intend to move their boat out of the area	-1	6	Figure 21	Increases supply	It is assumed that the vacant mooring will be suitable for at least one of the boat dwellers in need of a permanent mooring
(5) Subtract the number of boat dwellers on licensed permanent moorings who intend to stay in the area but move off their boat and sell the boat	-0 (zero)	6	Figure 21	Increases supply	It is assumed that the vacant mooring will be suitable for at least one of the boat dwellers in need of a permanent mooring
Potential maximum need					
(Alternative) Apply multiplier to gross up the number for 35 boats to the equivalent for 100 boats	x 2.9	17		Takes account of all boats, not only those interviewed	Our best estimate is that there are 100 live aboard boats in the area, but this number is subject to considerable uncertainty
Total net need for new moorings: evidence based actual number		6	Evidenced need		
Modelled need for number to account for 100 live aboard boats		17	Based on estimate of total number of boats		Included for completeness to illustrate potential maximum need

The size of licensed permanent moorings required

^{6.10} An indication of the size of moorings required is shown in Figure 41. These numbers are based on Figure 2, Figure 19 and Figure 20.

Figure 41: Size of licensed permanent moorings required (based on current boat length)

Length of boat	Number
20-30ft	0
30-40ft	0
40-50ft	1
50-60ft	3
Over 60ft	2
Don't Know	1
Total	7

7. Conclusions

The main findings

- A modelling exercise to ensure all important factors lead to an assessment of 6 licenced permanent moorings required on the River Avon and Kennet and Avon Canal through Bath and North East Somerset. The modelling takes account of factors such as any existing licenced moorings becoming available and any need from new households being formed by the adult children of boat dwellers.
- 7.2 A rough estimate based on observation suggests there may be up to 100 live aboard boats outside of marinas on the River Avon and Kennet and Avon Canal through Bath and North East Somerset. If there are 100 then modelling suggest there may be a need for up to 17 licenced permanent moorings. However, it is impossible to identify live aboard boats with any precision unless the owners are present and this statement should be treated as indicative rather than firm evidence to be presented or addressed in the Local Plan process.
- 7.3 The evidenced net need on the River Avon between the Canal and Hanham Lock is for a total of 660ft of River bank to be developed as temporary moorings, divided into practical moorings lengths. The model uses 3 moorings of 220ft each for clarity, but other lengths are equally valid. The need on the Kennet and Avon Canal is for services rather than additional temporary moorings.
- 7.4 The survey shows a need for improved services, probably the most urgent are difficulty accessing composting toilet emptying facilities and difficulty accessing fresh water.
- Services should be developed with the additional temporary moorings on the River Avon. On the Kennet and Avon Canal, it would seem appropriate to provide additional services between the existing services at Dundas Warf, Bathampton and near the connection with the River Avon, along with increasing the services available at these points.

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