TOURISM
RESOURCES
COMPANY

Tourism Resources Company
Management Consultancy & Research Services

Crown Estate Scotland
Private Moorings and Moorings Associations

Socio-Economic Assessment

August 2022

TOURISM RESOURCES COMPANY
Management Consultancy and Research Services

20 FINTRY CRESCENT, BISHOPBRIGGS, GLASGOW G4 1SH
Tel: 0141-353 1143 Fax: 0141-586 7127
Email: info@tourism-resources.co.uk
www.tourism-resources.co.uk

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Introduction

This report provides a socio-economic assessment of Crown Estate Scotland CES) licensed moorings.

Background

CES operates a seabed licensing scheme for private mooring holders and constituted Mooring Associations (MAs). This socio-economic study was undertaken to research and report on the contribution the private moorings sector makes to Scottish Government sustainable development goals.

Objectives

The main objectives were to report on the contribution the moorings make on economic development and social wellbeing. Recommendations have also been made on ways to leverage additional economic and social benefits.

Method

The study method included a desk-based review, stakeholder consultations, Mooring Associations survey, Mooring Licence Holders survey, economic impact assessment and social wellbeing assessment.

CES Licenced Moorings

In 2021 there were a total of 3,786 Crown Estate Scotland (CES) licensed moorings. There was a decline in 2020 (due to Covid), but there was a partial recovery in 2021 and this looks to be continuing into 2022. This will bring mooring numbers back to pre-Covid levels. The West is the area with the most moorings (56%), followed by Clyde (35%). In terms of zones, Argyll accounts for 39%, followed by the Clyde Estuary (34%) and Ardnamurchan to Gairloch (16%).

Mooring holders are largely supportive of the mooring licensing scheme and CES's efficiency, responsiveness and overall performance.

Economic Impact

The expenditure of mooring holders creates an annual economic impact of £23.8m and supports 445 FTE jobs.

Summary of Economic Impacts	
	Amount
Direct Expenditure	£14.2m
Output	£23.8m
Employment	445 FTEs
GVA	£12.8m

Distributional Impacts

The economic impact is spread over a number of different areas around the coast and is helping to support many rural and remote rural communities. It is helping to support a range of different businesses e.g. boatyards, garages, pubs, cafes, shops, etc.

Volunteering

The volunteers are crucial to the Mooring Association (MA) system and it could not operate without them. There are estimated to be around 650 volunteers who are volunteering on a regular basis (with additional volunteers on an ad hoc basis).

Social Wellbeing

Physical Health

There is far greater recognition of the beneficial effects from Blue Space. Through having access to a mooring, the mooring holder and friends & family are able to access these range of benefits. This includes improvements in physical health (for 78% sailing helps them to keep fit). People spend longer undertaking activities in Blue Space, compared to Green Space, so the total amount of energy consumed is likely to be greater. This is certainly true of mooring holders who regularly take their boats out on a day, short or longer cruise. Coastal areas are favourable for vitamin D synthesis and the benefits this brings in helping to reduce cancer, improve bone health and certain skin conditions.

Mental Health

People are happiest when spending time in a marine/coastal area compared to other natural environments. Having a mooring encourages visits to the coast and this, in turn, has a number of effects: restorative (greater than those in urban greenspaces); reduces stress, anxiety and depression; increases relaxation and reflection; and has a calming effect. Stepping on a boat has been shown to remove stressors such as traffic noise, television, the office, computers, etc. For 95% sailing helps them to relax and for 92% it gets them away from the stresses of life. The more often people participate in boating the more beneficial it is in reducing anxiety levels and increasing life satisfaction, and mooring holders are on average frequent participants.

Community Participation

Three-fifths of people socialise with friends / family when they want to relax and sailing provides an ideal opportunity to do so. A total of 92% of survey respondents use sailing as a way to spend time with friends & family. Just over a quarter of MAs hold social events, whilst sailing clubs are an important part of encouraging the next generation of sailors, some of whom will become volunteers, instructors and employees (or owners) of sailing businesses.

Children and Young People

Children are spending less time outdoors than their parents did and this is continuing to decline. The importance of children playing outside includes sunshine (to make vitamin D), exercise, executive function (troubleshoot, negotiate and multitask), taking risks, socialisation (share and work together) and appreciation of nature (valuing it).

Sailing is an enjoyable way of getting children into the outdoors and accessing all the benefits without them necessarily realising it. Sailing also increases self-confidence and good general mental health. Adults spending time with children sailing also brings them a range of benefits including feeling calm, relaxed, refreshed, revitalised and close to nature

Circular Economy

There is a strong connection between the mooring holders and the natural environment (97%) and awareness of the importance of protecting it (86%).

This is important as one of the toughest challenges in moving to a more circular economy is changing attitudes. The mooring holders already have a strongly favourable disposition to protecting the marine environment. This is also important in terms of the role of sailing clubs in bringing through the next generation of sailors and mooring holders, who will have this strong connection with and awareness of the need to protect the environment.

A total of 23% of MAs have introduced ways to increase recycling and / or reduce waste. However, many MAs have a limited operation that already has minimal waste and / or energy use, so there are not really the opportunities to reduce these.

Opportunities for Additional Benefits

Economic Development

Waiting lists should be reviewed to see if there is scope to increase moorings in these areas or the possibility of offering them a place elsewhere that has space.

Recommendation 1: Review the waiting lists to understand where there may be scope to accommodate more people.

Boats have got bigger in size over time, which reduces the space that MAs have for moorings. Data should be gathered from MAs on how many moorings they believe they could accommodate compared to their allowable limit. This will help to provide a more accurate reflection of the spare capacity in the system.

Recommendation 2: Gather data on spare capacity in the system.

Step ashore facilities are a key component in trying to encourage people to visit local communities and spend money in the local pubs, cafes, shops, etc. Some MAs are trying to develop these, but require funding as many have limited resources. These potential developments should be viewed in the wider strategic context of what is available from other organisations nearby e.g. marinas, harbour trusts, sailing clubs, local groups, etc. In many cases MAs do not develop facilities as their members or visitors can access these from other groups nearby.

Recommendation 3: Consider proposed developments in the wider strategic context.

Some MAs have found it difficult to apply for funding, as being constituted as a MA means they are often ineligible.

Recommendation 4: Provide advice on what organisational structure may be more suitable for those looking to expand their facilities.

Social Wellbeing

Having moorings generates not only significant economic benefits, but also a range of social wellbeing benefits in terms of physical health, mental health, and engaging children with the outdoors and developing new skills.

In addition to this, for many coastal areas access to the water forms a key part of the social fabric of their local community.

The MA and private moorings form part of a wider provision in these coastal areas that also includes others such as marinas, sailing clubs, harbour trusts, local groups, etc. Between them these different groups can accommodate both local residents and also visitors from further afield. It is important to maintain a balance between local residents and visitors, so that local residents do not get crowded out of the market.

Recommendation 5: Maintain a balance between local residents and visitors.

Not everyone will be spending a lot of money on their boat, but will still derive the various social well-being benefits and indeed contribute to the social aspects of their local community. The MAs and private moorings have an important role in providing for this type of use.

Recommendation 6: MAs should continue to provide for those that may not be spending a lot, but are benefitting from and contributing to local social well-being.

Circular Economy

Many of the MAs have a limited operation with minimal waste and / or energy use, so there is limited scope to reduce these. However, others do have facilities beyond the moorings. MAs with additional facilities should be made aware of funding available for environmental improvements.

Recommendation 7: Signpost the MAs to environmental grant funding.

Also new developments should be encouraged to incorporate sustainability and circular economy aspects into their plans.

Recommendation 8: Imbed sustainability and circular economy aspects into any support for infrastructure development.

Management/Administration

Just under half (45%) find it difficult / very difficult to find volunteers, and several have concerns over succession planning, as their committee members get older.

There are a large number of MAs, with 119 in total. In some cases there are a number of MAs in a relatively small geographic area. Some MAs should be encouraged to merge, as larger MAs: can take a more strategic view of what is required in the local area, are likely to find it easier to access funds for and to manage projects, and will require less volunteers to run them.

Recommendation 9: Encourage some of the MAs to merge.

Many of the MAs have limited online presence and it would be difficult to know that they are there. However, many would not want the additional burden of managing a website. Instead there could be one source that has a list of all the MAs with contact details for each (and a link where a website exists).

Recommendation 10: Have one source with a list of all the MAs and contact details.

There is an opportunity for some IT training that would make it easier and less time-consuming for some people to administer their MAs.

Recommendation 11: Undertake some IT training to allow for easier administration.

1 INTRODUCTION

This report provides a socio-economic assessment of Crown Estate Scotland CES) licensed moorings.

1.1 Background

The primary purpose of CES is to maintain and seek to enhance the value of the Scottish Crown Estate, and the income arising from it. CES operates a seabed licensing scheme for private mooring holders and constituted Mooring Associations (MAs). This socio-economic study was undertaken to research and report on the contribution the private moorings sector makes to Scottish Government sustainable development goals.

1.2 Objectives

The main objectives were to report on the contribution the private moorings sector makes to:

- Economic development; and
- Social wellbeing.

The study also identifies opportunities to leverage additional economic and social wellbeing benefits and makes recommendations as to how these benefits can best be realised.

1.3 Method

The study method comprised a combination of:

- Desk-based review
  - Data on CES licensed moorings
  - Literature Review
  - Audit of Mooring Associations
- Stakeholder Consultations
- Fieldwork
  - Mooring Associations (telephone survey)
  - Mooring Licence Holders (online and postal survey)
- Economic Impact Assessment

- Social Wellbeing Assessment
- Analysis and Reporting

1.4 Report Structure

The remainder of this report is structured as follows:

- Chapter 2: Boating Sector and Crown Estate Scotland Licensed Moorings
- Chapter 3: Moorings Associations Survey
- Chapter 4: Mooring Licence Holders Survey
- Chapter 5: Economic Development
- Chapter 6: Social Well-being
- Chapter 7: Conclusions and Recommendations

2 BOATING SECTOR AND CROWN ESTATE SCOTLAND LICENSED MOORINGS

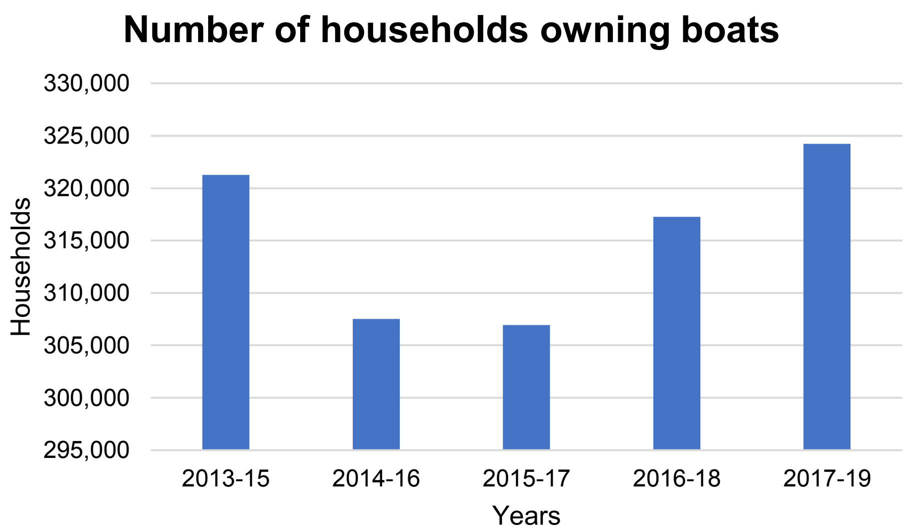
2.1 Introduction

This Chapter provides an overview of the boating sector in the UK and Crown Estate Scotland (CES) Licensed Moorings.

2.2 UK Boating Sector

The Covid pandemic has created an unprecedented period, so it is useful to look at what the trends were prior to Covid.

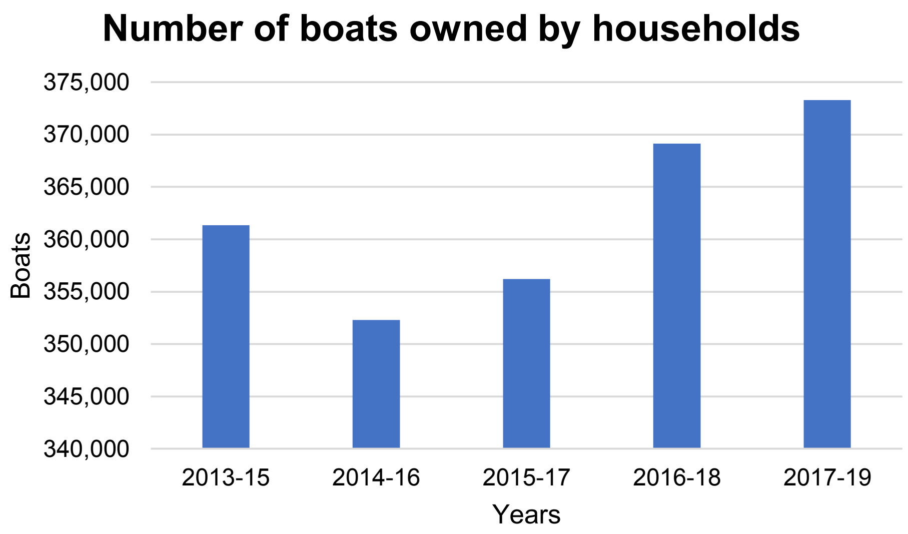
Following a dip in 2014-16 and 2015-17 in the number of households owning boats, the number increased during 2016-18 and 2017-19[1]. The number at c.324,000 in 2017-19 was slightly up on the 2013-15 figure of c.321,000.



Watersports Participation Survey

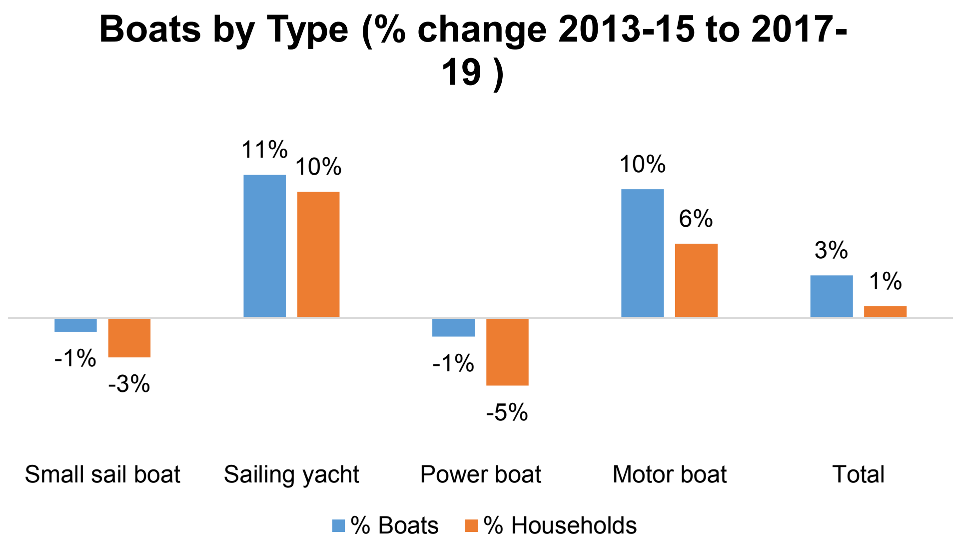
The number of boats owned by households increased between 2014-16 and 2017-19. The total of c.373,000 in 2017-19 was up on the 2013-15 total of c.361,000.

[1] Arkenford (2015-2019) *Watersports Participation Survey*



Watersports Participation Survey

The increases are due to increased ownership of sailing yachts and motor boats, as the number of small sail boats and power boats have declined.



Watersports Participation Survey

2.3 Crown Estate Scotland Licensed Moorings

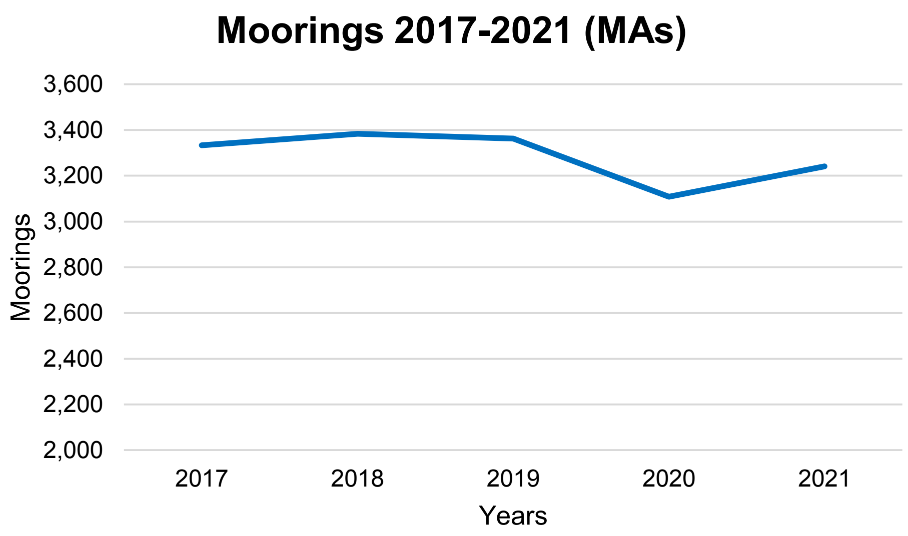
2.3.1 Number of Moorings

The CES licensed moorings are a combination of private moorings and Moorings Associations (MAs). There are currently a total of 545 private moorings and 119 Mooring Associations. The MAs have a maximum allocation of moorings that they can have, but they may have less than this actually in the water.

CES Licensed Moorings		
	Max Allowance	**No in Water (2021)**
Moorings Associations	5,348	3,241
Private Moorings	545	545
Total	**5,893**	**3,786**

Source: Bidwells

The max allowance is for 5,893 moorings with 3,786 in the water as of 2021, 64% of the max allowance. We do not have trend data for private moorings, but this data is available for MAs moorings.



Source: CES

The number of MA moorings remained very similar over the period 2017 to 2019, at just under the 3,400 level (average across the three years of 3,360). It then dropped in 2020, down by -8% (which was due to Covid). This then picked up again in 2021, up by 4%. Numbers are currently being collected and collated for 2022. Analysing those collected so far, plus those gathered as part of survey work undertaken for this study, shows a further increase of 2% in 2022. If this was replicated across the remaining Mooring Associations then the number of moorings would be around 3,360, so back to pre-Covid levels.

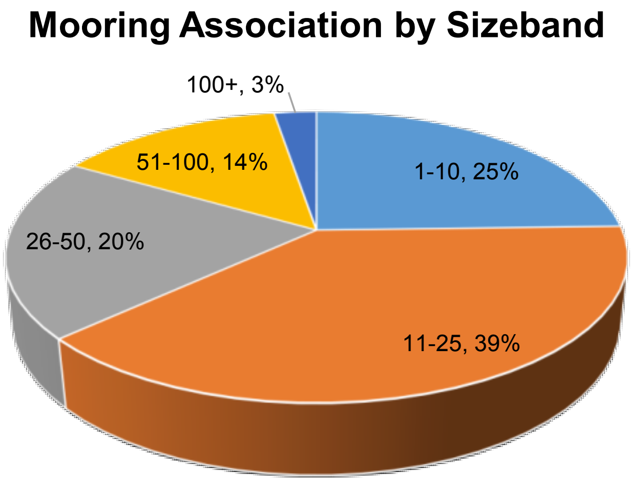
2.3.2 Moorings in the Water

The overall proportion of moorings in the water is 64% of the total allowable allocation and only 30% of Moorings Associations have operated at 90%+ of their maximum allocation at some point between 2017 and 2021. This seems to suggest that there is a lot of spare capacity in the system.

However, we would raise a note of caution here, as discussion with the Moorings Associations has indicated that the spare capacity will be less than this. The main reason for this is that boats have become bigger over time, so need more space and in some cases deeper water. This means that the MAs can fit less boats into their area or parts of their area are more in demand e.g. deeper water. So at the moment is it not possible to know the true level of spare capacity in the system or the specific nature of this.

2.3.3 Moorings by Sizeband[2]

The most common sizeband for MAs is 11-25 (39%), followed by 1-10 (25%).



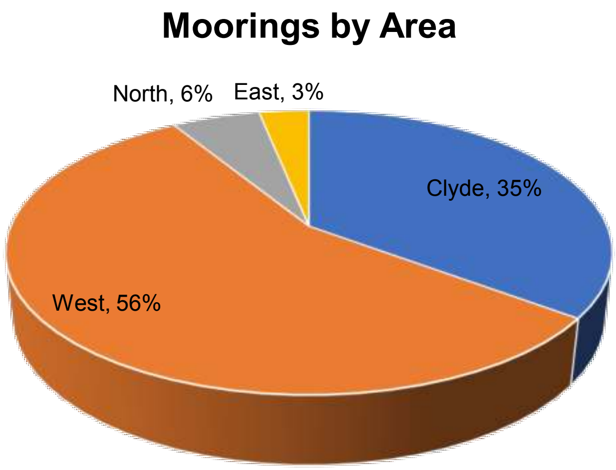
Source: CES

Only 3% of Mooring Associations have over 100 moorings.

2.3.4 Moorings by Geographical Area

The moorings by area are given in the figure, over.

[2] Sizebands are for the number of moorings in a MA e.g. 1-10, 11-25, 26-50, 51-100 and 100+



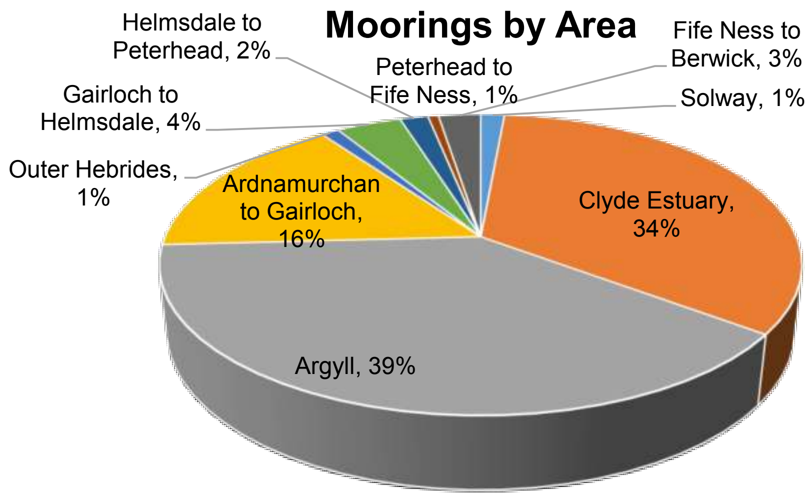
Source: CES

The West accounts for over half (56%) of the total, followed by Clyde with just over a third (35%). The table below breaks this down further into nine zones.

Moorings by Zone			
	Mooring Association Moorings	**Private Moorings**	**Total**
Solway	51	3	54
Clyde Estuary	1,140	139	1,279
Argyll	1,159	315	1,474
Ardnamurchan to Gairloch	550	56	606
Outer Hebrides	34	7	41
Gairloch to Helmsdale	137	11	148
Helmsdale to Peterhead	60	4	64
Peterhead to Fife Ness	18	6	24
Fife Ness to Berwick	92	4	96
Total	**3,241**	**545**	**3,786**

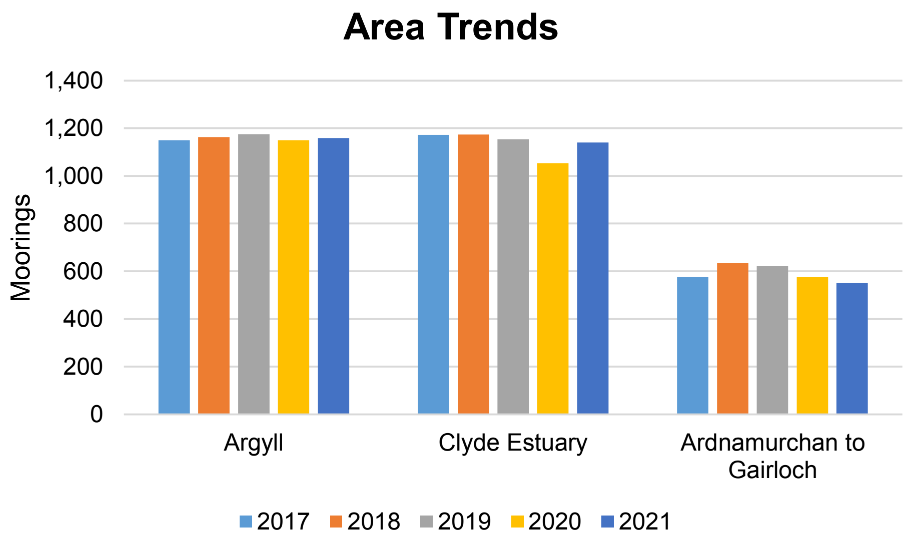
Source: CES

Argyll accounts for almost two-fifths (39%) of the moorings, with just over a third in the Clyde Estuary. The next largest is Ardnamurchan to Gairloch at 16%. The remaining areas account for between 1-4%, respectively (a more detailed breakdown by area is given in Appendix I).



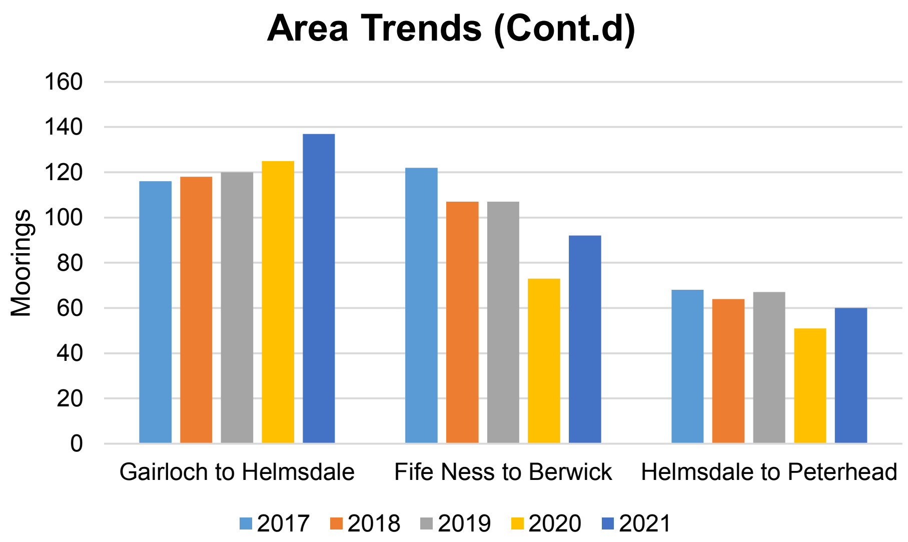
Source: CES

The number of MA moorings has remained fairly similar in Argyll between 2017 and 2021. In the Clyde Estuary they took a dip in 2020, but bounced back in 2021, whilst in Ardnamurchan to Gairloch they have declined slightly year on year since 2018.



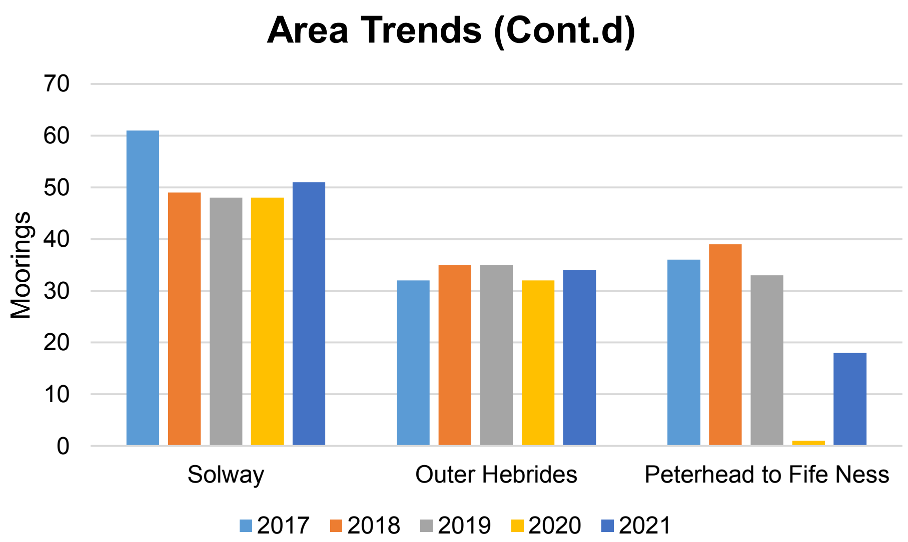
Source: CES

Gairloch to Helmsdale has experienced a year-on-year increase since 2017, whilst Fife Ness to Berwick has experienced a decrease, and Helmsdale to Peterhead has bounced back somewhat from a drop in 2020.



Source: CES

Solway experienced a drop in 2018, although there was a slight increase in 2021. The Outer Hebrides has remained fairly stable, whilst Peterhead to Fife Ness experienced a large drop in 2020, from which it has only partially recovered.

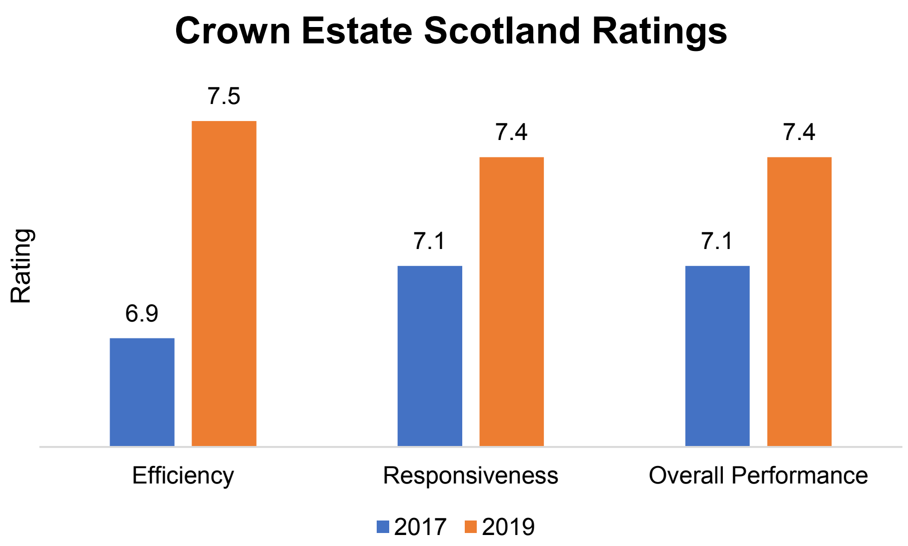


Source: CES

2.3.5 Customer Satisfaction

CES commissioned a customer satisfaction survey in 2019 and it noted that respondents were largely supportive of the mooring licensing scheme with a mean rating of 8.1[3].

They also gave CES ratings of 7.5 for efficiency, 7.4 for responsiveness and 7.4 for overall performance. These scores have also increased over time.



Source: Research Resource

[3] Research Resource (2019) *Crown Estate Scotland: Coastal Customer Satisfaction Research*

3 MOORINGS ASSOCIATIONS SURVEY

3.1 Introduction

This Chapter provides analysis of the Moorings Associations Survey. All 119 MAs were sent an email inviting them to participate, with a total of 87 opting to take part (73%), this gives a standard error of +/-5.5% (robust for survey analysis purposes). The surveys were undertaken by telephone.

3.2 Number of Moorings and Facilities

The 87 MAs have a total of 2,783 moorings between them, accounting for 86% of the MAs total. An average of 98% are occupied during the season. There is a mix across the different sizes of MA, which is a good representation of the total population of MAs.

Moorings Ranges	
No. of Moorings	**% of Mooring Associations**
≤10	21%
11-25	38%
26-50	22%
51-100	15%
101+	5%

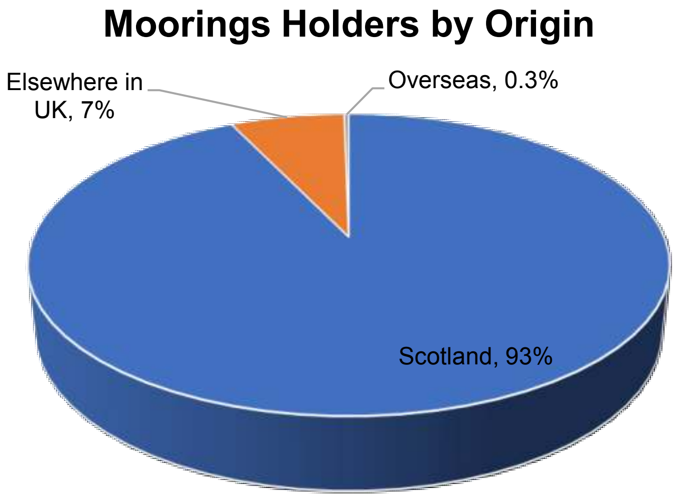
The proportions with different types of facilities include slipway (41%), water (23%), toilets (23%), showers (16%), food & beverage (13%), fuel (5%) and chandlery (1%).

Facilities	
Facilities	**% of Mooring Associations**
Slipway	41%
Water	23%
Fuel	5%
Chandlery	1%
Toilets	23%
Showers	16%
Food & beverage	13%

However, some will have access to these facilities nearby, which are operated by others. For example, where they are near to a sailing club, marina, boatyard or where the local town or village has certain services (e.g. toilets, food & beverage, etc).

3.3 Resident Boats

The current resident boat mooring tariff average is £73. The CES fee for MAs is £40, so on average MAs charge an additional £33. The approximate split of mooring licence holders by origin is 93% Scotland, 7% Elsewhere in UK and <1% overseas.



Just over a fifth (22%) of Mooring Associations have a waiting list. Numbers on waiting lists range from 1 to 47, with an average of 7. Wait times range from one month up to 10 years (with the latter being for large boats), with an average of 2 years.

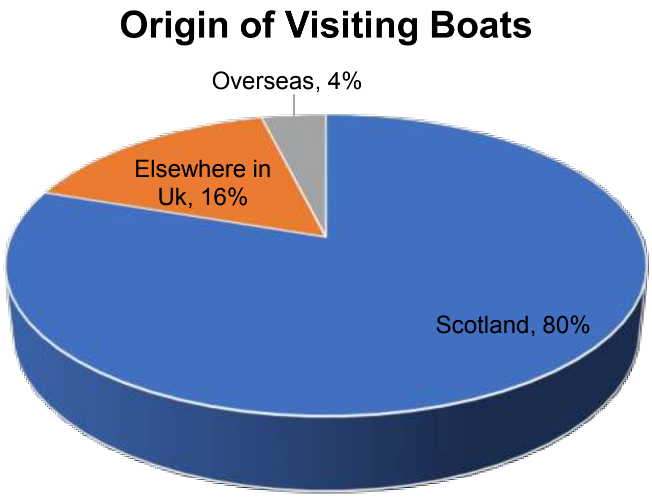
3.4 Visitor Boats

Just under a quarter (24%) have visitor moorings, with a total of 102 visitor moorings, an average of 5 per MA. The number of visiting boats per annum range from one or two to 800, with the average being 133. There was a decline in visitor numbers in 2020, which was only 55% of the 2019 level. This recovered to a large extent in 2021, at 94% of the 2019 level.

The current visitor boat tariffs range from £10 to £20 (with a couple not charging anything and one asking for a donation). For those that charge the average is £14.70. The proportion of boats that stay during the day is on average 10%, with 90% staying overnight. Those staying overnight stay on average for 1.5 nights.

The key change over the last few years has been the drop in numbers during Covid and to a lesser extent the increase in the size of the boats visiting.

Four-fifths of boats are from Scotland, with 16% from Elsewhere in the UK and 4% from Overseas.



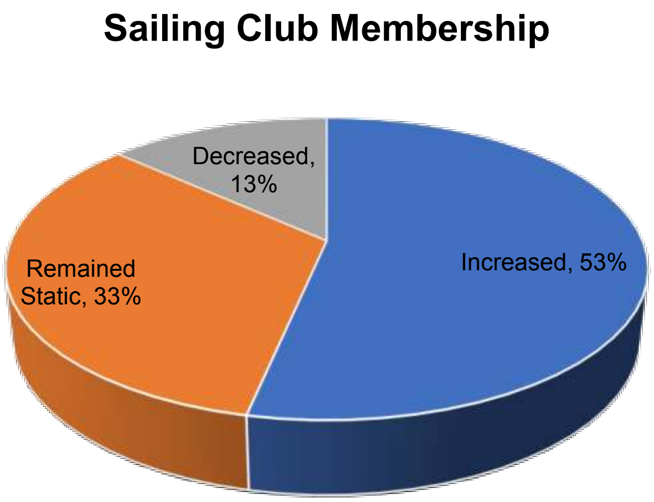
Just under two-fifths (38%) of MAs have on occasion been unable to accommodate visiting boats. The most common times this happens are during local sailing events (13%) or local sailing / yacht club musters (13%).

3.5 Sailing Clubs

Just under a fifth (19%) of the MAs are also sailing clubs. Membership numbers range from 50 to 430, with the average being 210. The most common size band is 101-200, accounting for just over half (53%). Juniors account for just over a fifth (21%) of the total membership.

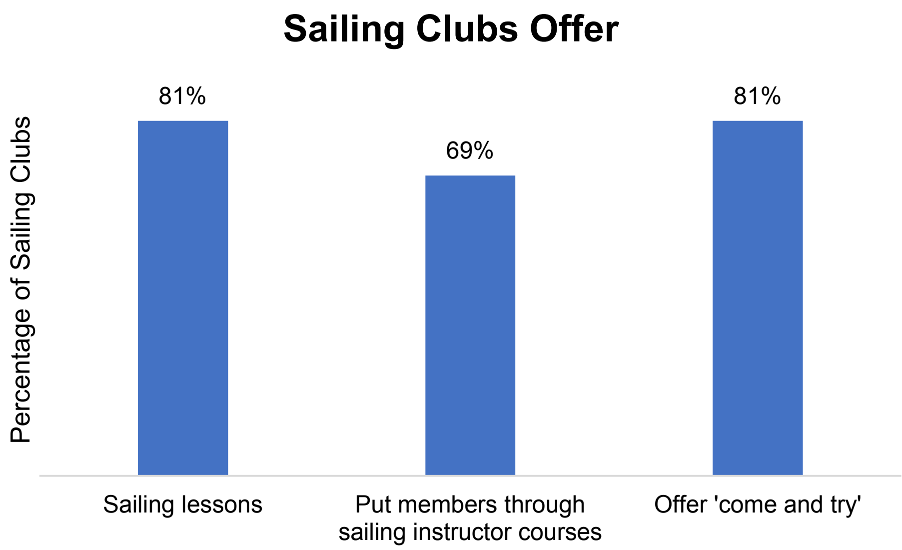
Sailing Clubs	
No. of Members	**% of Sailing Clubs**
≤100	20%
101-200	53%
201-400	20%
401+	7%

Over the last three years, over half (53%) have experienced an increase in membership, whilst 13% have experienced a decrease. The other third have remained fairly static.



The most common increase was in 1-10% range (55%), with the remaining being 11-25% (45%). For those with a decline, one was 11-25% and the other 26-50%.

A total of 81% offer sailing lessons and 69% put members through sailing instructor's courses (a further 6% already have members with training so do not need to put them through courses). A total of 81% offer 'come and try' activities for potential new members.



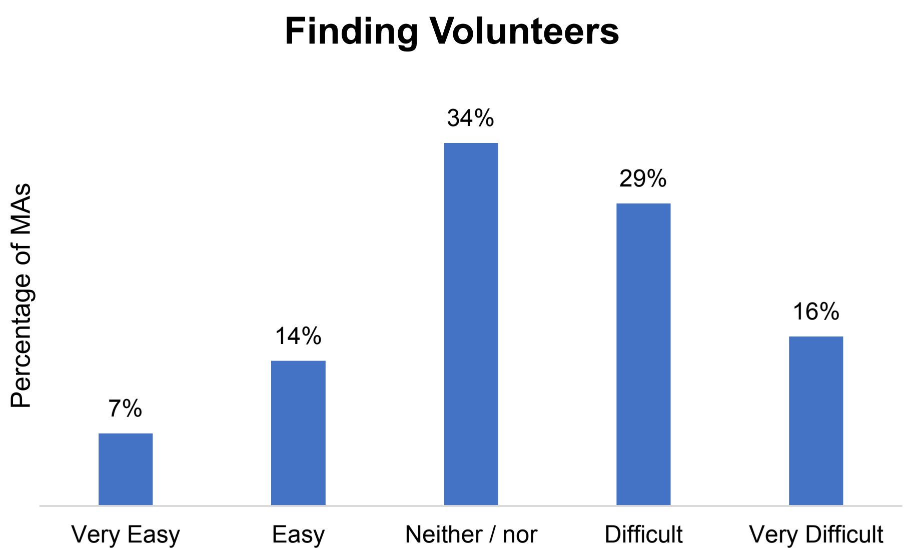
A total of 63% identified barriers to growing their club, with the most common being boat storage, number of rescue boats and getting responsible adults (each of these 13%).

3.6 Management and Administration

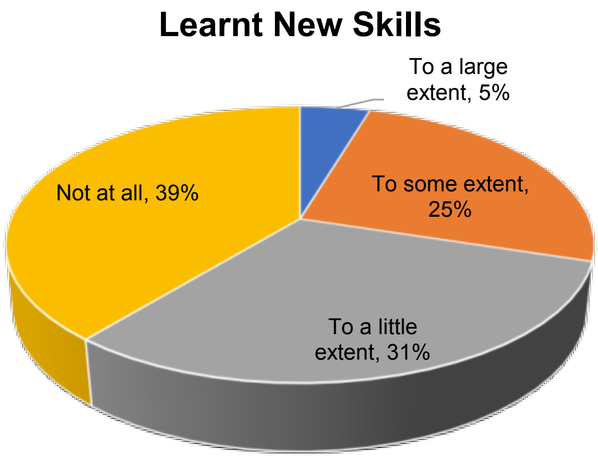
3.6.1 Volunteers

Nearly all of the MAs (98%) are run completely by volunteers with only 2% having any employees. The total number of volunteers was 478, with an average of 5.6 per MA. This will underestimate the number of volunteers somewhat, as a number of MAs also referred to getting working parties together to undertake certain tasks. As these numbers, scale of input required and frequency varied from task to task, it was not possible to get meaningful numbers for these more 'casual' volunteers. The number given, therefore, is for those that volunteer on a regular basis.

Just under half (45%) said that it was difficult / very difficult to get volunteers. A number commented on the fact that the volunteers at their MAs have been in the role for a long time and there are concerns about finding replacements, particularly as they get older.

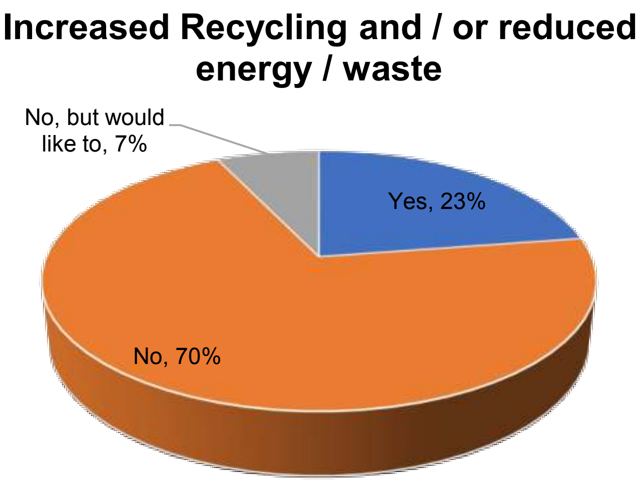


Just over three-fifths (61%) felt that they had developed new skills to some extent through volunteering at their MA.



3.6.2 Recycling and Energy Reduction

A total of 23% had introduced ways to increase recycling and / or reduce energy use or waste, with a further 7% not having done so but would like to. For those that have not but would like to, 3% said they would look at this if they are able to install a pontoon in the future, whilst 1% had recently installed a pontoon so were going to look at it.



The most common things introduced have been:

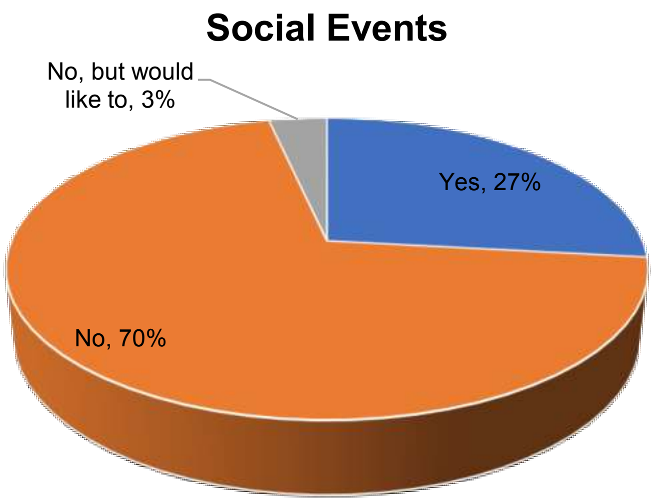
- Recycling bins (13%);
- Beach cleans (6%);
- Recycle old chain (2%); and

- Removed disposable plates/cutlery (2%).

In terms of those that have not introduced anything there is an important point to note, which was raised by a number of MAs. A lot of MAs simply have moorings and no other facilities. They have minimal waste or energy use, so there are not really the opportunities for them to reduce these.

3.6.3 Social Events

A total of 27% hold social events, whilst a further 3% do not but would like to. For those that would like to, for 1% there does not seem to be the enthusiasm from the members and another 1% cannot access the beach for a barbeque.



The most popular type of social events included:

- Barbeques (8%);
- Sail aways/cruises (7%);
- Regattas (6%);
- Dinners (5%);
- Quiz nights (3%);
- Burns Supper (3%); and
- Talks/slideshows (2%).

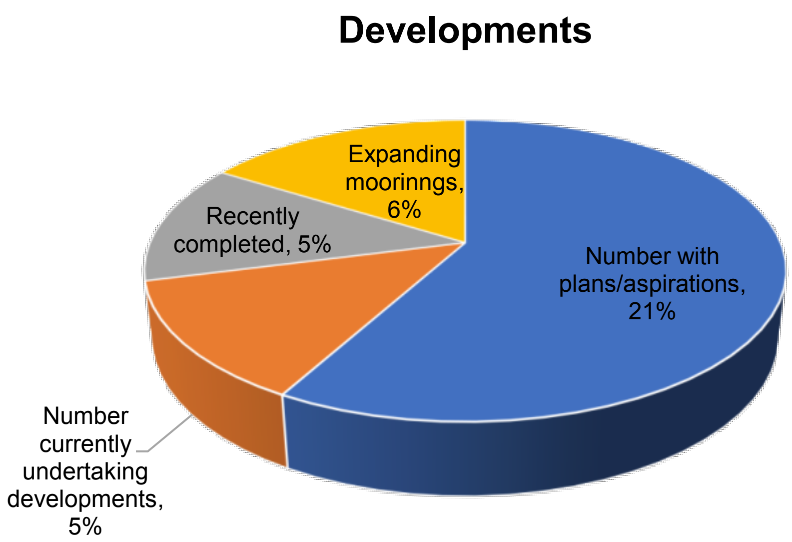
The likelihood of holding social events was much higher for those MAs that are part of sailing clubs. A total of 94% of sailing clubs held social events, whilst for MAs that were not sailing clubs only 11% did.

A point made by many of the MAs was that their function was to provide moorings for members and did not see holding social events as part of the role of a MA. Several also commented that in their area the local sailing club and / or other groups in the village already offer social events, so there is no point in them doing it as it is the same people that would be attending.

3.7 Plans

3.7.1 Mooring Associations

A total of 21% have plans to develop their facilities, with a further 6% planning to expand their mooring provision. There are a further 5% that are currently developing their facilities and 5% that had recently completed improvements.



Beyond the expansion in the number of moorings the most common plans were:

- Install/expand pontoon (5%);
- Improve slipway (3%);
- Install slipway (3%);
- Repair/replace pontoon (2%);
- Extend jetty (2%);

- Dinghy storage (2%).

The developments that are underway include slipway / jetty improvements (2%) and new / extended clubhouses (2%).

Some mentioned that they had tried to apply for funding, but were unable to access this due to their constitution as an MA.

It should be noted that a number of the MAs did not want to develop their facilities, they are content with the way that they operate and feel that they meet the needs of their members.

3.7.2 Constraints

The most commonly cited constraints to developing their MA were:

- Lack of space (15%);
- Cost/funding (14%);
- Not enough car parking (9%), if people drive to a mooring they need somewhere to park;
- Private land so can't develop anything (5%); and
- Lack of shelter for a pontoon (2%).

3.7.3 Opportunities Nearby

The most common type of planned developments nearby that would benefit the MA were for pontoons (5%).

3.8 Other Comments

The most common other comment was that not all people with a boat are well off (11%).

4 MOORING LICENCE HOLDERS SURVEY

4.1 Introduction

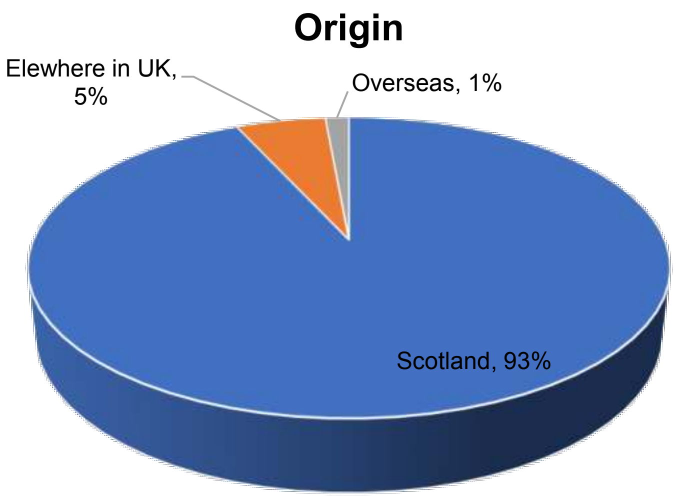
A survey of individual mooring licence holders was undertaken and distributed in the following ways:

- Private Mooring Licence Holders - were emailed the survey link or sent the questionnaire by post; and
- Mooring Association Members - their Mooring Associations were asked to email the survey link to them.

The total number of survey responses received was 358, giving a standard error of +/-4.9% (robust for survey analysis purposes).

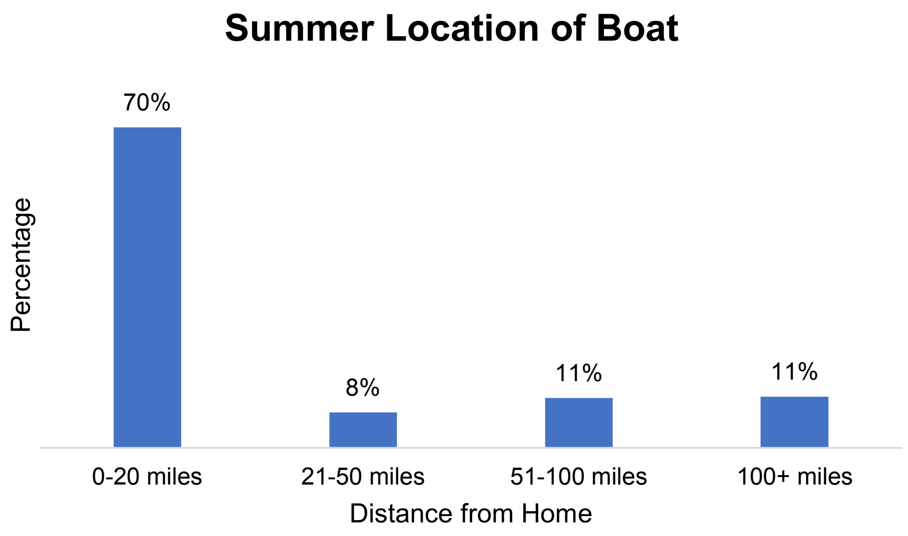
4.2 Origin

The split of boat owners by origin is 93% Scotland, 5% Elsewhere in the UK and 1% Overseas.

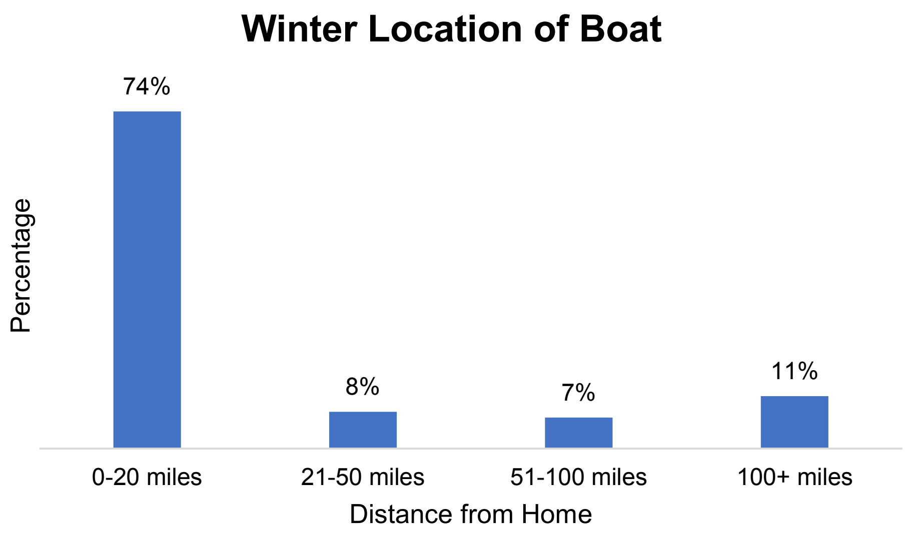


4.3 Location of Boat

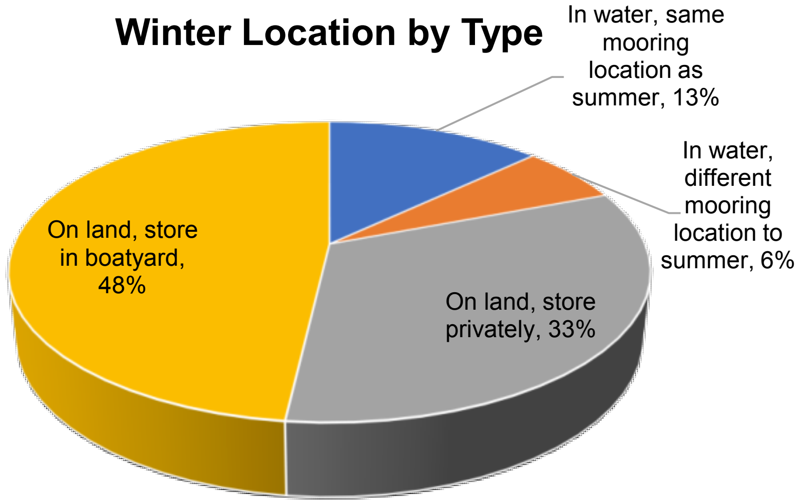
A total of 70% live with 20 miles of their summer mooring.



A slightly higher percentage (74%) live within 20 miles of their winter mooring / storage.

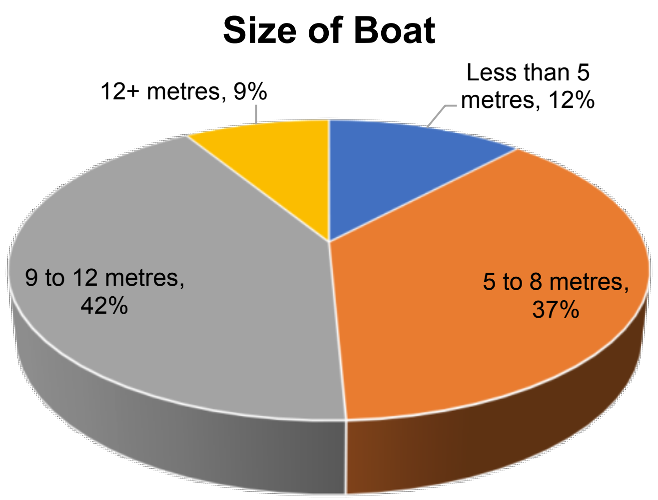


The most common place to keep their boat in the winter is on land (81%), either in a boatyard (48%) or stored privately (33%).



4.4 Type of Boat

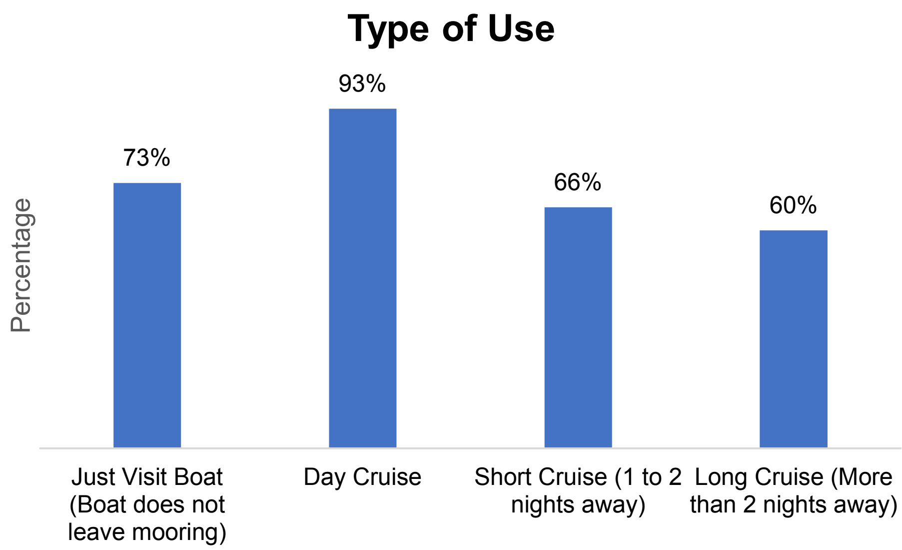
The most common size of boat is 9-12 metres (42%), followed by 5-8 metres (37%). For those over 12 metres, the average size is 13.8 metres.



A total of 61% of boats are sail and 37% power, with 3% power & sail.

4.5 Use of Boat

The average number of times people visit their boat per year is 48. The most common activity is a day cruise (93%), followed by just visiting their boat at their mooring (73%). The percentage taking short cruises is 66% and longer cruises 60%.



Longer cruises ranged from three to ninety nights, with an average of eleven nights.

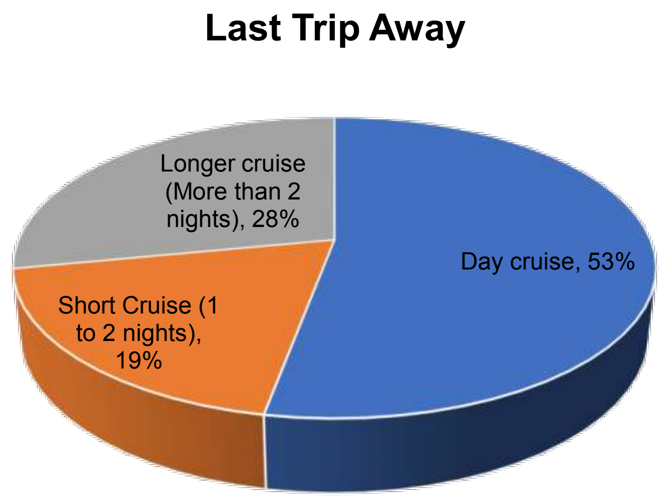
4.6 Additional Facilities

A total of 34% would like to see additional facilities at their mooring, with the most common being:

- Pontoon/more pontoon space (11%);
- Water supply (7%);
- More parking (3%);
- Improved dinghy/tender landing/launching (3%);
- Dinghy storage (3%);
- Improvement to jetty/pier (2%); and
- Toilets (2%).

4.7 Last Trip Away

For just over half (53%) their last trip away was a day cruise, followed by 28% that went on a longer cruise and 19% on a short cruise.



On their last trip, 79% dropped their anchor and 68% used formal berthing / mooring.

4.8 Benefits of Sailing

Respondents were asked to what extent they agreed with a number of statements about sailing.

Benefits of Sailing	Strongly Agree	Agree	Neither / Nor	Disagree	Strongly Disagree	Don't Know
Helps you keep fit	26%	52%	18%	3%	-	-
Helps you relax	59%	36%	4%	0%	-	-
Is a good way to spend time with friends / family	54%	38%	7%	1%	-	1%
Gives you time away from the stresses of everyday life	58%	34%	8%	-	-	-
Is a good way of connecting with the natural environment	68%	28%	3%	-	-	-
Has made you more aware of the need to protect the natural environment	50%	36%	12%	2%	-	-
Has allowed you to learn new skills	50%	37%	12%	1%	-	-

For the vast majority sailing helps them relax (95%, strongly agree/agree), gives them time away from the stresses of everyday life (92%) and is a good way to spend time with friends / family (92%). Almost all (97%) strongly agree / agree that sailing is a good way connect with the natural environment and for 86% it has made them more aware of the need to protect that environment.

For 87% sailing has allowed them to learn new skills and for 78% it helps them keep fit.

4.9 Best Aspects and Suggested Improvements

The best aspects of sailing / boating in Scotland most commonly cited, included:

- The scenery (48%);
- Peace & quiet/uncrowded (30%);
- The variety (16%);
- Wildlife (15%);
- Safe anchorages/sheltered waters (11%);
- Great sailing conditions (7%);
- Challenges of weather/tides/navigation (7%); and
- Friendly people (6%).

The most commonly suggested improvements to sailing / boating in Scotland, include:

- The weather (12%);
- More pontoons (11%);
- More visitor moorings (7%);
- More provision for fuel (5%);
- Make it cheaper to boat (3%);
- Tighter controls on fish farms (3%);
- More/better slipways (3%); and
- More marina facilities (3%).

4.10 Other Comments

In terms of other comments the most common were to keep boating affordable (1%).

5 ECONOMIC DEVELOPMENT

5.1 Introduction

This Chapter sets out the current level of economic impact resulting from those that have Crown Estate Scotland (CES) licensed moorings. The impacts below are those generated through both resident and visitor moorings.

5.2 Resident Moorings Expenditure

Moorings

For the economic impact we are interested in the number of moorings that are occupied, as they have associated expenditure[4].

Resident Moorings		
	Available	**Occupied**
Clyde	1,333	1,306
West	2,121	2,078
North	212	208
East	120	118
Total	**3,786**	**3,710**

Average Expenditure

An average expenditure level per annum has been calculated based on the survey results. We have deducted the proportion that would be spent on trips to visitor moorings in the MAs, so as to avoid double-counting this when assessing visiting boat night expenditure. The average expenditure by area is given in the table below.

Average Expenditure	
	Annual Expenditure
Clyde	£3,698
West	£3,936
North	£2,405
East	£2,405

Direct Expenditure

The direct expenditure generated by resident boats on an annual basis is £13.8m

[4] The occupancy rate is 98%.

Resident Moorings	
	Annual Expenditure
Clyde	£4,830,474
West	£8,180,990
North	£499,612
East	£282,799
Total	**£13,793,875**

Multipliers

This direct economic activity also has two types of wider impact on the economy:

- *Supplier (indirect) effect:* an increase in sales in a business will require it to purchase more supplies than it would have otherwise. A proportion of this 'knock-on' effect will benefit suppliers in the Scottish economy; and

- *Income (induced) effect:* an increase in sales in a business will usually lead to either an increase in employment or an increase in incomes for those already employed. A proportion of these increased incomes will be re-spent in the Scottish economy.

A combined multiplier of 1.68 has been applied which gives total output.

Total Output

Applying the multiplier to the direct expenditure gives total output of £23.2m.

Resident Moorings	
	Annual Output
Clyde	£8,115,196
West	£13,744,064
North	£839,348
East	£475,102
Total	**£23,173,710**

5.3 Visiting Boats Expenditure

Number of Visiting Boats and Average Expenditure

The number of visiting boat nights at MAs moorings is 3,105.

Visiting Boats	
	Number of Nights
Clyde	325
West	2,400
North	99
East	281
Total	**3,105**

The average expenditure per visitor boat is estimated at £119 based on the survey findings.

Direct Expenditure

The direct expenditure generated by visitor boats is £0.37m.

Visiting Boats	
	Annual Expenditure
Clyde	£38,755
West	£286,286
North	£11,807
East	£33,476
Total	**£370,324**

Total Expenditure

The combined multiplier of 1.68 is applied which gives total output of £622,144.

5.4 Total Current Output

The total current output generated by resident (home mooring) and visitor moorings is £23.8m.

Total Current Output			
	Resident	Visitor	Total
Clyde	£8,115,196	£65,108	£8,180,304
West	£13,744,064	£480,960	£14,225,024
North	£839,348	£19,836	£859,183
East	£475,102	£56,240	£531,343
Total	**£23,173,710**	**£622,144**	**£23,795,854**

5.5 Employment

The level of employment that resident and visitor boat output supports can be estimated using an output: employment ratio. Applying this gives employment of 445 FTEs[5].

Employment	
	FTEs
Clyde	153
West	266
North	16
East	10
Total	**445**

5.6 Gross Value Added

Gross value added has been estimated on the basis of a GVA: turnover ratio. This equates to £12.85m.

GVA	
	Annual GVA
Clyde	£4,417,364
West	£7,681,513
North	£463,959
East	£286,925
Total	**£12,849,761**

5.7 Summary

Those with a CES licensed mooring currently account for £23.8m of output per year in Scotland and support a total of 445 FTE jobs.

Summary of Economic Impacts	
	Amount
Direct Expenditure	£14.2m
Output	£23.8m
Employment	445 FTEs
GVA	£12.8m

5.8 Geographic Inclusion

The MAs and private moorings are distributed around different parts of the coast, reflecting the natural strengths of certain areas for sailing / boating.

[5] Full time equivalent and excludes volunteers.

So the economic impact is spread over a number of different areas and will be helping to support a number of local communities around the coast, including many rural and remote rural locations. The Mooring Holders are spending on a number of different aspects such as repairs / maintenance, chandlery, fuel, food and drink (on board and onshore), accommodation, entertainment, retail and transport. So they are helping to support a range of different businesses in their local community e.g. boatyards, garages, pubs, cafes, shops, etc.

5.9 Volunteering

An important aspect here is the importance of volunteering. The MAs system could not operate without these volunteers and the time and effort that they put in to running a MA. The survey identified a total of 478 volunteers across the 87 MAs interviewed. The total number of MAs is 119, so grossing up to this number would give an estimated number of volunteers of 654.

Just over three-fifths (61%), had learnt new skills as a result of volunteering at their MA, but it is also important to recognise than many of them will have brought their own skills to the benefit of the MA (either those acquired through their working life or other volunteering activities they have been involved in).

6 SOCIAL WELL-BEING

6.1 Introduction

This Chapter considers the social well-being aspects of having a mooring.

6.2 Blue Space

Blue Space can be defined as:

> 'Outdoor environments - either natural or manmade - that prominently feature water and are accessible to humans either proximally (being in, on or near water) or distally (being able to see, hear or otherwise sense water)[6]'

There is longstanding and established literature on Green Space and it is from this that Blue Space research has emerged more recently. Whilst potential effects of water environments e.g. ponds, rivers, lakes had formed part of Green Space research, more recently research has focused on it as a separate and distinct entity[7]. Thus the concept of Blue Space has become more common with an increasing amount of research in this subject area.

6.2.1 Proximity

A number of studies have looked at people's engagement with Blue Space relative to their proximity to it. Unsurprisingly, the likelihood of visiting Blue Space increases for those living near it (with one of the studies comparing research across eighteen countries).[8][9][10]. Also analysis of MENE[11] data found that the odds of people in England visiting the coast were 15 times greater for those whose residence was <1km away compared with those that lived >20km away.

---

[6] Grellier *et al* (2017) *BlueHealth: a study programme protocol for mapping and quantifying the potential benefits to public health and well-being from Europe's blue spaces*
[7] Environment Agency (2020) *The social benefits of Blue Space: a systematic review*
[8] White *et al* (2014) *Coastal proximity and physical activity*
[9] Boyd *et al* (2018) *Who doesn't visit natural environments for recreation and why: a population representative analysis of spatial, individual and temporal factors among adults in England*
[10] Elliott *et al* (2020) *Defining residential blue space distance categories: modelling distance-decay effects across eighteen countries*
[11] Monitor of Engagement with the Natural Environment

However, having a boat adds a different dimension to this, as this is what encourages people to visit rather than their proximity to the coast.

Analysis of the survey results shows that the average number of times that people visit their boat is 48 and whilst this does decline the further they are from their boat, it does not tail off dramatically as it does for the general public simply visiting the coast.

Number of Times Visit Boat	
Distance from home (summer)	**Number of Times**
0-20 miles	56
21-50 miles	48
51-100 miles	38
100+ miles	31
Average	48

Those with a mooring have a much greater propensity to visit the coast. It gives them direct access to being on the water and therefore the benefits of Blue Space. This will be the case for both the mooring holder and their friends & family that also use their boat. Analysis of the Mooring Holders survey shows that the average number of people on trips out with their boat is three. Below we consider the range of benefits that Blue Space generates.

6.2.2 Physical Health

A total of 17% of people from a survey in Britain indicated that exercising and keeping fit was a benefit that they had gained through the use of Blue Space[12]. However, the majority of visits to the natural environment are not defined as 'active', with 80% of them being for <30 minutes or expending <3 METs[13][14]. Sailing is classed as moderate activity (i.e. 3.0-6.0 METs) - so is active (examples of other moderate activities include yoga, gymnastics, swimming, and surfing). The Mooring Holders survey shows that 78% consider that sailing helps them to keep fit. Using a boat under power would not be active, but the survey also shows that 61% are sail boats and a further 3% sail & power.

[12] De Bell *et al* (2017) *The importance of nature in mediating social and psychological benefits associated with visits to freshwater blue space*
[13] Metabolic Equivalent of Task
[14] White *et al* (2016) *Recreational physical activity in natural environments and implications for health*

Research shows that the intensity of activities undertaken in Green Spaces is greater than in Blue Spaces, however, visits to Blue Spaces are more likely to be longer and therefore more likely in total to consume a greater amount of energy[15]. This is certainly true of mooring holders who regularly take their boats out on a day, short or longer cruise.

Also participating in exercise in a waterside environment links into mental health through having a significantly positive affect on both peoples' mood and self-esteem[16]. Participants undertaking exercise experienced the greatest degree of improvement in their mood in a waterside environment, followed by people undertaking exercise in forested and wooded environments, wild habitats, areas of urban green and the countryside.

Coastal climates also provide more favourable conditions for vitamin D synthesis and exposure to sunlight has a number of other benefits including reducing your risk of cancer (as long as you're wearing sunscreen), improving bone health and improving certain kinds of skin conditions[17].

Sunlight also increases the production of serotonin in the brain, which improves peoples' mood and sense of well-being, whilst people who aren't getting enough vitamin D are disproportionately more likely to feel the effects of depression.

A 14 country pan-European survey included a question on the marine activities and how good or bad they were for public health and well-being. On a scale of -3 very bad to 3 very good, the mean score for watersports (which includes sailing / boating) was c.1.5[18]. They were also asked how important they thought protecting and promoting public health and well-being from the marine environment was for policy makers and for themselves. On a scale of zero (not at all important) to six (extremely important) the average for policy makers was c.4.5 and for themselves c.5.5.

---

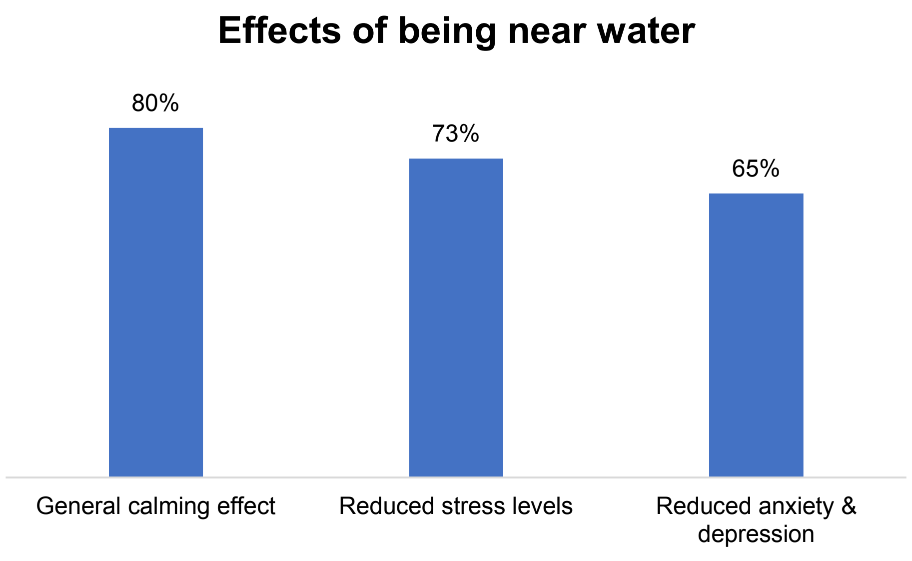
[15] Elliott *et al* (2015) *Energy expenditure on recreational visits top different natural environments*
[16] Barton and Pretty (2010) *What is the best dose of nature and Green Exercise for improving mental health?*
[17] The YachtMarket News (2021) *The science of why boating is good for your mental health*
[18] H2020 SOPHIE Consortium (2020) *Citizens and the Sea. Public perceptions of Oceans and Human Health: A 14 country pan-European citizen survey*

6.2.3 Mental Health

Visits to marine and coastal environments has a restorative effect on people[19]. They provide opportunities for stress reduction, and time to relax and reflect. Approximately 30-40% of people interviewed in a Natural England survey found Blue Space to be either a relaxing or calming experience[20]. People visiting coastal environments report greater feelings of restoration, in comparison to urban environments (e.g. urban parks and green spaces).

Also people are happiest when spending time in marine and coastal areas, in comparison to other natural environments in the UK[21]. They are happiest in coastal or marine environments, followed in descending order of effect by mountains, woodland, grassland, farmland, and then freshwater environments.

In 2021 VisitScotland commissioned a YouGov survey[22] that identified a number of benefits from being near water. These included 80% that felt that being near water had a general calming effect, 73% had reduced stress levels and 65% reduced anxiety and depression.

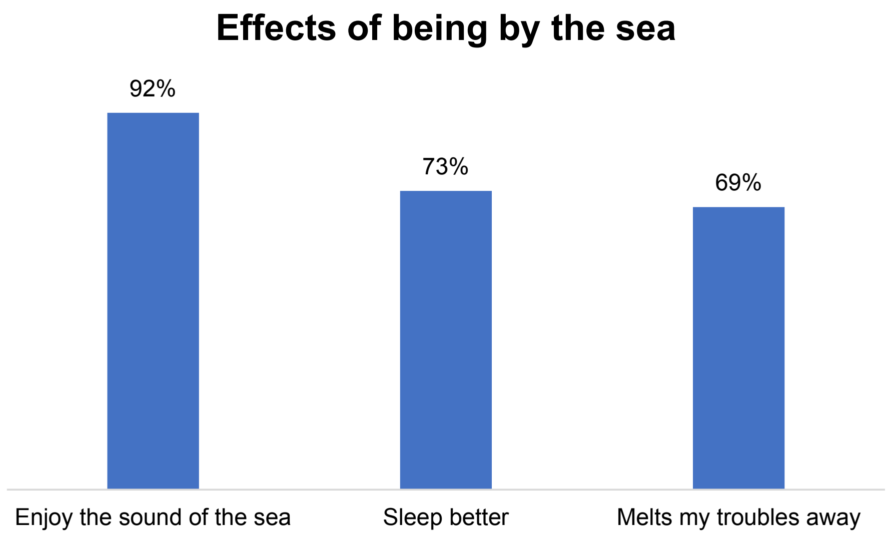


Source: VisitScotland

---

[19] DEFRA (2019) *The well-being and human health benefits of exposure to the marine and coastal environment*
[20] Natural England (2012 & 2013) *Monitor of Engagement with the Natural Environment: the national survey on people and the environment*
[21] MacKerron, g. and Mourato, S. (2013) *Happiness is greater in natural environments*
[22] VisitScotland (2021) *The Health Benefits of Being Near Water*

Additional effects of specifically being by the sea included enjoying the sound of the sea (92%), sleeping better (73%) and melts troubles away (69%).

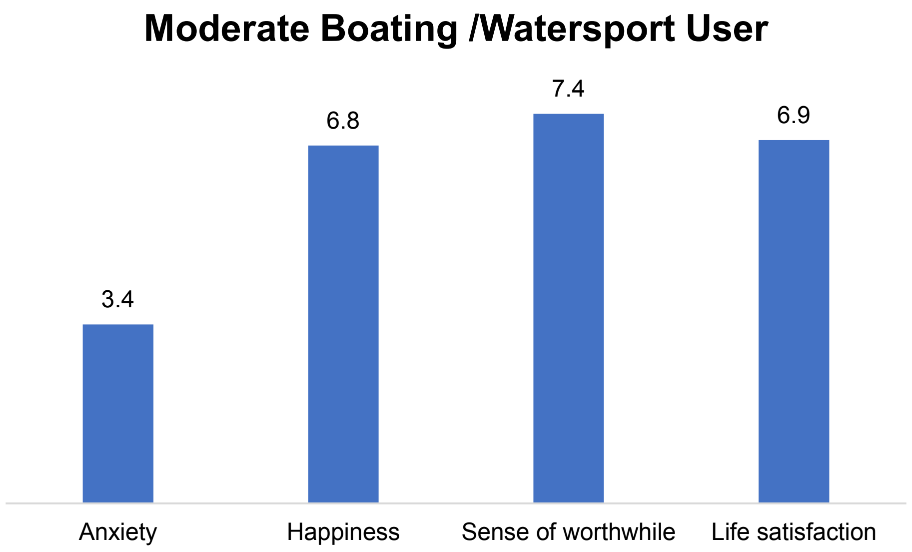


Source: VisitScotland

Dr Nichols author of the Blue Mind[23], highlighted the negative stressors that go away when someone steps on a boat which include “traffic noise, television, the office, computers - they all fade away”[24]. The Mooring Holders survey found that 95% felt that sailing helps them to relax and 92% that it gives them time away from the stresses of everyday life.

Research commissioned by British Marine and the Canal & River Trust[25] found that a moderate boating / watersport user has (on a scale of 0-10) - anxiety 3.4, happiness 6.8, sense of worthwhile 7.4 and life satisfaction 6.9.

[23] The bestselling book on the scientific connection between water and happiness
[24] Discover Boating (2018) *Your brain on a boat*
[25] Simetrica-Jacobs (2021) *Measuring the economic, social and wellbeing value associated with inland and coastal boating*



Source: British Marine and Canal & River Trust

The more often someone takes part in boating / watersports activities the more beneficial it is. The Mooring Holder survey shows that on average mooring holders are frequent boat users. Frequent participation[26] in boating and watersports compared to moderate participation[27] is associated with anxiety levels 15% lower and a life satisfaction value 6% higher. Frequent boat / watersports users also compare favourably with other activities, for example it increased life satisfaction by 0.44 compared with 0.17 for yoga or pilates.

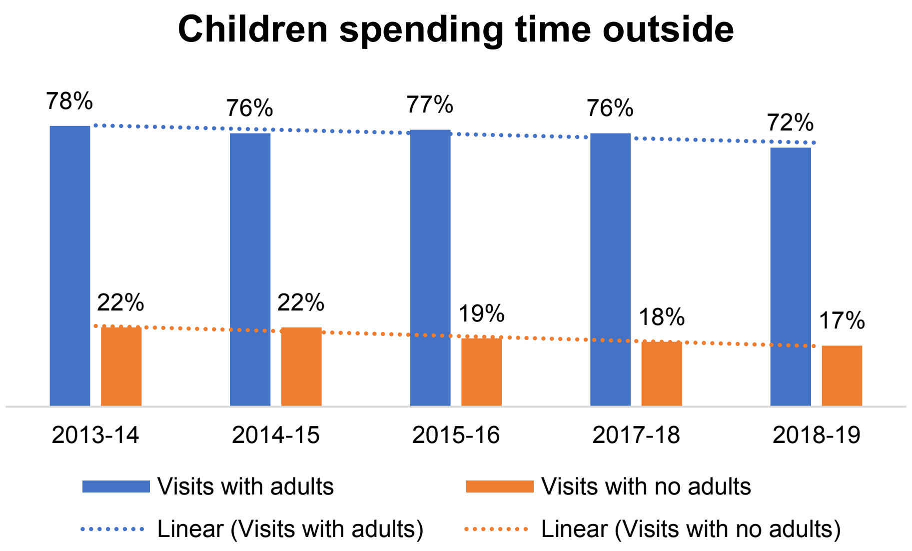
6.2.4 Socialisation

Survey data suggests that spending time with others is a key motivation for visits to coastal waters[28]. Sailing provides the opportunity to socialise by taking friends and family onto the water and sharing a hobby with them. A YouGov poll found that 58% of people socialise with family/friends when they want to relax[29]. The Mooring Holders survey found that 92% of people found sailing a good way to spend time with friends & family. Sailing clubs and mooring associations also provide opportunities to meet with other like-minded people with an interest in the same activity. Just over a quarter (27%) of MAs hold social events and this is particularly important aspect for those that are sailing clubs, with 94% of these holding social events.

[26] At least once a month
[27] At least once every six months
[28] Elliott *et al* (2018) *Recreational visits to inland and coastal waters in England: who, where, when, what and why*
[29] VisitScotland (2019) *Exploring the role of wellness in the visitor experience*

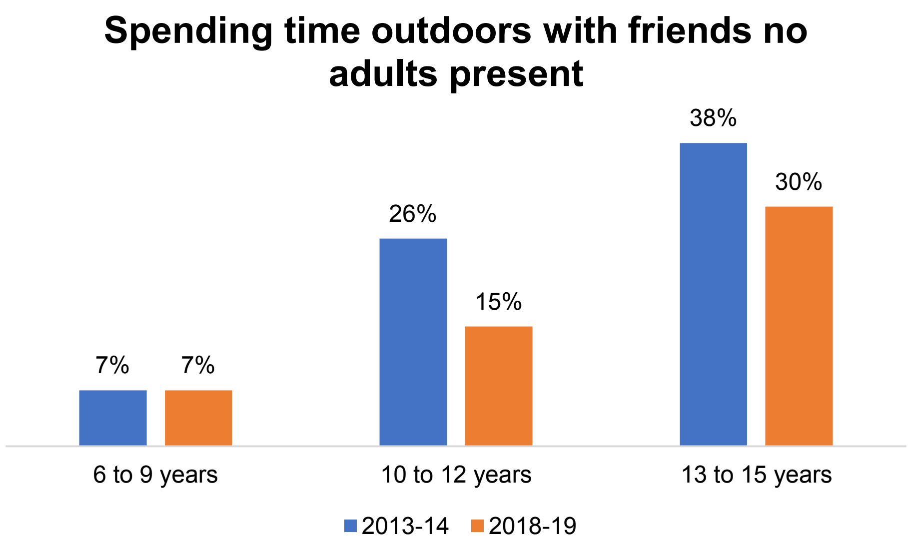
6.2.5 Young People

The National Trust undertook a study that found that children spend half the time playing outside that their parents did, at 4 hours compared with 8.2 hours per week[30]. MENE data also shows a decline in the proportion of children spending time outside[31].



Source: MENE

From 2013-14 to 2018-19 the proportion spending time outside with adults had declined from 78% to 72% and those without adults from 22% to 17%.



Source: MENE

[30] National Trust (2018) *Children spend half the time playing outside in comparison to their parents*
[31] MENE (2019) *Children and Young People Report*

The drop in children spending time outdoors with friends and no adults present is particularly noticeable in the 10 to 12 (down from 26% to 15%) and 13 to 15 (down from 38% to 30%) age groups.

An RSPB study also found that only one in five children have a 'connection to nature'[32]. Which raises concerns about how children view and engage with nature, especially as they will be the ones responsible for protecting it in the future. The Mooring Holders survey showed that the respondents have a strong connection with the natural environment (97%) and awareness of the importance of protecting it (86%). So bringing through the next generation of sailors and mooring holders who would have this strong connection and awareness is important in relation to the local environment.

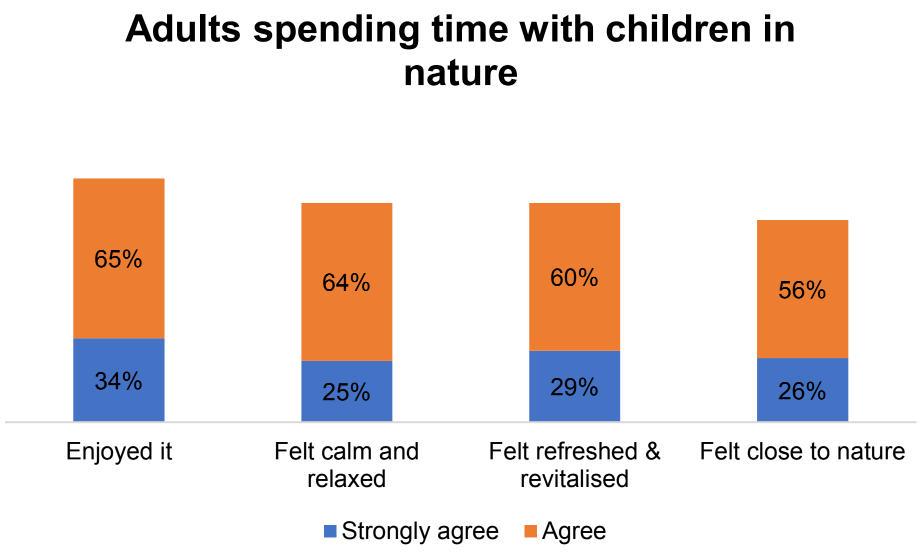
The reasons that children need to play outside was encapsulated in a Harvard article - sunshine (to make vitamin D), exercise, executive function (troubleshoot, negotiate and multitask), taking risks, socialisation (share and work together) and appreciation of nature (they need to learn to value it)[33].

Sailing is an enjoyable way to get children into the outdoors, undertaking exercise and connecting them to the natural environment without them necessarily realising that this is what they are doing. Research on dinghy sailing among 9-13 year olds found that it has a number of benefits. It helps support personal feelings of confidence, key personal and interpersonal skills (including social interaction skills, problem-solving, decision-making, planning, concentration, resilience, communication and leadership), physical fitness and good general mental health[34].

Adults spending time in nature with children also experience a range of benefits. These include enjoyment (99%), feeling calm and relaxed (89%), feeling refreshed & revitalised (89%) and feeling close to nature (82%)[31]. The Mooring Holders survey found that 92% found sailing / boating as a good way to spend time with friends / family.

---

[32] Bragg, R. Wood, C. Barton, J. and Pretty, J. (2013) *Measuring connection to nature in children aged 8-12: a robust methodology for the RSPB*
[33] McCarthy. C (2020) *6 reasons children need to play outside*
[34] Cotterill, S.T. & Brown, H. (2018) *An Exploration of the Perceived health, Life Skill and Academic Benefits of Dinghy Sailing for 9-13 Year-old School Children*



Source: MENE

For those MAs that are sailing clubs, junior memberships account for just over one-fifth (21%). Sailing clubs that cater for young people provide an opportunity for them to spend time with their friends, whilst undertaking exercise and engaging with the natural environment. Sailing clubs are also an important part of encouraging the next generation of sailors, some of whom will go on to become volunteers at sailing clubs, instructors, and employees (or owners) of sailing businesses.

7 CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

This Chapter provides conclusions and recommendations based on the analysis of the preceding sections.

7.2 CES Licensed Moorings

In 2021 there were a total of 3,786 Crown Estate Scotland (CES) licensed moorings. There was a decline in 2020 (due to Covid), but there was a partial recovery in 2021 and this looks to be continuing into 2022. This will bring mooring numbers back to pre-Covid levels. The West is the area with the most moorings (56%), followed by Clyde (35%). In terms of zones, Argyll accounts for 39%, followed by the Clyde Estuary (34%) and Ardnamurchan to Gairloch (16%).

Mooring holders are largely supportive of the mooring licensing scheme and CES's efficiency, responsiveness, and overall performance.

7.3 Economic Development

Direct Expenditure

The direct expenditure of those with CES licensed moorings equates to £14.2m per annum.

Direct Expenditure £m	
	£m
Clyde	£4.9
West	£8.5
North	£0.5
East	£0.3
Total	**£14.2**

Supply Chain

The moorings sector also generates economic impact in the wider supply chain sector, reflected in the indirect and induced multipliers. The total output which takes account of the direct expenditure and wider supply chain is equal to £23.8m per annum.

Output (£m)	
	£m
Clyde	£8.2
West	£14.2
North	£0.9
East	£0.5
Total	**£23.8**

Employment and GVA

The total employment equates to 445 FTEs, whilst the GVA is £12.8m per annum.

Employment and GVA		
	FTEs	**GVA**
Clyde	153	£4.4
West	266	£7.7
North	16	£0.5
East	10	£0.3
Total	**445**	**£12.8**

Summary of Impacts

The economic impacts are summarised below

Summary of Economic Impacts	
	Amount
Direct Expenditure	£14.2m
Output	£23.8m
Employment	445 FTEs
GVA	£12.8m

Distributional Impacts

The economic impact is spread over a number of different areas around the coast and is helping to support many rural and remote rural communities. The Mooring Holders spend occurs across a number of different components and is helping support a range of different types of local business e.g. boatyards, garages, pubs, cafes, shops, etc.

Volunteering

The MAs system could not operate without volunteers, who provide their time and effort free of charge to manage and administer the MA.

There are estimated to be around 650 volunteers who are volunteering on a regular basis (and there will be a number of others that volunteer on an ad hoc basis).

7.4 Social Well-being

Blue Space

Green Space and the social well-being effects that this generates has long been established, but the concept of Blue Space (outdoor water environments accessible either proximally or distally) has materialised more recently.

Whilst the likelihood of visiting Blue Space increases with proximity, owning a mooring adds a different dimension as this is what encourages people to visit the coast rather than simply proximity. Mooring owners have a greater propensity to visit the coast and to thus derive the various benefits that being in Blue Space offers. Also the benefits extend beyond the mooring holder to include their friends / family, as the average number of people on a boating trip is three.

Physical Health

Whilst the majority of visits to the natural environment are not defined as active, sailing is an active pursuit (with people viewing it as important for public health and well-being). People spend longer undertaking activities in Blue Space, compared to Green Space, so the total amount of energy consumed is likely to be greater. This is certainly true of mooring holders who regularly take their boats out on a day, short or longer cruise. For almost four-fifths (78%) of mooring holders sailing helps them to stay fit. Participating in exercise in a waterside environment also links into peoples' mental health by having a significant positive effect on mood and self-esteem. Undertaking exercise in a waterside environment has the greatest improvement in mood compared to forests/woods, wild habitats, urban green areas and countryside.

Coastal areas also provide favourable conditions for vitamin D synthesis and exposure to sunlight helps reduce cancer (if wearing sunscreen), improves bone health and certain kinds of skin conditions, as well as improving peoples' mood and sense of well-being.

Mental Health

People are happiest when spending time in a marine/coastal area compared to other natural environments. Having a mooring encourages visits to the coast and this, in turn, has: restorative effects (greater than those in urban greenspaces); reduces stress, anxiety and depression; increases relaxation and reflection; and has a calming effect. Stepping on a boat has been shown to remove stressors such as traffic noise, television, the office, computers, etc. For 95% sailing helps them to relax and for 92% it gets them away from the stresses of life. The more often people participate in boating the more beneficial it is in reducing anxiety levels and increasing life satisfaction, and mooring holders are on average frequent participants.

Community Participation

Three-fifths of people socialise with friends / family when they want to relax and sailing provides an ideal opportunity to do so, whilst sailing clubs and mooring associations also provide opportunities to meet with like-minded people with an interest in the same activity. A total of 92% use sailing as a way to spend time with friends & family.

Just over a quarter of MAs hold social events, whilst many others do not as other groups in their local area already do and they would simply be duplicating existing provision.

Sailing clubs are also an important part of encouraging the next generation of sailors, some of whom will become volunteers, instructors and employees (or owners) of sailing businesses.

Children/Young People

Children spend half the time playing outside compared to their parents, and this is continuing to decline, whilst only one in five have a connection to nature.

The importance of children playing outside includes sunshine (to make vitamin D), exercise, executive function (troubleshoot, negotiate and multitask), taking risks, socialisation (share and work together) and appreciation of nature (valuing it).

Sailing is an enjoyable way of getting children into the outdoors and accessing all the benefits noted above without them necessarily realising it. Sailing also increases self-confidence and good general mental health.

Adults spending time with the children sailing also brings them a range of benefits including feeling calm, relaxed, refreshed, revitalised, and close to nature

7.5 Circular Economy

People also have a strong sense that both policymakers and they themselves should protect and promote well-being from the marine environment. There is a strong connection between the mooring holders and the natural environment (97%) and awareness of the importance of protecting it (86%). This is important as one of the toughest challenges in moving to a more circular economy is changing attitudes. The mooring holders already have a strongly favourable disposition to protecting the marine environment.

This is also important in terms of the role of sailing clubs in bringing through the next generation of sailors and mooring holders, who will have this strong connection with and awareness of the need to protect the environment.

A total of 23% of MAs have introduced ways to increase recycling and / or reduce waste. However, there is a caveat as to why it is not a higher percentage. Many MAs have a limited operation that already has minimal waste and / or energy use, so there are not really the opportunities to reduce these.

7.6 Opportunities for Additional Benefits

Economic Development

Just over a fifth of MAs have a waiting list. There would be three aspects worth investigating further:

- Is there any scope for these MAs to increase their mooring provision or are they already at capacity? If it is the latter is it possible to expand their allowable area?

- What is the nature of the waiting list? Is it someone who has a boat elsewhere and simply wants to move it to the area or do they not have a boat yet as they don't have a mooring? If it is the latter (or if their boat is currently outside Scotland) then being able to provide space would increase the number of boats and the economic impact from this; and

- Are they wanting a specific space (deeper water) or in a certain location? Would they be open to having a space in another area that has spare capacity?

Recommendation 1: Review the waiting lists to understand where there may be scope to accommodate more people.

This links to the point about what the true capacity is within the system. Boats have got bigger over time, meaning that they occupy more space, cutting down on the number of boats a MA can fit into its area. There is an allowable limit for moorings for a MA. Data is gathered each year on how many moorings a MA has in the water, with this process already underway for this year.

For next year it would also be worthwhile asking the MAs how many moorings they believe they could fit into their area compared with the allowable limit. This will help to provide a greater understanding of the actual spare capacity in the system.

Recommendation 2: Gather data on spare capacity in the system.

Step ashore facilities are a key component in trying to encourage people to visit local communities and spend money in the local pubs, cafes, shops, etc. Some MAs are trying to develop pontoons to facilitate this. However, this requires access to funding, as many of the MAs have limited financial resources. It is important to view this in a broader strategic context.

CES licensed moorings form part of the provision, there are also other organisations such as marinas, harbour trusts, sailing clubs, local groups, etc that also provide facilities. In many cases MAs do not develop facilities as their members or visitors can access these from other groups nearby. So any potential support for a proposed development should be viewed in the wider context of what is already available in that area.

Recommendation 3: Consider proposed developments in the wider strategic context.

Some MAs have found it difficult to apply for funding, as being constituted as a MA means they are often ineligible.

So for MAs that want to expand and develop their facilities, it may be that that another type of organisational structure may be more suitable e.g. Community Interest Company, Company Limited by Guarantee, Charity, etc.

Recommendation 4: Provide advice on what organisational structure may be more suitable for those looking to expand their facilities.

Social Well-being

Having moorings generates not only significant economic benefits, but also a range of social wellbeing benefits in terms of physical health, mental health, and engaging children with the outdoors and developing new skills. In addition to this, for many coastal areas access to the water forms a key part of the social fabric of their local community. The MA and private moorings form part of a wider provision in these coastal areas that also includes others such as marinas, sailing clubs, harbour trusts, local groups, etc. Between them these different groups can accommodate both local residents and also visitors from further afield. It is important to maintain a balance between local residents and visitors, so that local residents do not get crowded out of the market.

Recommendation 5: Maintain a balance between local residents and visitors.

Also not everyone will be spending a lot of money on their boat, but will still derive the various social well-being benefits and indeed contribute to the social aspects of their local community. The MAs and private moorings have an important role in providing for this type of use.

Recommendation 6: MAs should continue to provide for those that may not be spending a lot, but are benefitting from and contributing to local social well-being.

Circular Economy

Many of the MAs have a limited operation with minimal waste and / or energy use, so there is limited scope to reduce these. However, others do have facilities beyond the moorings.

There is already a strong disposition amongst mooring holders to help protect the environment, so MAs with additional facilities should be made aware of funding available for environmental improvements.

Recommendation 7: Signpost the MAs to environmental grant funding.

Also new developments should be encouraged to incorporate sustainability and circular economy aspects into their plans.

Recommendation 8: Imbed sustainability and circular economy aspects into any support for infrastructure development.

Management/Administration

Just under half (45%) find it difficult / very difficult to find volunteers, and several have concerns over succession planning, as their committee members get older.

There are a large number of MAs, with 119 in total. In some cases there are a number of MAs in a relatively small geographic area. Some MAs should be encouraged to merge, as larger MAs:

- Could take a more strategic view over what is required in the local area;
- Are likely to find it easier to access funds for and to manage projects to develop their facilities; and
- Would have a larger pool of members from which to find volunteers and would require fewer for committee roles. This would then free up others to take on individual projects.

Recommendation 9: Encourage some of the MAs to merge.

Many of the MAs have limited online presence and it would be difficult to know that they were there. Many of the MAs are happy with the way they operate and would not want to add to their administration burden by having to manage a website. The alternative to this would be to have one source that would list all of the MAs with contact details for each (and a link where a website exists).

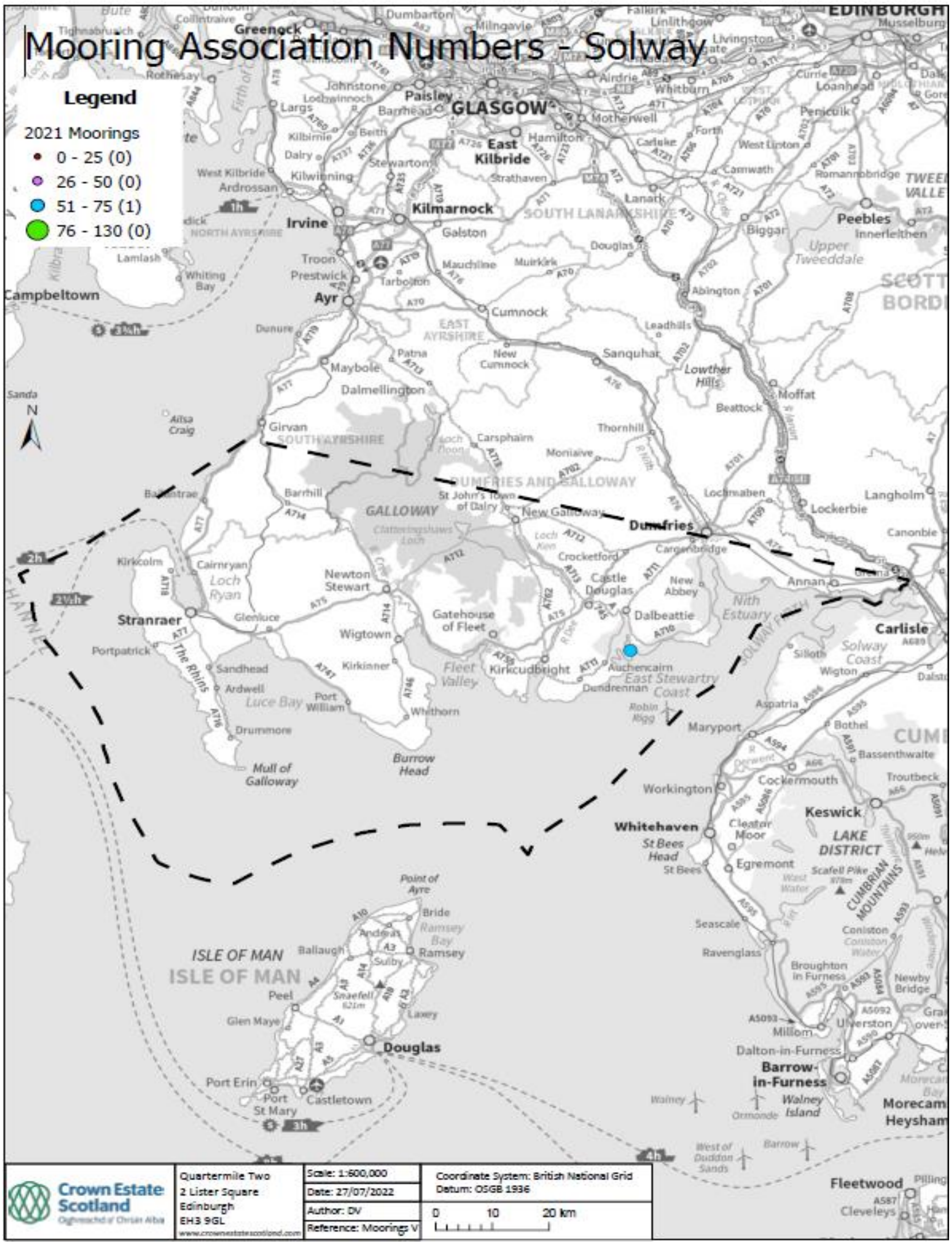
Recommendation 10: Have one source with a list of all the MAs and contact details.

Discussions with the MAs highlighted that there is an opportunity to undertake some IT training to make it easier and less time-consuming for some people to administer them.

Recommendation 11: Undertake some IT training to allow for easier administration.

APPENDIX I – MOORINGS BY AREA

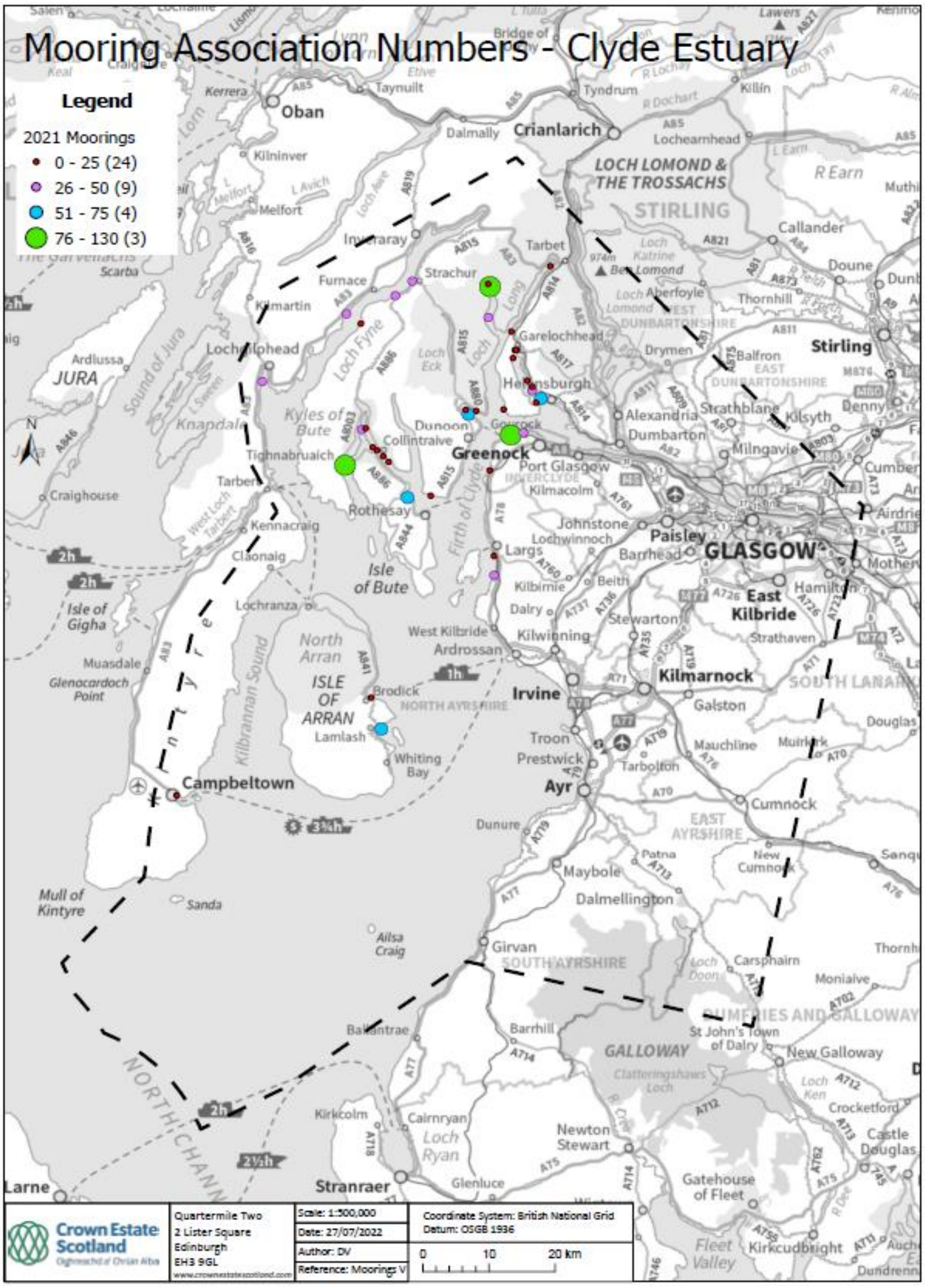
Solway



Solway	
Number of Moorings Associations	1
Mooring Association Moorings	51
Private Moorings	3
Total Moorings	**54**

Mooring Association Moorings Over Time					
Allocation	**2017**	**2018**	**2019**	**2020**	**2021**
100	61	49	48	48	51

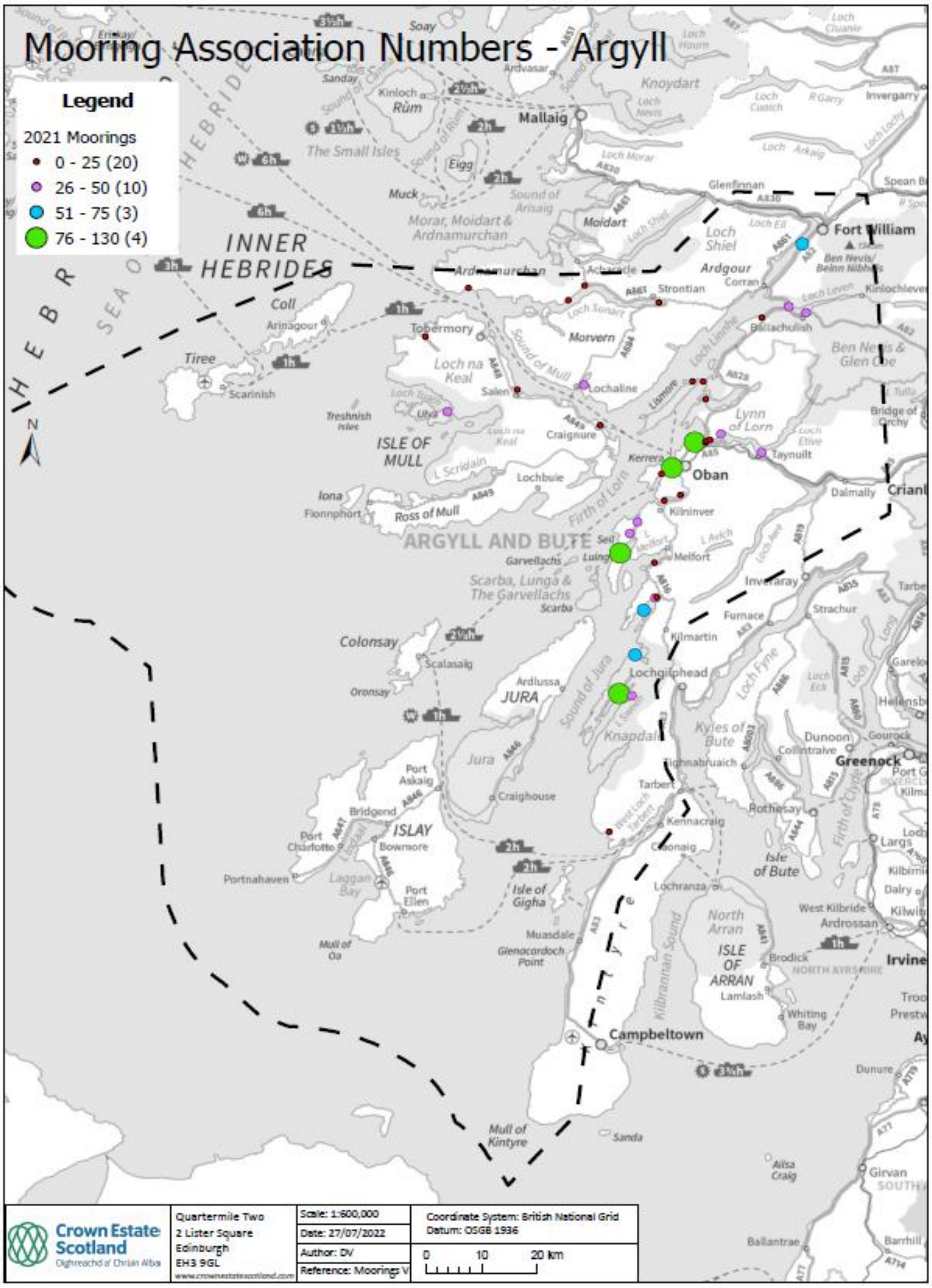
Clyde Estuary



Clyde Estuary	
Number of Moorings Associations	40
Mooring Association Moorings	1,140
Private Moorings	139
Total Moorings	**1,279**

Mooring Association Moorings Over Time					
Allocation	**2017**	**2018**	**2019**	**2020**	**2021**
1,922	1,172	1,174	1,154	1,053	1,140

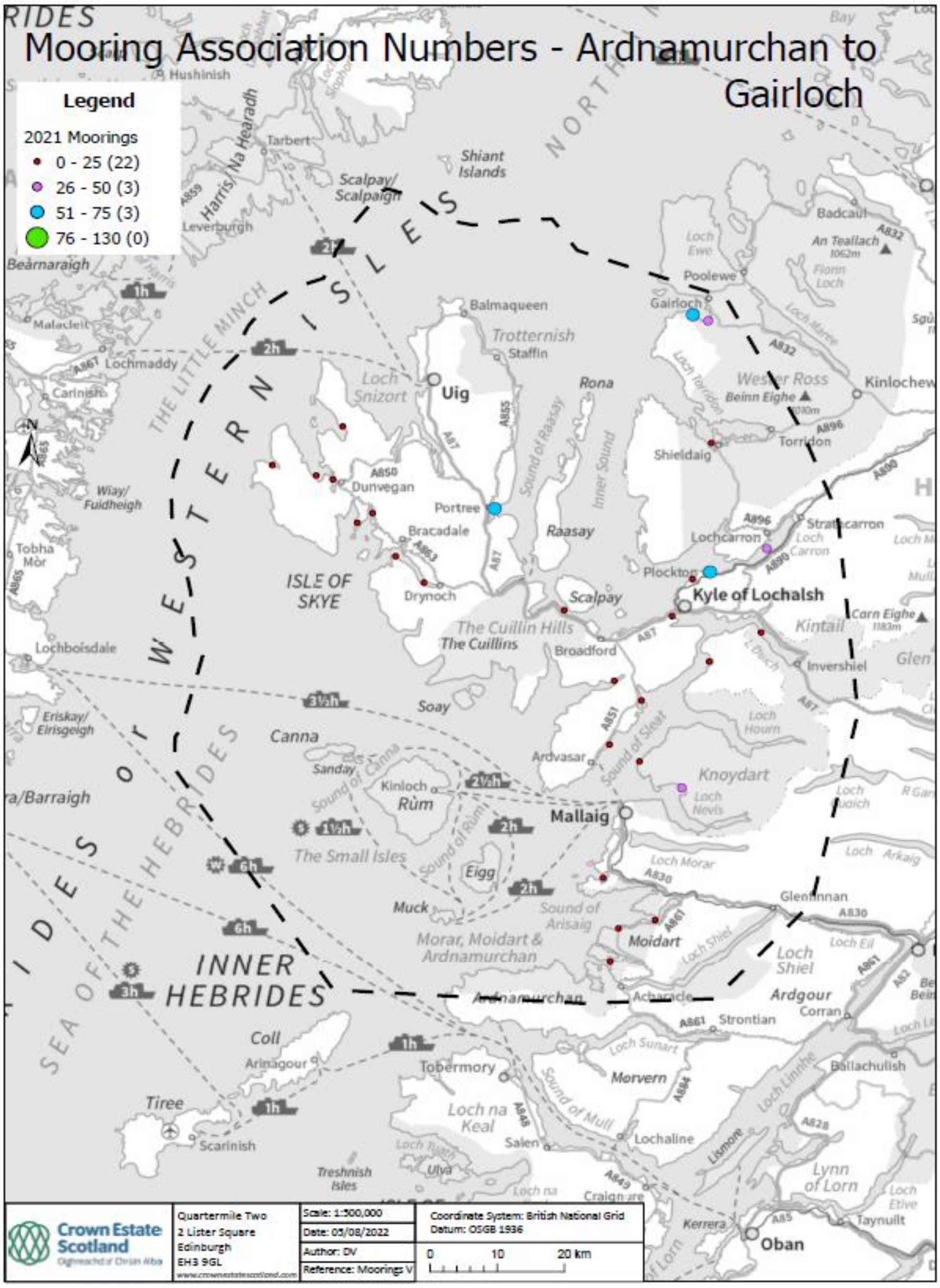
Argyll



Argyll	
Number of Moorings Associations	37
Mooring Association Moorings	1,159
Private Moorings	315
Total Moorings	**1,474**

Mooring Association Moorings Over Time					
Allocation	**2017**	**2018**	**2019**	**2020**	**2021**
1,645	1,150	1,163	1,175	1,150	1,159

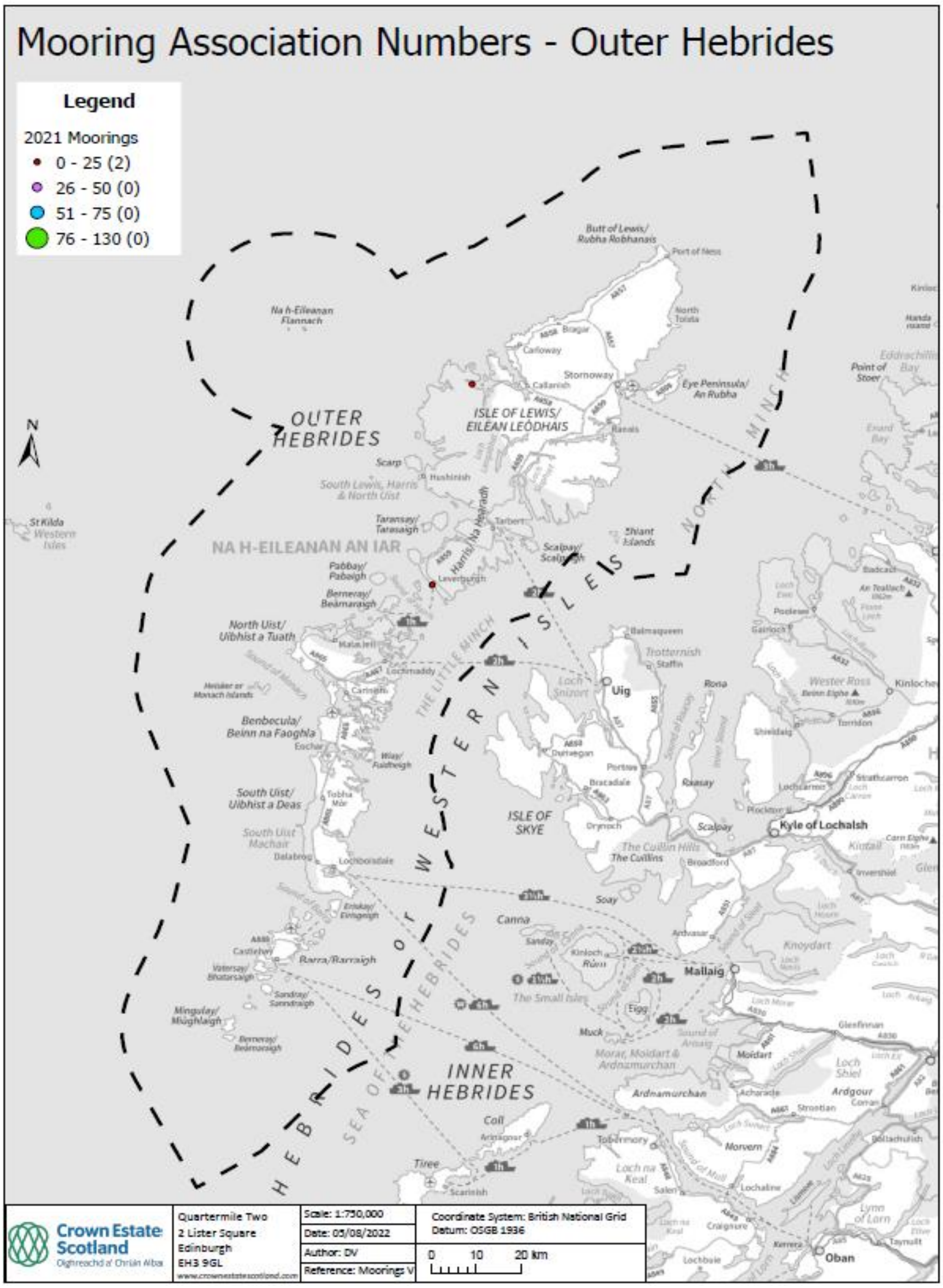
Ardnamurchan to Gairloch



Ardnamurchan to Gairloch	
Number of Moorings Associations	28
Mooring Association Moorings	550
Private Moorings	56
Total Moorings	**606**

Mooring Association Moorings Over Time					
Allocation	**2017**	**2018**	**2019**	**2020**	**2021**
963	576	635	623	576	550

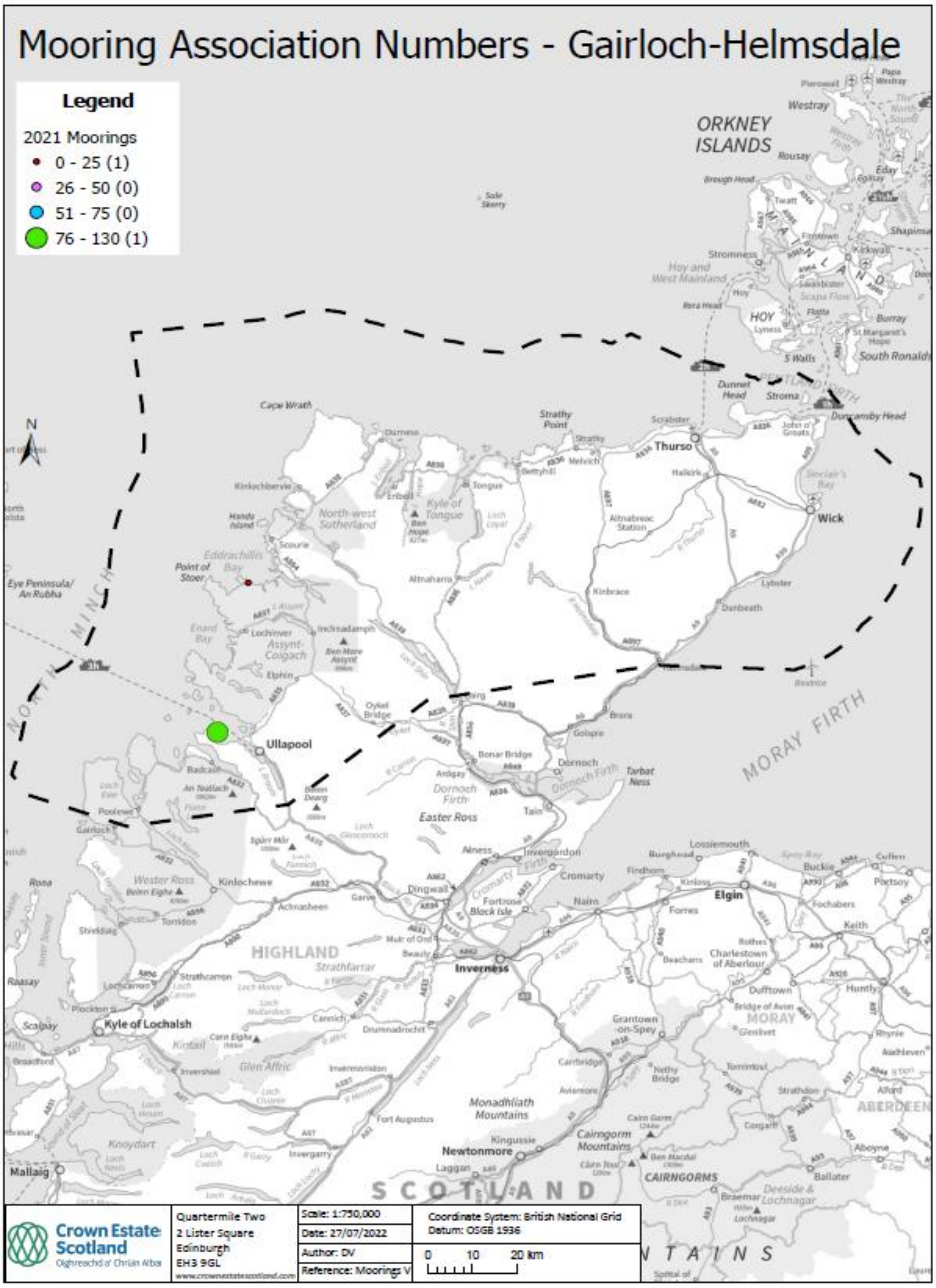
Outer Hebrides



Outer Hebrides	
Number of Moorings Associations	2
Mooring Association Moorings	34
Private Moorings	7
Total Moorings	**41**

Mooring Association Moorings Over Time					
Allocation	**2017**	**2018**	**2019**	**2020**	**2021**
70	32	35	35	32	34

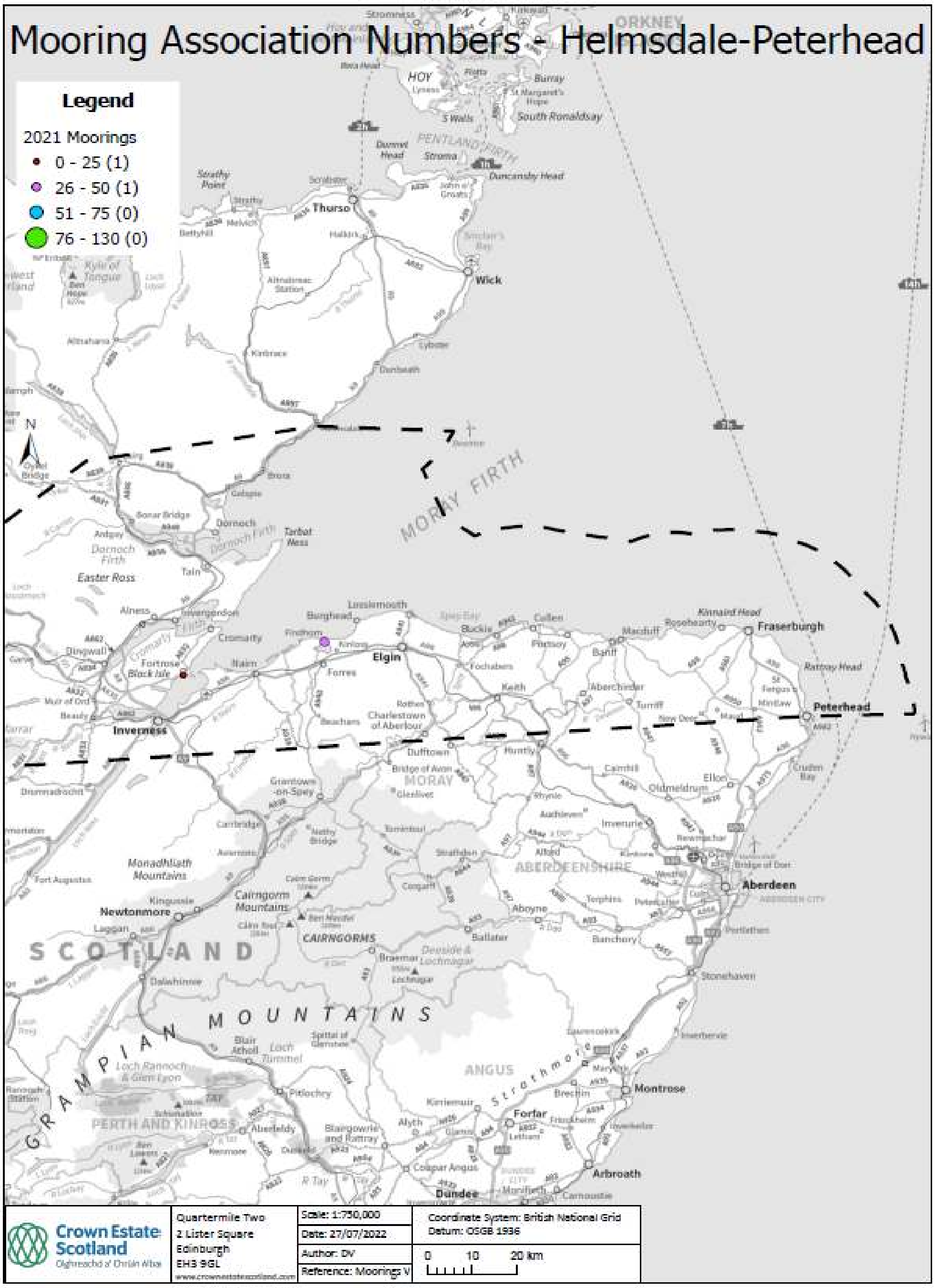
Gairloch to Helmsdale



Gairloch to Helmsdale	
Number of Moorings Associations	2
Mooring Association Moorings	137
Private Moorings	11
Total Moorings	**148**

Mooring Association Moorings Over Time					
Allocation	**2017**	**2018**	**2019**	**2020**	**2021**
165	116	118	120	125	137

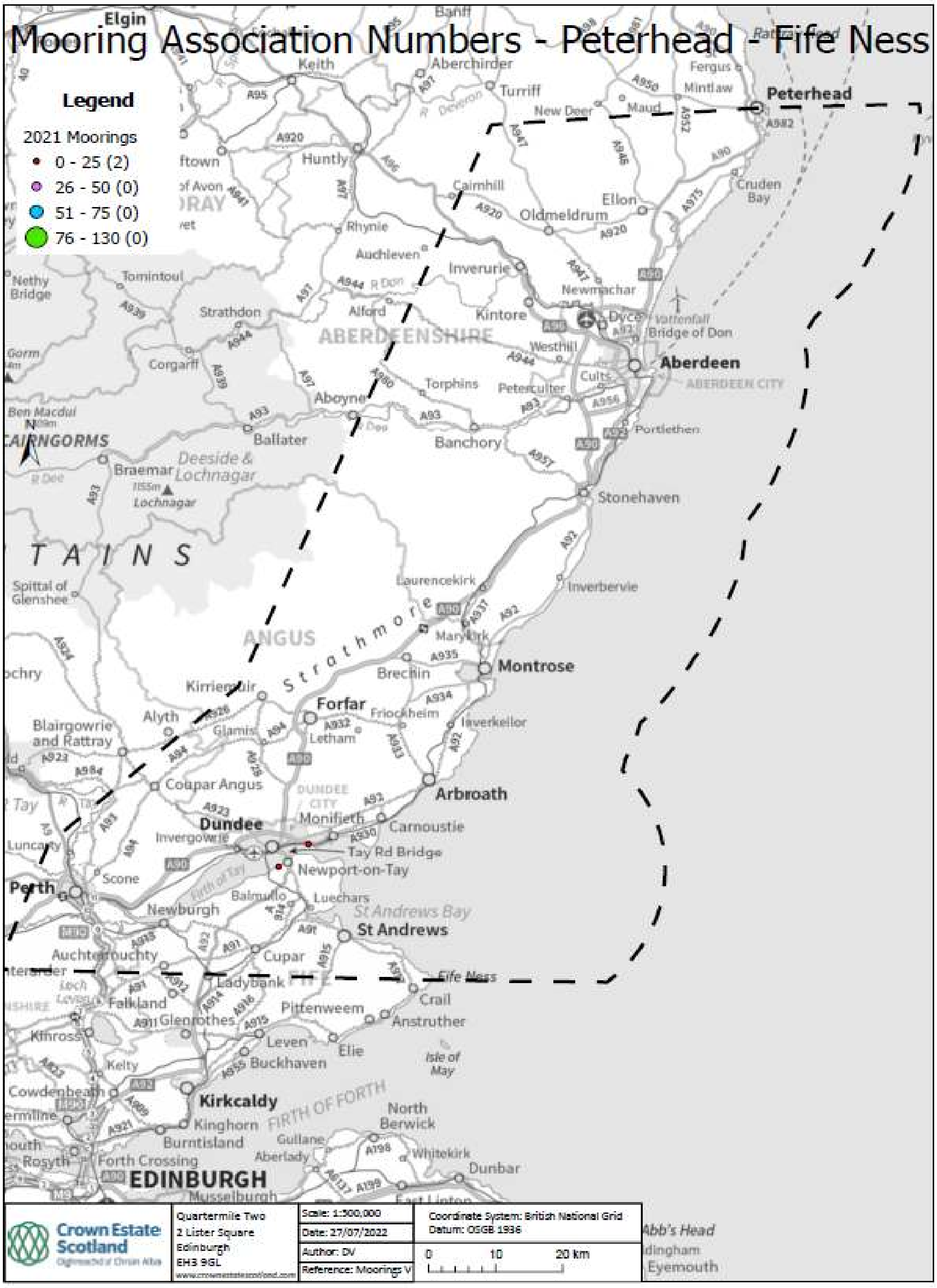
Helmsdale to Peterhead



Helmsdale to Peterhead	
Number of Moorings Associations	2
Mooring Association Moorings	60
Private Moorings	4
Total Moorings	**64**

Mooring Association Moorings Over Time					
Allocation	**2017**	**2018**	**2019**	**2020**	**2021**
140	68	64	67	51	60

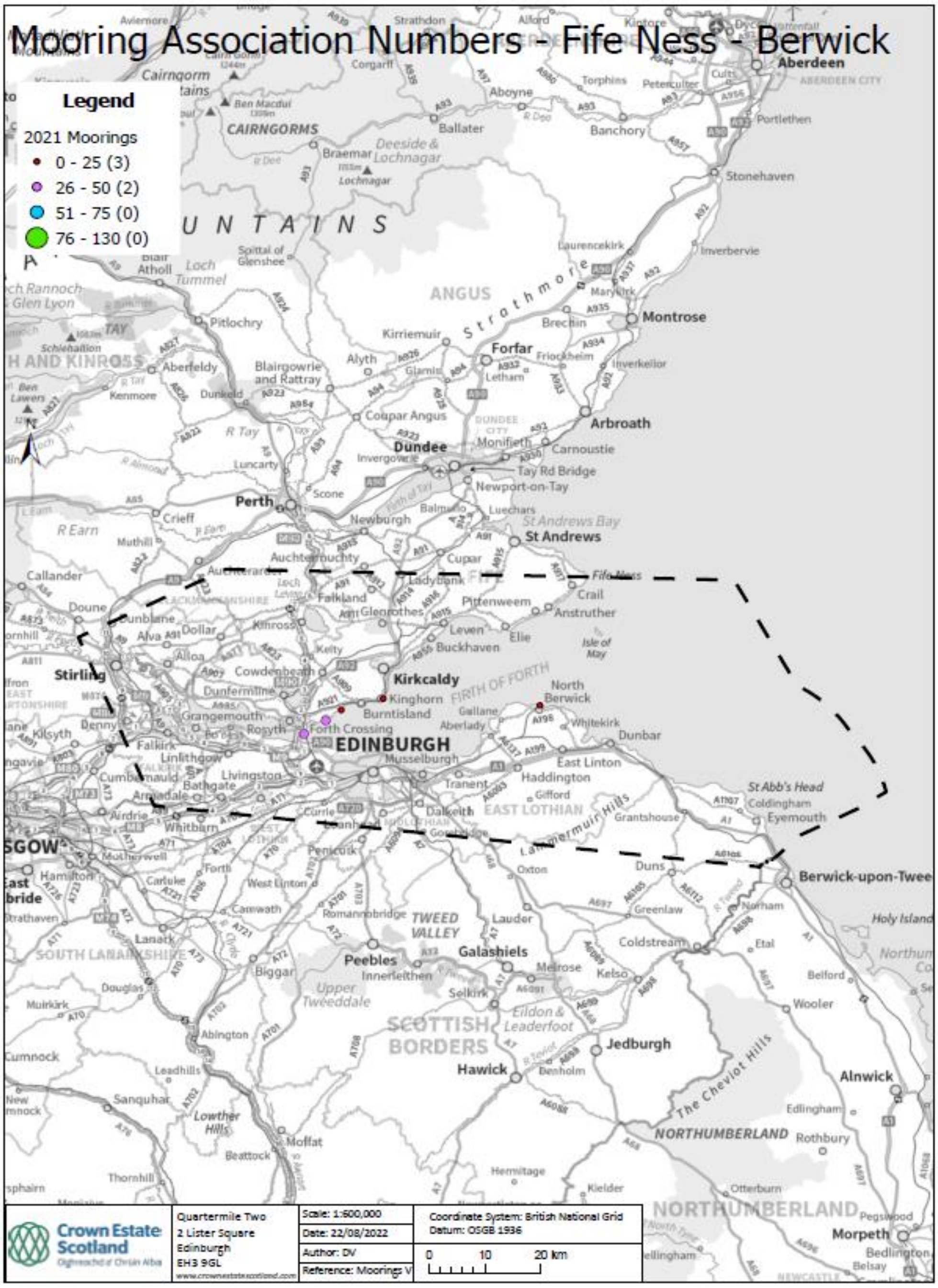
Peterhead to Fife Ness



Peterhead to Fife Ness	
Number of Moorings Associations	2
Mooring Association Moorings	18
Private Moorings	6
Total Moorings	**24**

Mooring Association Moorings Over Time					
Allocation	**2017**	**2018**	**2019**	**2020**	**2021**
160	36	39	33	1	18

Fife Ness to Berwick



Fife Ness to Berwick	
Number of Moorings Associations	5
Mooring Association Moorings	92
Private Moorings	4
Total Moorings	**96**

Mooring Association Moorings Over Time					
Allocation	**2017**	**2018**	**2019**	**2020**	**2021**
183	122	107	107	73	92

APPENDIX II – BIBLIOGRAPHY

Arkenford (2015-2019) *Watersports Participation Survey*

Barton and Pretty (2010) *What is the best dose of nature and Green Exercise for improving mental health?*

Boyd, F. White, M.P. Bell, S. & Burt, J. (2018) *Who doesn't visit natural environments for recreation and why: a population representative analysis of spatial, individual and temporal factors among adults in England*

Bragg, R. Wood, C. Barton, J. and Pretty, J. (2013) *Measuring connection to nature in children aged 8-12: a robust methodology for the RSPB*

Cotterill, S.T. & Brown, H. (2018) *An Exploration of the Perceived Health, Life Skill and Academic Benefits of Dinghy Sailing for 9-13 Year-old School Children*

De Bell, S. Graham, H. Jarvis, S. & White, P. (2017) *The importance of nature in mediating social and psychological benefits associated with visits to freshwater blue space*

DEFRA (2019) *The well-being and human health benefits of exposure to the marine and coastal environment*

Discover Boating (2018) *Your brain on a boat*

Elliott, L.R. White, M.P. Grellier, J. Garrett, J.K. Cirach, M. Wheeler, B. W. Bratman, G.N. van den Bosch, M.A. Ojala, A. Roilo, A. Lima, M.L. O'Connnor, A. Gascon, M. Nieuwnhuijsen, M & Fleming, L.E. (2020) *Defining residential blue space distance categories: modelling distance-decay effects across eighteen countries*

Elliott, L.R. White, M.P. Grellier, J. Rees, S. Waters, R. Fleming, R.E.F. (2018) *Recreational visits to inland and coastal waters in England: who, where, when, what and why*

Elliott, L.R. White, M.P. Taylor, A.H & Herbert, S. (2015) *Energy expenditure on recreational visits top different natural environments*

Environment Agency (2020) *The social benefits of Blue Space: a systematic review*

Grellier, J. White, M.P. Albin, M. Bell, S. Elliott, L.R. Gascon, M. Silbio, S. Mancini, I. Nieuwenhuijsen, M.J. Sarigiannis, D.A. Van den Bosch, M. Wolf, T. Wuijts, S. & Fleming, L.E. (2017) *BlueHealth: a study programme protocol for mapping and quantifying the potential benefits to public health and well-being from Europe's blue spaces*

H2020 SOPHIE Consortium (2020) *Citizens and the Sea. Public perceptions of Oceans and Human Health: A 14 country pan-European citizen survey*

McCarthy. C (2020) *6 reasons children need to play outside*

MacKerron, G. and Mourato, S. (2013) *Happiness is greater in natural environments*

Monitor of Engagement with the Natural Environment (2019) *Children and Young People Report*

National Trust (2018) *Children spend half the time playing outside in comparison to their parents*

Natural England (2012 & 2013) *Monitor of Engagement with the Natural Environment: the national survey on people and the environment*

Research Resource (2019) *Crown Estate Scotland: Coastal Customer Satisfaction Research*

Simetrica-Jacobs (2021) *Measuring the economic, social and wellbeing value associated with inland and coastal boating*

The YachtMarket News (2021) *The science of why boating is good for your mental health*

VisitScotland (2021) *The Health Benefits of Being Near Water*

VisitScotland (2019) *Exploring the role of wellness in the visitor experience*

White, M.P. Elliott, L.R. Gascon, M. Roberts, B. & Fleming, L.R. (2020) *Blue Space, health and well-being: a narrative overview and synthesis of potential benefits*

White, M.P. Elliott, L.R. Taylor, T. Wheeler, B.W, Spencer, A. Bone, A. Depledge, M.H. & Fleming, L.E. (2016) *Recreational physical activity in natural environments and implications for health*

White, M.P. Wheeler, B.W. Herbert, S. Alcock, L. & Depledge, M.H. (2014) *Coastal proximity and physical activity*