



THRIVING OCEAN, THRIVING PEOPLE

THE CONNECTION BETWEEN OCEAN RESTORATION
AND THE BLUE WELLBEING ECONOMY

DECEMBER 2021

BEGIN →



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

EXECUTIVE SUMMARY

The ocean is vital to us all. The restoration of marine ecosystems is inextricably linked to the wellbeing of society at large.

The COVID-19 pandemic has shown us more than ever just how important our natural world is to us, particularly the ocean that connects and supports global society. In our 2020 public survey, 97% of people said they missed visiting the ocean and beaches during period of lockdown, above any other natural environment.

This, along with restrictions on international travel, saw many more people heading to the UK's coast as part of the boom in 'staycations'. Wild blue spaces have been in high demand.

However, sadly the UK's seas are in poor health. In 2019, **11 out of the 15 official indicators of ocean health failed**, with ocean biodiversity declining every year.

2021 marks the start of the **UN Ocean Decade**, highlighting the vital role of Planet Ocean in the fight against climate change, combatting biodiversity loss, ensuring societal stability, and calling for the urgent investment in ocean recovery, not just for environmental health but also for our collective wellbeing.

This study investigates the linkages between ocean recovery and human health, gathering insights on public understanding of marine protection, wellbeing and ocean recovery. Through a comprehensive literature review and a representative survey of 10,064 people across the UK, conducted during the summer of 2021, this report adds to the growing body of evidence that a thriving ocean contributes to thriving people, and that restoring the ocean is vital to human health and prosperity.

THERE HAS BEEN A
29% INCREASE
IN PEOPLE VISITING THE
BEACH TO RELAX SINCE THE
START OF THE PANDEMIC'

The findings demonstrate that, despite the pandemic, the level of engagement with the marine environment remained strong in 2020. Results show that 45% of respondents visited the sea to relax and unwind in 2020, which shows a significant increase from just 14% in 2019. In the last year, visiting the sea has also had more positive outcomes for health and well-being.

There is strong evidence to support the positive links between spending time near or in outdoor blue spaces and mental health benefits. The health care costs of treating a person by a mental health specialist can cost the NHS up to £1,125 per case.

CONTINUE →



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

Although, the evidence to establish a clear link between visits to the sea and mental health effects is less available, it has been shown that people living in close vicinity to the sea have better overall mental health and a reduced risk of depression. This could also be applied to visits to the sea through 'blue prescribing' as a mental health treatment.

Moreover, there is experimental evidence that has suggested that people feel **more restored and happier** when there is a more natural and protected marine environment. This highlights the risk that continued degradation of the marine environment could have on public mental health and wellbeing.

Over the course of the pandemic, we have seen huge increases in the uptake of water sports such as surfing, bodyboarding, paddle boarding, belly boarding, kayaking and wild swimming. The finding of this study suggests that the number of people taking part on these types of activities has doubled over the last year.

The benefits in terms of physical health can be estimated at c. £580 per person per year for those people engaging in moderate and/or high intensity physical activities. Nationally, **these benefits could amount to £20.2bn annually**, well above earlier estimates by Defra. The benefits of the blue activity economy are clear.

However, whilst almost a third of UK seas have been designated as Marine Protected Areas (MPA's), many are simply 'paper parts' that exists without adequate monitoring and enforcement and still allow destructive fishing practices and extractive industries to take place. There is clearly considerable public concern regarding the state of the ocean. This study found that over half of the respondents thought that the UK seas are somewhat threatened and in poor health with almost 80% wanting to see action to restore the ocean and with a significant majority (60%) wanting more effective government action. However, we have found that there were generally limited levels of ocean literacy amongst respondents, 47% of respondents having not heard of MPA's.

PEOPLE LIVING IN CLOSE VICINITY TO THE SEA HAVE BETTER OVERALL MENTAL HEALTH AND A REDUCED RISK OF DEPRESSION

Of those respondents who had some knowledge of MPA's, 60% thought they were ineffective at protecting UK seas, highlighting public demand for urgent action to avoid further destruction and the need for government to adopt greater levels of protections such as highly or fully protected marine areas.

Overall this study shows that continued ocean degradation and lack of action can compromise significant benefits in terms of human health, prosperity and wellbeing and this is a risk not worth taking.

NEXT →





INTRO- DUCTION

**NINE OUT OF TEN
PEOPLE AGREE THAT
NATURAL SPACES ARE
GOOD FOR MENTAL
HEALTH & WELLBEING**

Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

In the last 18 months there has been a surge of people spending time in the natural environment.¹

In the summer of 2020, many people headed to the UK's coast, due to COVID led restrictions hindering international travel and the pent-up desire to spend time outdoors after the nationwide lockdown restrictions. This led to a boom in 'staycations' and outdoor activities in closer proximity to and/or in the sea^{2,3}.

However, the UK seas are not in great health. In 2019, only four of the 15 indicators of health were in 'good' status.

Earlier surveys have suggested that people were generally pessimistic about the health of the sea⁴. The state of the ocean is however gaining more public interest, fuelled by increasing media coverage and further evidence on the benefits of marine conservation.

The findings from our 2020 Ocean and Climate Survey revealed that 97% of the public are aware of the impact that climate change is having on the blue planet⁵.

The year 2021 has seen the start of the UN Decade of the Ocean, with the ocean recovery agenda highlighting the critical role that the blue environment is to play in the fight against climate change but also its role in human health and wellbeing.

This study looks to further the increasing body of literature and evidence on the role that the ocean plays in human health and wellbeing and also investigates the public understanding and attitudes towards marine protection.

1 UK government (2020): The People and Nature Survey for England: Monthly interim indicators for May 2020 (Experimental Statistics), available at: <https://www.gov.uk/government/statistics/the-people-and-nature-survey-for-england-monthly-interim-indicators-for-may-2020-experimental-statistics>

2 The Guardian (2021): Wave of success: staycations and Olympics drive surfing boom. Available at: <https://www.theguardian.com/travel/2021/jul/25/wave-of-success-staycations-and-olympics-drive-surfing-boom>.

3 The Times (2021): How wild swimming became a British lockdown obsession. Available at: <https://www.thetimes.co.uk/article/how-wild-swimming-became-a-british-lockdown-obsession-kpl86hjd7>

4 Hawkins et al (2016): Public awareness and attitudes towards marine protection in the United Kingdom, available at: https://eprints.whiterose.ac.uk/102826/1/Hawkins_et_al_2016.pdf

5 Surfers Against Sewage (2021): Ocean & Climate Report, January 2021, Cornwall.

CONTINUE →



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

The specific objectives of the study are:

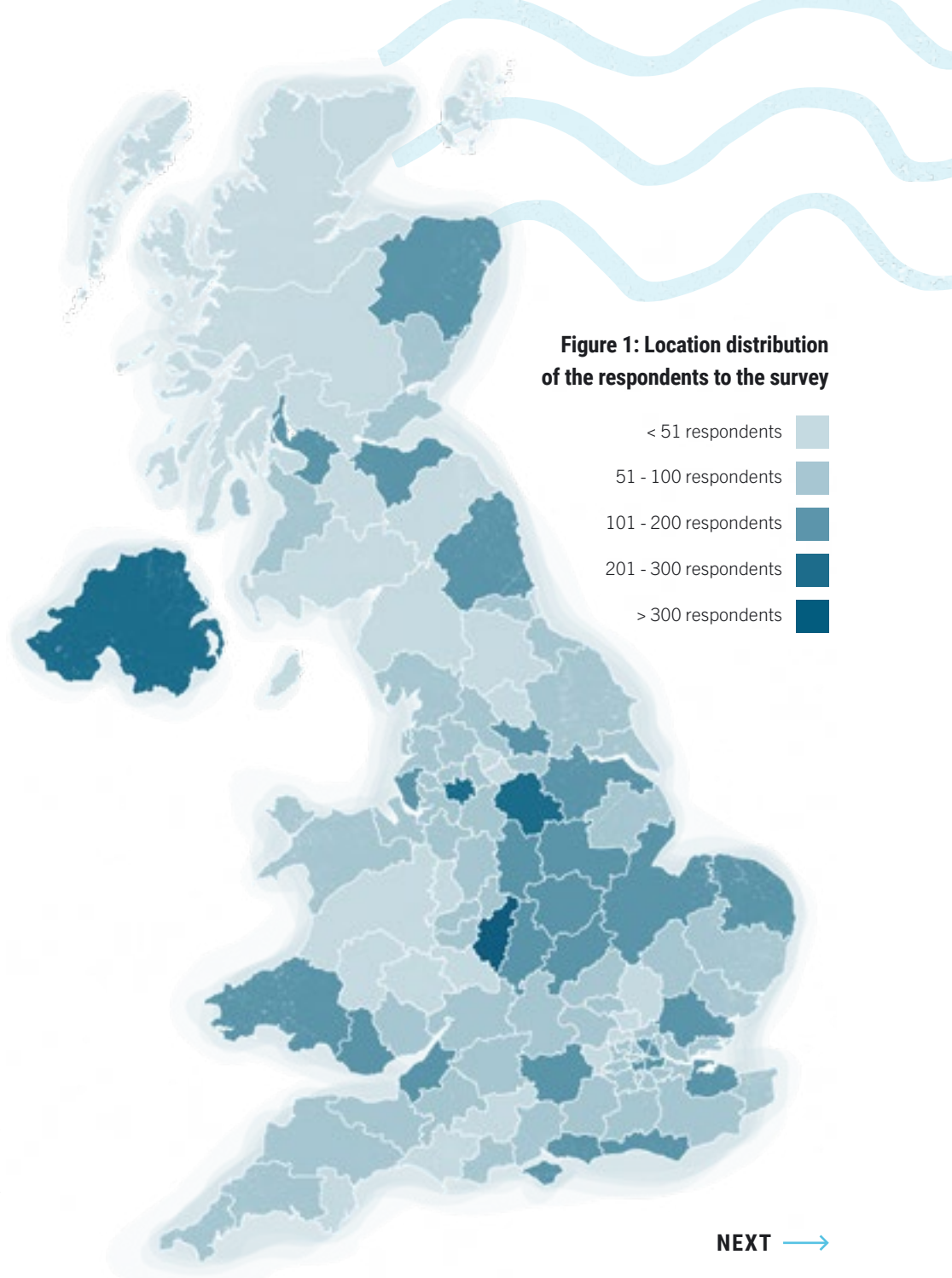
- To explore the relationship between ocean recovery and human health (both physical health and mental health, and well-being);
- To gauge the public understanding of marine protection and ocean recovery; and
- To explore the public's willingness to pay for ocean recovery and highly protected marine areas.

This report presents the findings of an in-depth literature review as well as new primary research from a representative survey of 10,064 UK based respondents conducted between July and in August 2021. The distribution of survey responses is shown in Figure 1. Overall, 21% of respondent to the survey were found to live less than 5 miles away from the coast (8km), further 13% live between 5 miles and 10 miles (8-16km) away from the coast and the rest more than 10 miles away (>16km)⁶. This is consistent with the national average of 36% of the population in the UK is estimated to live within 5 km from the sea⁷.

⁶ 26% between 10 miles and 25 miles; 27% between 25 miles and 50 miles, and finally 13% more than 50 miles away from the coast.

⁷ 2010 data from Eurostat, available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Coastal_regions_-_population_statistics#Distribution_of_the_population_within_coastal_strips

Figure 1: Location distribution of the respondents to the survey



NEXT →



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

THE RELATIONSHIP BETWEEN BLUE SPACE, OCEAN RECOVERY AND HUMAN HEALTH & WELL-BEING

CONTINUE →



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

CURRENT LEVEL OF PROTECTION OF BLUE SPACE

The government's '25 Year Environment Plan to Improve the Environment' published in 2018 recognises that Green and Blue Spaces in our built environment are essential to health and happiness.

The Plan was set out to help the natural world in the UK regain and retain good health, for instance by reducing the use of plastics that contribute to pollution of the ocean.⁸

Much of the research to date on health benefits, both physical and mental, has focused on Green Space. The Blue Space research agenda emerged relatively recently from the longstanding and established literature on Green Space. Blue Space has been defined in recent publication by the Environment Agency -The Social Benefits of Blue Space: A Systematic Review⁹.

The report defines Blue Space using a modified version set out by the Blue Health research project (funded by the EU's Horizon 2020 programme) 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)”.¹⁰

For this study we have adopted a similar definition but excluding rivers and lakes; thus, focusing on the coastal environment.

CONTINUE →



8 HM Government (2018): A Green Future: Our 25 Year Plan to Improve the Environment, available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

9 EA (2021): The Social Benefits of Blue Space, available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/928136/Social_benefits_of_blue_space_-_report.pdf

10 Grellier J, White MP, Albin M, 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 BMJ Open 2017;7:e016188. doi: 10.1136/bmjopen-2017-016188



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

The UK Marine Protected Area (MPA) network has progressed substantially over the last few years. Currently, Marine Protected Areas cover 38% of the UK waters, with the total number in 2021 rising to 371 sites. However, many of these areas have been described as ‘paper parks’ due to the fact they give the appearance of protection without delivering it.¹¹

Bottom trawling, one of the most destructive fishing practices, was only restricted in 1.7% of UK seas in 2019¹² with a recent study of European seas finding that trawling activity was higher in MPAs than outside of them due to inappropriate or poorly enforced management.¹³ In 2019, the Environmental Audit Committee reported that methods of compliance monitoring on fisheries have declined (e.g. at-sea inspections) and follow-up enforcement requires more support.¹⁴

In 2020, the UK government also published an independent review into whether and how Highly Protected Marine Areas (HPMAs) should be introduced.

The review, led by former Fisheries Minister Richard Benyon, recommended that HPMAs are an essential part of the UK MPA network for protection and recovery of the marine environment and the government should introduce HPMAs within existing Marine Protected Areas. On 20 July 2020 the Secretary of State announced that he intends to pilot HPMAs.¹⁵

In addition to providing economic value, the marine environment provides considerable social and cultural value including recreation, heritage and identity, beauty and inspiration, sense of place, health and wellbeing.

The 2021 EA report found that living near the coasts can have particular health benefits. Those visiting the coast also reportedly benefit in terms of health.¹⁶

NEXT →

**BOTTOM TRAWLING,
ONE OF THE MOST
DESTRUCTIVE
FISHING PRACTICES,
WAS ONLY RESTRICTED IN
1.7% OF UK SEAS IN 2019¹²**

11 Stewart et al (2020): Marine Conservation Begins at Home: How a Local Community and Protection of a Small Bay Sent Waves of Change Around the UK and Beyond. *Frontier in Marine Science*, 7 (76).

12 RPA (2020): The value of restored UK seas, Final Report for WWF, July 2020, Norfolk. Available at: <https://www.wwf.org.uk/sites/default/files/2021-01/WWF2009-01%20Value%20of%20restored%20UK%20seas%20report%20v6%20%28002%29.pdf>

13 Dureuil, M., Boerder, K., Burnett, K. A., Froese, R., and Worm, B. (2018). Elevated trawling inside protected areas undermines conservation outcomes in a global fishing hot spot. *Science* 362, 1403–1407

14 MMO (2019). Evaluation of marine protected area management measures concerning fishing. A report produced for the Marine Management Organisation, MMO Project No: 1172, October 2019, 95pp Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/841305/191023_MMO1172_Evaluation_of_MPA_Measures_publication.pdf

15 Defra (2021): Speech A vision for the UK Seas, delivered on 19 January 2021, available at: <https://www.gov.uk/government/speeches/a-vision-for-uk-seas>

16 The study looked at over 3,700 studies whittled down to 77 that were finally analysed in detail. EA (2021): The social benefits of Blue Space: a systematic review, available at: <https://environmentagency.blog.gov.uk/2021/08/04/blue-space-the-final-frontier/>



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

LEVEL OF ENGAGEMENT WITH THE BLUE SPACE

THE RESULTS OF THE SURVEY SHOWED
NEARLY HALF OF THE RESPONDENTS
VISITED THE SEASIDE AT LEAST ONCE
EVERY TWO TO THREE MONTHS

The UK seas extend to over 880,000 square kilometres, which is more than three and a half times the UK land area, and has over 30,000 kilometres of coastline, one of the longest in Europe.¹⁷

In addition to some large coastal cities such as Brighton and Hove, Southampton, Portsmouth, Plymouth or Liverpool, there are over 5.3 million residents living in coastal towns in England and Wales, of which 3.5 million living in seaside towns (those with a beach and visitor attractions) and 1.9 million in other coastal towns.¹⁸

Figure 2 shows that during 2020, 29% of respondents did not visit the seaside, an increase from 2019, when 16% of respondents did not visit the seaside.

The reason is likely to be COVID related. However, the level of engagement during 2020 remained strong, despite restrictions.

The results of the survey showed that, in 2020, 36% of respondents spent their leisure time out by the seaside at least one or twice a month, with nearly half of the respondents visiting the seaside at least once every two to three months (46% of 10,064).

This is consistent with the EA review that also found that around half of the population in England use blue spaces at least once a month.¹⁹

CONTINUE →

¹⁷ Defra (2019): Marine Strategy Part One: UK updated assessment and Good Environmental Status, available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/921262/marine-strategy-part1-october19.pdf

¹⁸ ONS (2020): Coastal towns in England and Wales: October 2020, available at: <https://www.ons.gov.uk/businessindustryandtrade/tourismindustry/articles/coastaltownsinenglandandwales/2020-10-06>

¹⁹ EA (2021): The social benefits of Blue Space: a systematic review, available at: <https://environmentagency.blog.gov.uk/2021/08/04/blue-space-the-final-frontier/>



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

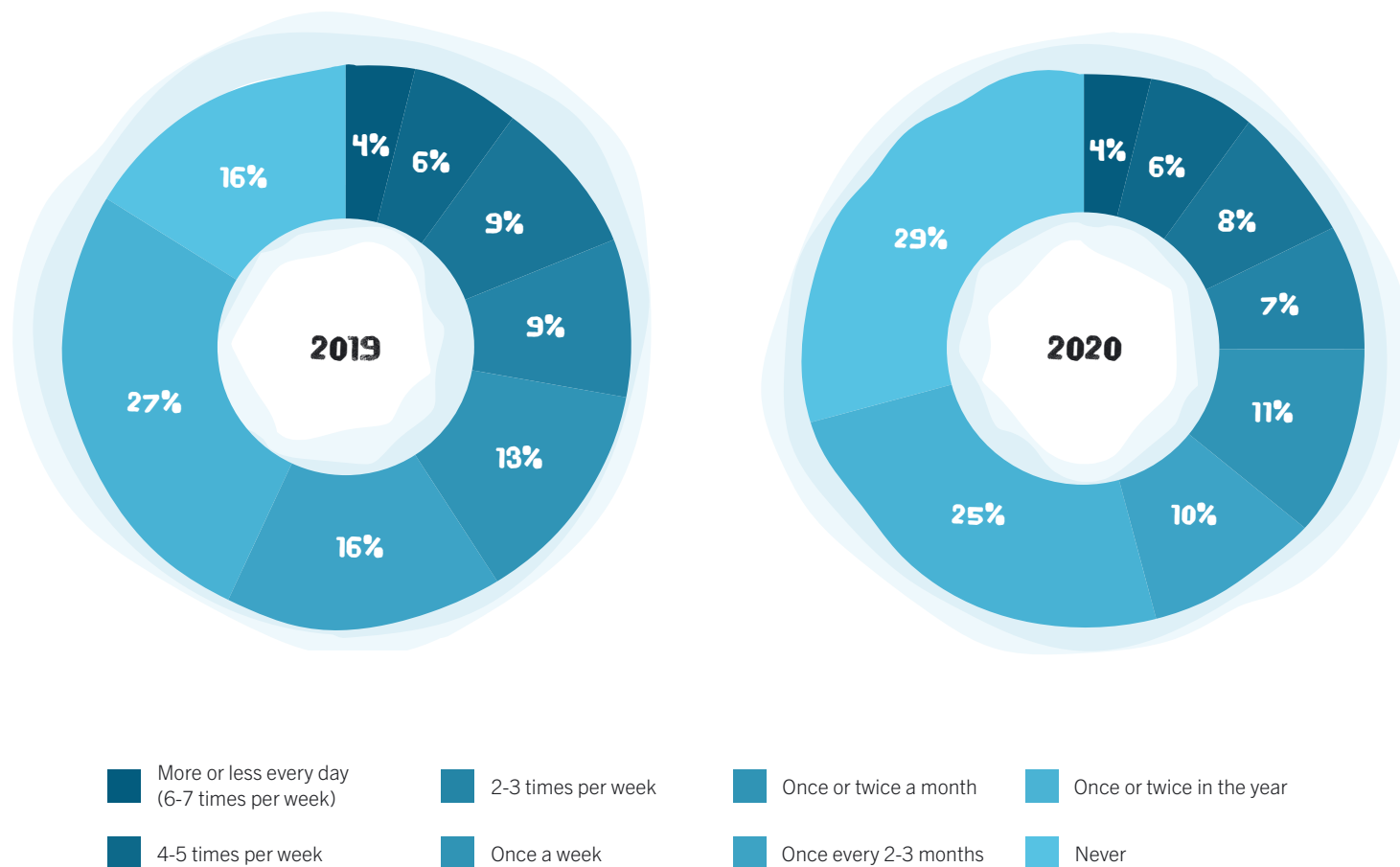
Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

Figure 2: Frequency of visits to the seaside in 2019 and 2020²⁰



CONTINUE →

²⁰ Note: Percentages were calculated based on the total number of respondents, n=10,064



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

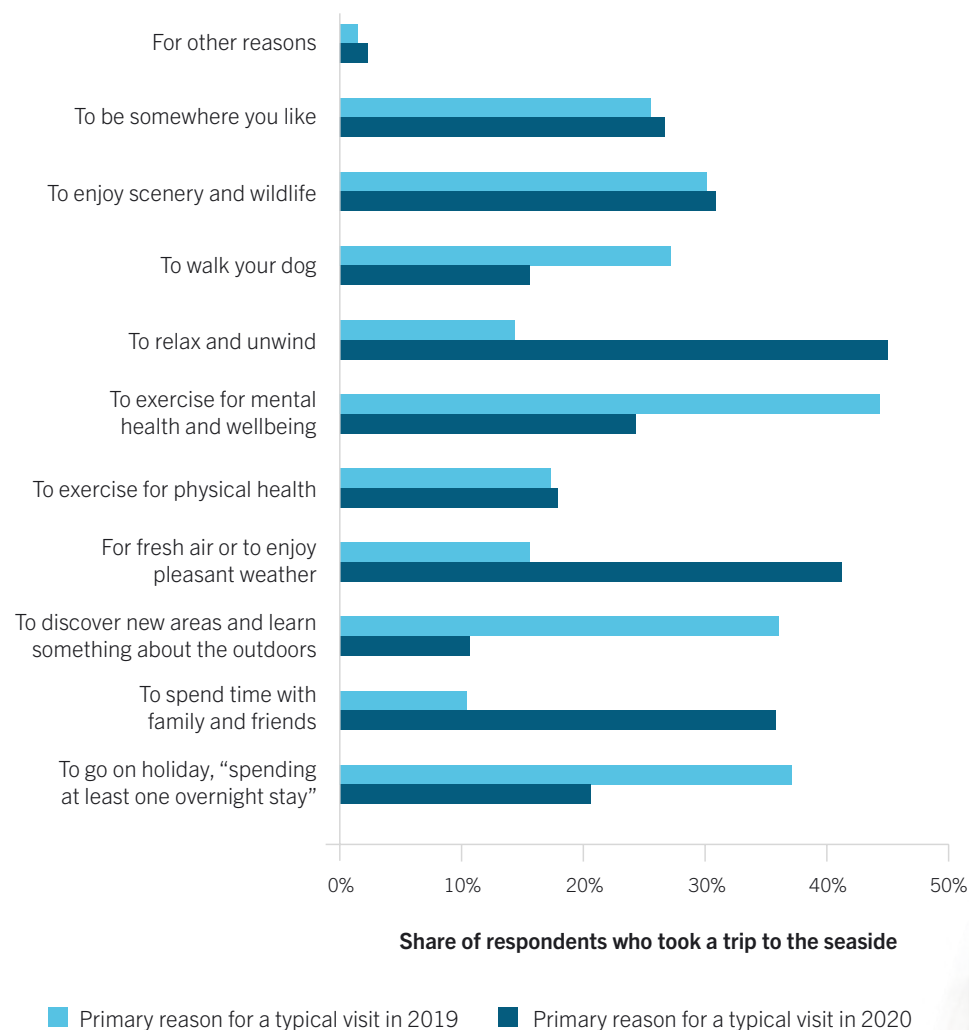
Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

Figure 3: Main reason for the visits to the seaside in 2019 and 2020²¹



²¹ Note: The base for the calculation of percentages is the number of respondents visiting the seaside in 2019 (n=8,396) and 2020 (n=7,139), respectively. Respondents were asked to pick at least 1 and max 3 reasons.

As shown in Figure 3, the main reason for visits to the coast in 2020 was to relax or unwind (45%), followed by enjoying the weather and catching fresh air (41%) and to spend time with family and friends (36%). In addition:

- 24% of respondents went to exercise, for mental health and well-being
- 18% of respondents went to exercise, for physical health.

CONTINUE →





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

When comparing the above with the main reason for a visit in 2019, however, the results showed that in 2020, in the midst of the pandemic, a higher percentage of respondents visited the sea to relax and unwind.

Over 92% of respondents spent more than one hour visiting the sea in 2020. As can be seen from Figure 4, the main activity was to walk (45% of respondents), with or without a dog, followed by eating out and sunbathing or paddling. Moreover, 14% of respondents were engaged in wildlife watching, whilst 9% went jogging or running and 4% of the respondents engaged in water-sports. This finding is consistent with the EA's report, which found that the most common activity near blue spaces is walking, often with a dog, but most visits are not active.²²

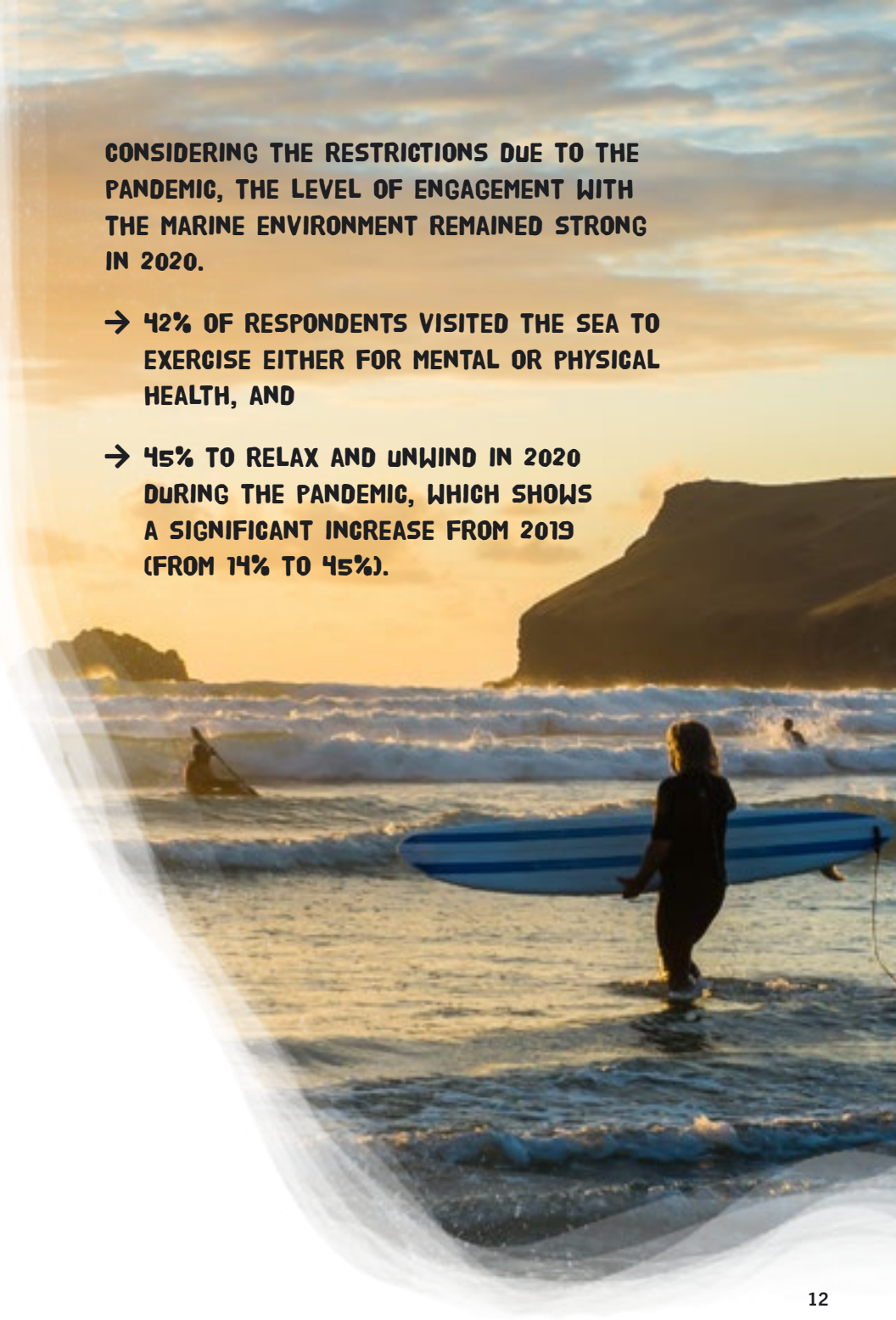
CONTINUE →

22 EA (2021): The social benefits of Blue Space: a systematic review, available at: <https://environmentagency.blog.gov.uk/2021/08/04/blue-space-the-final-frontier/>

CONSIDERING THE RESTRICTIONS DUE TO THE PANDEMIC, THE LEVEL OF ENGAGEMENT WITH THE MARINE ENVIRONMENT REMAINED STRONG IN 2020.

→ 42% OF RESPONDENTS VISITED THE SEA TO EXERCISE EITHER FOR MENTAL OR PHYSICAL HEALTH, AND

→ 45% TO RELAX AND UNWIND IN 2020 DURING THE PANDEMIC, WHICH SHOWS A SIGNIFICANT INCREASE FROM 2019 (FROM 14% TO 45%).





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

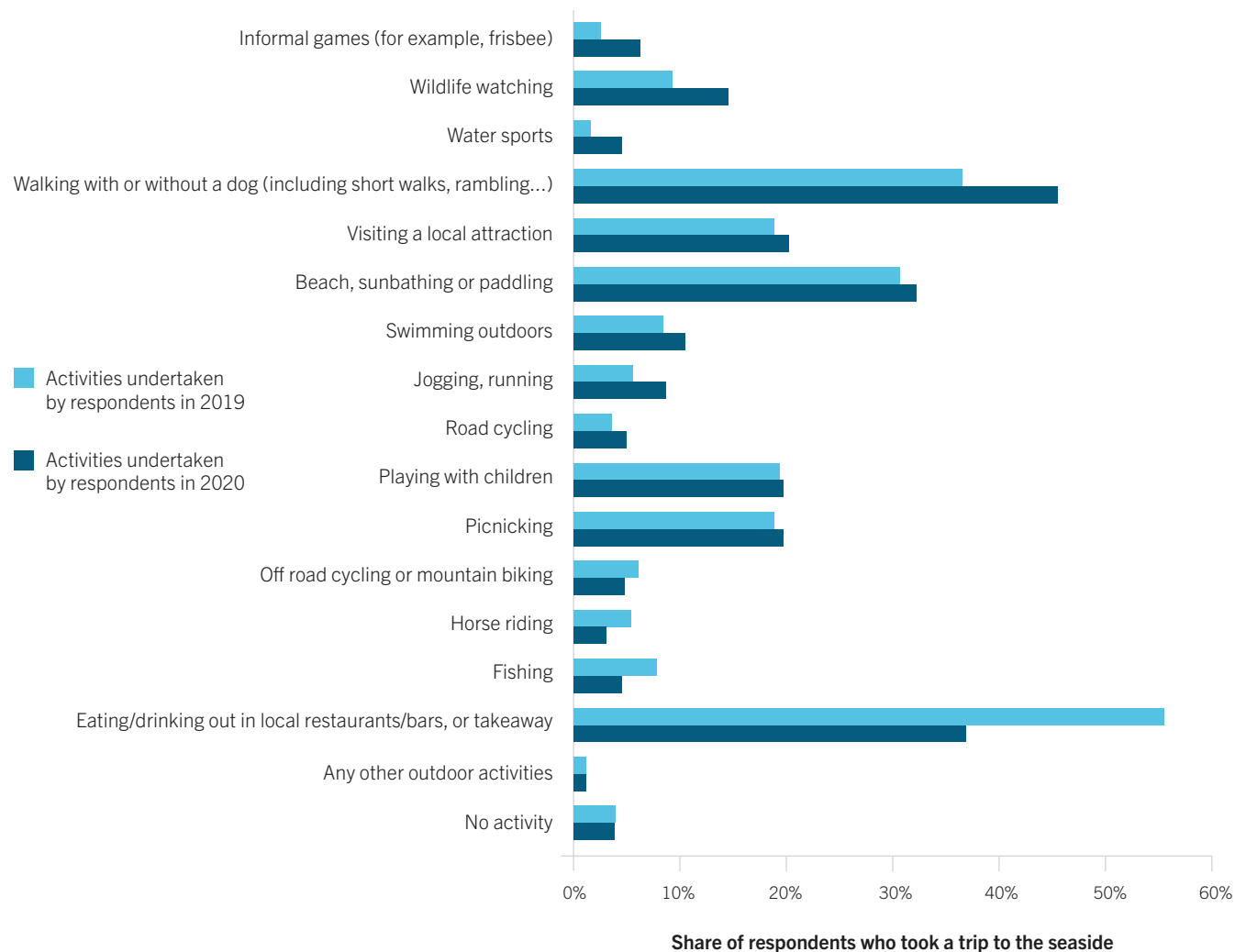
Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

Figure 4: Activities undertaken during typical visits to the seaside in 2019 and 2020²³



²³ Note: The base for the calculation of percentages is the number of respondents visiting the seaside in 2019 (n=8,396) and 2020 (n=7,139), respectively. Respondents were asked to pick at least 1 and max 3 activities. Most respondents who selected 'Any outdoor activity' participated in playing golf or tennis, metal detecting, taking photos or shopping.

CONTINUE →



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

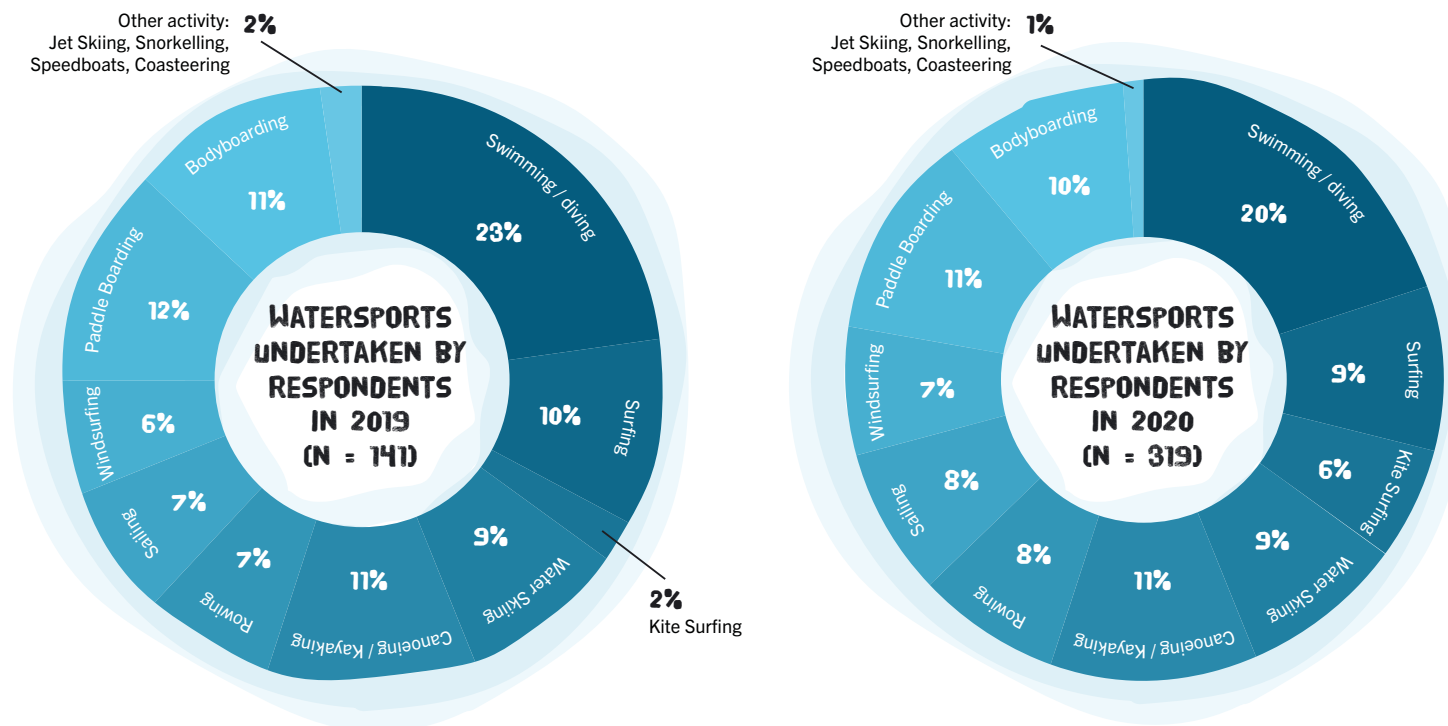
Our Conclusions

Our Call

In addition, visitors were more actively involved in water sport activities in 2020 than in 2019. In 2020, 4% (319 out of 7,139) of respondents who undertook an activity during their visit to the seaside chose to carry out water sport activities compared to 2% (141 out of 8,396) of respondents in 2019, an increase of 100%.

Swimming/diving, canoeing/kayaking, bodyboarding and paddleboarding remained the most popular water sports (see Figure 5).

Figure 5: Water sport activities undertaken during typical visits to the seaside in 2019 and 2020²⁴



²⁴ Note: Respondents were asked to pick at least 1 and max 5 watersports activities.

NEXT →



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

HEALTH BENEFITS LINKED TO THE BLUE SPACE & OCEAN RECOVERY

Freshwater and coastal blue space merit greater consideration in public health and urban planning policy and in the design of environments that aim to promote mental health and healthy ageing.²⁵

Although most of the literature to date has focused on the physical and mental health from green spaces, like parks and woodlands, there is an increasing body of evidence that there are health benefits from living and visiting the sea. The Blue Gym Initiative was created in the UK in 2009 to explore:

- whether blue space environments might be positively related to human health and well-being; and
- whether the public could be encouraged to preserve and protect these environments.

Whilst the wider initiative considers all blue spaces including inland bodies of water (e.g. lakes, rivers and canals as well as the coasts and oceans), to date the focus has been primarily on marine and coastal environments.

CONTINUE →

²⁵ McDougall, C. W., Hanley, N., Quilliam, R. S., Bartie, P. J., Robertson, T., Griffiths, M., & Oliver, D. M. (2021): Neighbourhood blue space and mental health: A nationwide ecological study of antidepressant medication prescribed to older adults. *Landscape and Urban Planning*, 214. <https://doi.org/10.1016/j.landurbplan.2021.104132>

²⁶ More information on: <https://www.cambridge.org/core/journals/>

[journal-of-the-marine-biological-association-of-the-united-kingdom/article/abs/blue-gym-what-can-blue-space-do-for-you-and-what-can-you-do-for-blue-space/2409C4FCED48391786A65146D8A5C51D](https://www.journal-of-the-marine-biological-association-of-the-united-kingdom/article/abs/blue-gym-what-can-blue-space-do-for-you-and-what-can-you-do-for-blue-space/2409C4FCED48391786A65146D8A5C51D)





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

Defra's Evidence Statement (2019)²⁷ describes the benefits of the marine environment for well-being and mental health as follows:

- Therapeutic effect: the coast has been shown to play a role as a therapeutic landscape for promoting well-being and mental health and may help to cater for varied needs;
- Restorative effect: Restoration refers to emotional responses, including calmness, relaxation, refreshment and revitalisation. People visiting coastal environments report greater recalled feelings of restoration, in comparison to urban environments (e.g. urban parks and green spaces).
- Subjective well-being: this refers to how we think and feel about our lives. People are happiest when spending time in marine and coastal margins, in comparison to other natural environments in the UK.

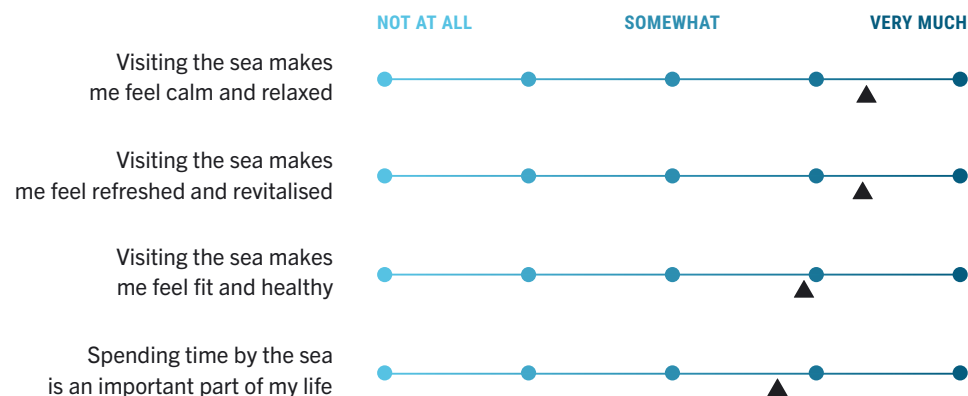
²⁷ Evidence Statements are succinct summaries of evidence from published literature in a defined policy setting that are written for senior policy officials and a general non-expert audience to support decision making. This one reviewed over 60 sources. Defra (2019): The well-being and human health benefits of exposure to the marine and coastal environment, available at: https://www.smmr.org.uk/wp-content/uploads/2020/07/SD1712_well-being-and-human-health-benefits.pdf

There are also benefits of the marine environment for physical human health.

In 2019, the EA commissioned a systematic review which found strong evidence that living near the coast is associated with lower levels of being overweight and healthier living.

Our survey asked respondents to what extent they agree with different statements which are associated with the health benefits from visiting the sea, building on the above literature's findings. The majority of respondents strongly agreed with the statements saying that visiting the sea makes them feel calm and relaxed, followed closely by feeling refreshed and revitalized.

Figure 6: Ranking of typical benefits from visits to the seaside²⁸



²⁸ Note: The respondents were asked to select one of the following options for each statement: [5] Strongly agree; [4] Agree; [3] Neither agree nor disagree; [2] Disagree; [1] Strongly disagree.

CONTINUE →



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

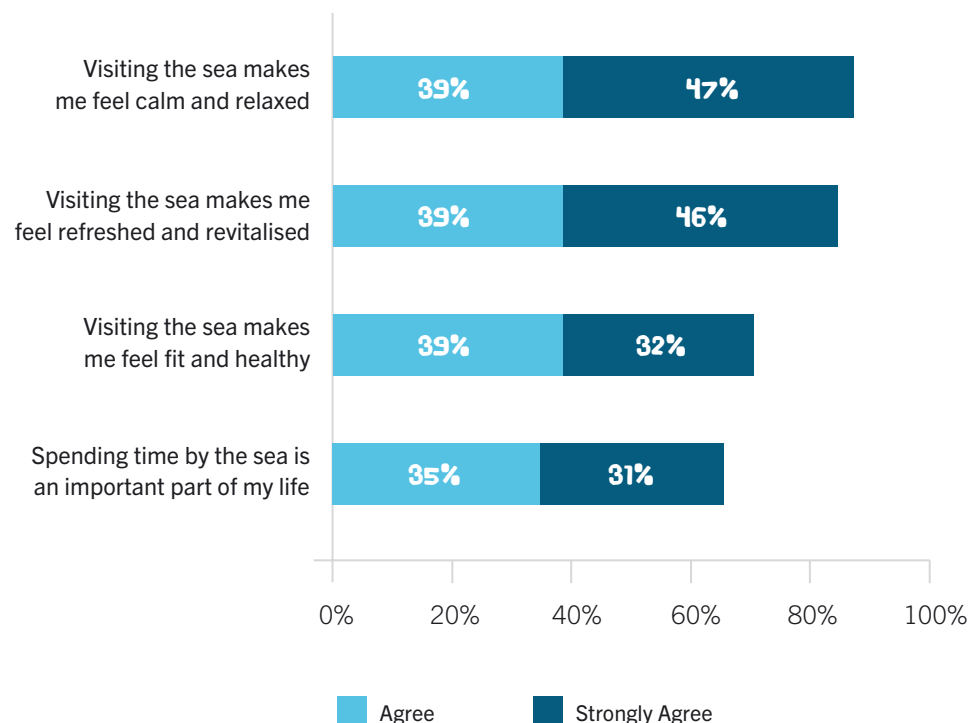
The percentage breakdown of respondents who generally perceived spending time by the seaside as beneficial (i.e. those who either agreed or strongly agreed with the statements) is shown in Figure 7.

The Defra's report on Ocean Literacy³⁰ also reported similar outcomes from visits to the marine environment. Good mental health (84%) and physical health (80%) were the most frequently reported outcomes from spending time in a marine environment. The MENE survey showed that in 2018/2019 the main reasons to visiting the beach was for health to exercise (61%) and to relax/unwind (47%), with 36% agreeing that visiting the coastline made them feel calm and relax. The outcomes of the MENA survey suggest that a higher percentage of respondents benefited in terms of feeling calm and relaxed in 2020 than in 2019.

Thus, in the last year, visiting the sea provided more positive outcomes for health and wellbeing.

NEXT →

Figure 7: Public opinion on the benefits from visits to the seaside (percentage breakdown of respondents who agreed or strongly agreed)²⁹



²⁹ Note: Percentages were calculated based on the total number of respondents, n=10,064

³⁰ To answer these questions, Defra used a survey through an online panel method. This utilised a mix of different panels, which improves the quality of outputs by hedging against a single panel provider. A total number of 8,440 survey responses were recorded. Defra (2021a): Understanding Ocean Literacy and ocean climate-related behaviour change in the UK, available at: https://oceanconservationtrust.org/app/uploads/15131_ME5239OceanLiteracyHeadlineReport_FINAL.pdf



CURRENT HEALTH BENEFITS FROM THE BLUE SPACE

Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

Research has found that not only are coastal visits reported as being better than other settings for stress reduction, they are also the locations where most energy is expended; in other words, they provide two important health-related functions - one linked to physical activity, or the so-called “blue gym” and the other to do with reduced stress.^{32,33}

The Blue Health International Survey, conducted from June 2017 to April 2018 concerned recreational use of blue spaces and its relationship with human health and included panellists in 18 countries, including the UK. A systematic review was also conducted under the EU Umbrella Project Blue Health.³⁴ The balance of evidence suggested a positive association between greater exposure to outdoor blue spaces and both benefits to mental health and well-being and levels of physical activity.

Other studies support this:

- In a cross-sectional study for urban adults England³⁵, Garrett et al., (2019) found that living within 1 km from the coast, in comparison to >50 km, was associated with better mental health for urban adults.³⁶
- McDougall C et al (2021) focused on antidepressant medication for older adults and the link with blue space in Scotland³⁷. The availability of both freshwater and coastal blue space was associated with lower antidepressant medication prevalence among older adults in Scotland. The findings also suggested that neighbourhood blue space availability may have a greater impact on antidepressant medication prevalence than neighbourhood green space availability.³⁸
- Dempsey S et al (2018) tested whether higher exposure to coastal blue space was associated with lower risk of depression using data from The Irish Longitudinal Study on Ageing (TILDA), a nationally representative longitudinal study of people aged fifty and over in Ireland. The results indicated that exposure to coastal blue space is associated with beneficial mental health outcomes, and TILDA respondents with the highest share of sea view visibility have lower depression (CES-D) scores.³⁹

CONTINUE →

32 White et al (2021): Associations between green/blue spaces and mental health across 18 countries. Scientific Reports.

33 Dempsey et al (2015): Coastal blue space and depression in older adults. Health and Place, 54.

34 Gascon, M., Zijlema, W., Vert, C., White, M.P., Nieuwenhuijsen, M.J. (2017). Outdoor blue spaces, human health and well-being: A systematic review of quantitative studies. Int J Hyg Envir Heal 4. doi:10.1016/j.ijheh.2017.08.004

35 2008–2012, N ≥25,963

36 Garrett et al (2019): Coastal proximity and mental health among urban adults in England: Themoderating effect of household income, Health and Place 59, available at: <https://reader.elsevier.com/reader/sd/pii/S1353829219300607?token=F7943F27A3D5F27EE6CDEE302F3AAEB89481DDE69D55234950CF91EE9D12714EFB609A82B74A0BC960B3C422ABC67F7B&originRegion=eu-west-1&originCreation=20210618123536>

37 The study combined nationwide antidepressant prescription data for over two million older adults and geospatial data of blue space availability for over six thousand neighbourhoods and adjusted for a range of demographic and socioeconomic covariates.

38 McDougall, C. W., Hanley, N., Quilliam, R. S., Bartie, P. J., Robertson, T., Griffiths, M., & Oliver, D. M. (2021): Neighbourhood blue space and mental health: A nationwide ecological study of antidepressant medication prescribed to older adults. Landscape and Urban Planning, 214. <https://doi.org/10.1016/j.landurbplan.2021.104132>

39 Dempsey S et al (2018): Coastal blue space and depression in older adults, Health and Place, 54 (Landsc. Urban Plan. 142 2015): 110-117



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

There is strong evidence that engagement with the blue space can have health and wellbeing benefits.

Mosely et al (2018) developed an economic indicator of physical health benefits from visitor survey data by linking time spent with energy spent and calories burnt.⁴⁰

The benefits were monetised based on the number of quality adjusted life years (QALYs) realised by the respondents. QALYs are widely used by health professionals and are based on willingness to pay studies to avoid specific health outcomes and justify interventions.

This approach has been used to monetise the physical health benefits realised by undertaking activities at the seaside by respondents to the survey conducted for this study. Based on the results of the survey, the average QALY gain per person has been estimated to be between 0.024 and 0.034 QALY's per year.⁴¹

The UK value of health interventions, as used by the National Institute for Health and Clinical Excellence (NICE)⁴² (i.e. the threshold of £20,000 per QALY), has been subsequently applied to the number of additional QALYs.

IT HAS BEEN CONCLUDED THAT AN INDIVIDUAL CONDUCTING A PHYSICAL ACTIVITY BY THE SEA COULD ACCRUE ANNUAL HEALTH BENEFITS OF THE ORDER OF £490 TO £670 PER YEAR.

If the survey results are extrapolated for the whole of UK, the annual health benefits could reach between **£14.6 billion and £20.2 billion.**⁴³

Papathanasopoulou et al (2015)⁴⁴ estimated that physical activities in the marine environment provided a total gain of 24,853 QALYs in 2012 associated with £177 million worth of savings.

Defra (2019) has updated the monetary value to 2018 prices and reported a figure of £195 million worth of savings to the National Health Service, through non-occurring health care expenditure (e.g. coronary heart disease, strokes and type 2 diabetes).

This estimate relates to 400,050 people that participated in a limited number of identifiable aquatic activities (e.g. swimming was excluded).⁴⁵

The annual benefits of between £14.6.9 billion and £20.2 billion estimated as part of our survey cover more participants (i.e. the survey findings suggest that 3,050,000 people undertook least one moderate- and/or high-intensity activity during a typical visit to the seaside in 2020) as well as a wider range of activities.

CONTINUE →

40 Forest Research (2018): Developing an indicator for the physical health benefits of recreation in woodlands, June 2018. Available at: <https://www.sciencedirect.com/science/article/pii/S2212041617304436>

41 More detailed explanation of the approach applied for the monetisation of the health impacts is presented in Annex 3.

42 NICE's 'threshold,' over which treatments are less likely to be recommended for use in the NHS, is typically between £20,000 and £30,000 per QALY. National Institute for Health and Care Excellence (2015): Carrying NICE over the threshold, available at: <https://www.nice.org.uk/news/blog/carrying-nice-over-the-threshold>

43 95% Confidence Interval, Margin of error 1%

44 Eleni Papathanasopoulou, Mathew P. White, Caroline Hattam, Aisling Lannin, Andrea Harvey, Anne Spencer (2015): Valuing the health benefits of physical activities in the marine environment and their importance for marine spatial planning

45 Defra (2019): The well-being and human health benefits of exposure to the marine and coastal environment, available at: https://www.smmr.org.uk/wp-content/uploads/2020/07/SD1712_well-being-and-human-health-benefits.pdf



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

As indicated in Figures 6 and 7, the majority of respondents to the survey have reported that spending time by the seaside makes them feel refreshed and revitalised (85% of respondents), and calm and relaxed (86% of respondents).

Therefore, it could be assumed that in addition to physical health benefits, spending time by the seaside is beneficial to mental health. Based on the literature review, publicly available figures on the costs of mental health, interventions range from £45 for low-intensity psychological interventions to £1,125 for high-intensity psychological interventions (NICE, 2015⁴⁶).

McDougall et al (2021) found that high freshwater or coastal blue space coverage in the immediate neighbourhood (i.e. living in close proximity <5 km or <3.1 miles to the coast) was associated with a 5% (PR = 0.9508, 95% CI 0.9334-0.9685) reduction in antidepressant medication prevalence.

Moreover, research suggests that interacting with blue space regularly can promote emotional well-being as we age.⁴⁷ 13% of respondents to the survey conducted as part of this study live less than 5km away from the coast, and therefore likely realise benefits from a reduced antidepressant medication prevalence.

There could be public savings of up to £1,125 for each case avoided of a person needing referral from a GP to a mental health specialist but the evidence to establish a clear link between visits and impacts is less available. There is some more robust evidence that people living in close vicinity of the sea are in better mental health and at reduced risk of depression.

NEXT →

46 NICE (2015): Resource impact statement: Depression and anxiety Disorder, available at: <https://www.nice.org.uk/Media/Default/Standards-andindicators/QOF%20Indicator%20Key%20documents/NM123-cost-impact-report.pdf>

47 McDougall, C. W., Hanley, N., Quilliam, R. S., Bartie, P. J., Robertson, T., Griffiths, M., & Oliver, D. M. (2021): Neighbourhood blue space and mental health: A nationwide ecological study of antidepressant medication prescribed to older adults. *Landscape and Urban Planning*, 214. <https://doi.org/10.1016/j.landurbplan.2021.104132>





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

HEALTH BENEFITS FROM A HEALTHIER OCEAN

A healthier ocean will ensure the continuity of human health and well-being benefits. At the current level of degradation, we run the risk of missing out on significant human health and well-being benefits.

Experimental evidence has suggested that people feel more restored and happier when there is a better-quality marine environment. Moreover, a better quality of ocean can reduce the public health burden from the risk associated with some recreational activities, such as bathing or swimming. These are not however within the scope of the study.

Mathew P. et al (2017), on a UK survey of 1,407, concluded that there is greater restorative potential from greater perceived biodiversity.⁴⁸ Wyles KJ (2016) concluded that litter can undermine the psychological benefits that the coast ordinarily provides, thus demonstrating that, in addition to environmental costs of marine plastic pollution, there are also costs to people.^{49,50} Plastic Pollution can also reduce recreational opportunities.⁵¹ Moreover, any loss of the current health-promoting potential of coastal environments will negatively impact on the health and wellbeing of coastal communities.⁵²

It is difficult to estimate the impacts that continuous degradation is having on human health with accuracy. However, there are some known impact channels:

- Reduced quality can reduce visits to the marine and coastal environment, thus reducing health benefits from users;
- A degraded marine environment can make people feel sad and affect wellbeing.
- Finally, reduced ocean quality can impact local communities negatively.

NEXT →



48. Mathew P. White, Abigail Weeks, Tom Hooper, Luke Bleakley, Deborah Cracknell, Rebecca Lovell, Rebecca L. Jefferson, (2017): Marine wildlife as an important component of coastal visits: The role of perceived biodiversity and species behaviour, Marine Policy, Volume 78, 2017, Pages 80-89,

49. Note that this was based on a small set of UK experiments, from 20 to 79 participants.

50. Wyles KJ, Pahl S, Thomas K, Thompson RC. (2016): Factors That Can Undermine the Psychological Benefits of Coastal Environments: Exploring the Effect of Tidal State, Presence, and Type of Litter. Environ Behav. 2016;48(9):1095-1126. doi:10.1177/0013916515592177

51. Defra (2019): The well-being and human health benefits of exposure to the marine and coastal environment, available at: https://www.smmr.org.uk/wp-content/uploads/2020/07/SD1712_well-being-and-human-health-benefits.pdf

52. Depledge MH, et al. (2017): Future of the Sea: Health and Wellbeing of Coastal Communities.



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

PUBLIC ATTITUDES AND UNDERSTANDING OF MARINE PROTECTION AND OCEAN RECOVERY

CONTINUE →





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

PUBLIC PERCEPTION OF THE STATE OF THE OCEAN

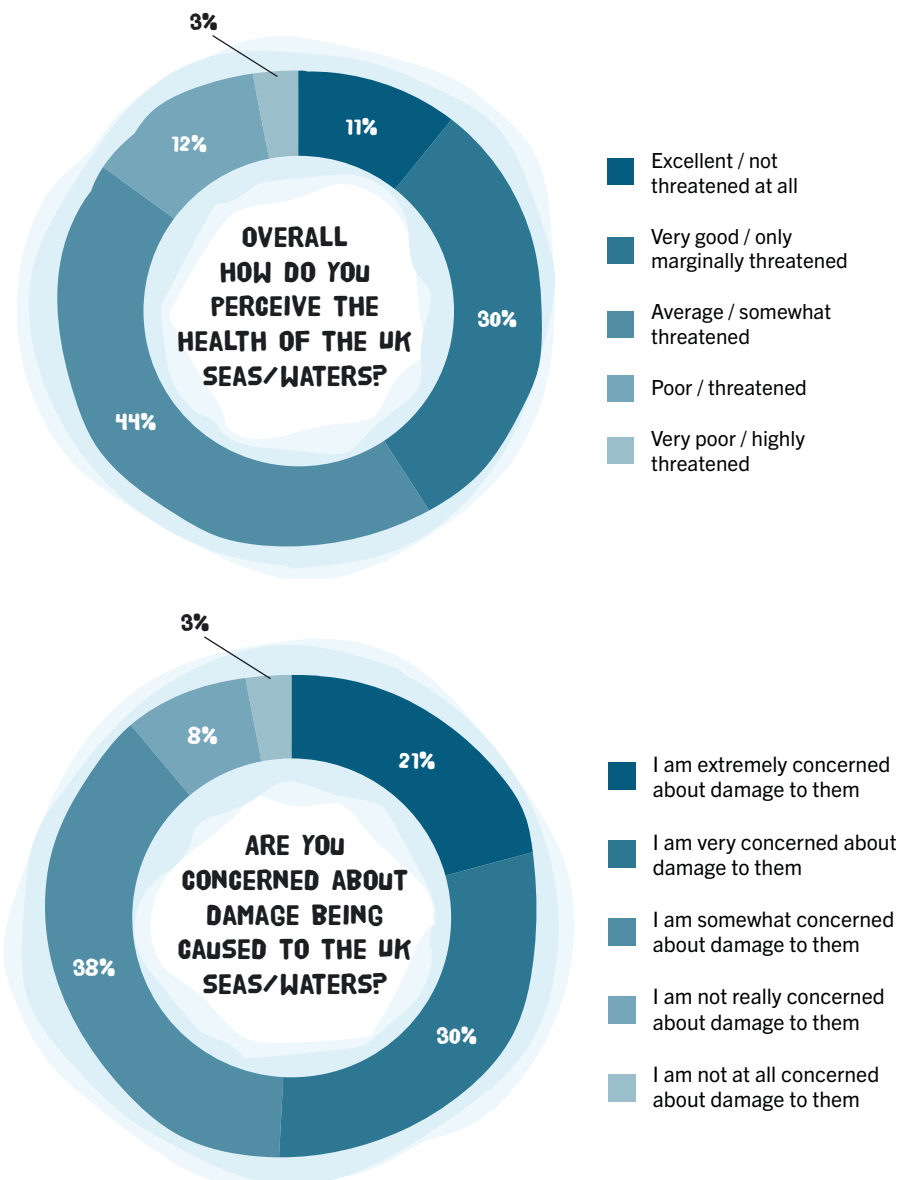
The survey undertaken for this study asked respondents how they perceived the health of the UK seas.

44% of respondents thought that the UK seas are somewhat threatened and a further 12% thought they were in poor health and threatened. Over half of the respondents said they were extremely concerned and/or very concerned about the damage to the seas.

CONTINUE →

53 Note: Percentages were calculated based on the total number of respondents, n=10,064. Respondents were asked to select one answer.

Figure 8: Perceived health of the UK Seas ⁵³





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

As depicted in Figure 9, **younger respondents perceive the health of the UK seas to be in a better condition than those in older age groups**. This could well be evidence of ‘shifting baseline syndrome’ with younger generations perceiving the current degraded environment as healthy as they have limited comparisons to draw from. However, as shown in Figure 10, **there is little variation between age groups** regarding the level of concern about damage being caused to UK seas.

Against the knowledge shown in Figure 8, a higher percentage of respondents are extremely and/or very concerned about the damage being caused to the ocean.

CONTINUE →

54 Note: Percentages were calculated based on the total number of respondents by age category, n (16-24) = 1,194; n (25-34) = 1,875; n (35-44) = 1,772; n (45-54) = 1,717; n (55-64) = 1,850; n (65+) = 1,656.

55 Note: Percentages were calculated based on the total number of respondents by age category, n (16-24) = 1,194; n (25-34) = 1,875; n (35-44) = 1,772; n (45-54) = 1,717; n (55-64) = 1,850; n (65+) = 1,656.

Figure 9: Public opinion on the health of UK seas by age category⁵⁴

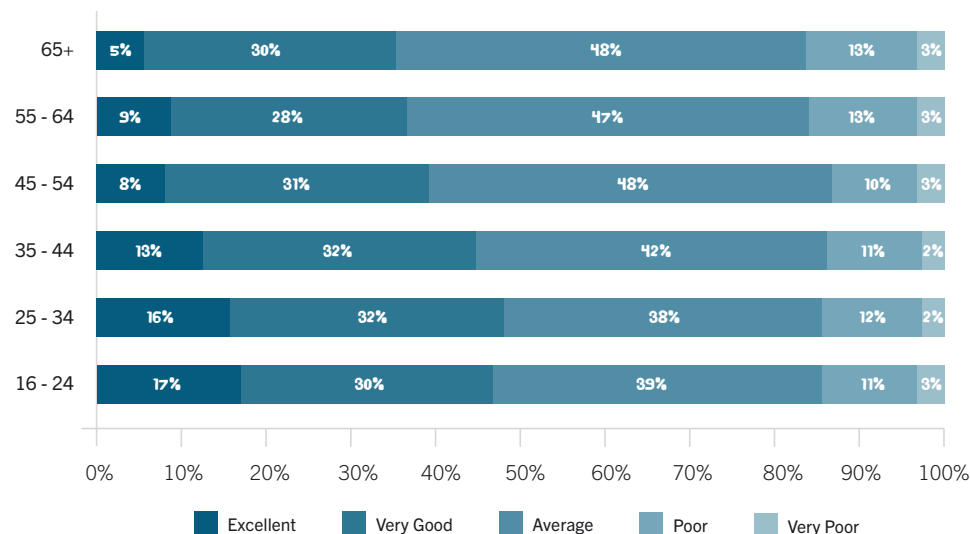
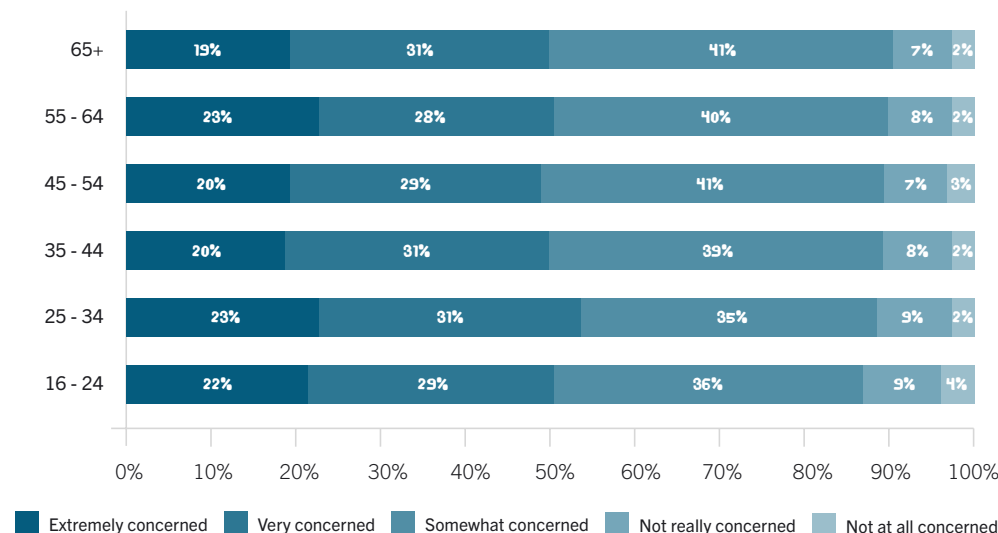


Figure 10: Public opinion about the damage being caused to UK seas by age category⁵⁵





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

Geographically, respondents to this survey who reside in West Midlands, South West, South East and Greater London regions are on average most concerned about the damage being caused to UK seas (see Figure 11).⁵⁶

A number of threats were identified by those concerned about the health of the UK seas. **Sea pollution in general was ranked as the first by 79% of the respondents**, closely followed by **climate change**. 63% of the respondents identified climate change induced by humans as a threat to the marine environment. This is comparable to the findings of our Ocean & Climate Report, which showed, on a smaller sample of Surfers Against Sewage (SAS) supporters, that 89% were extremely concerned about the climate emergency, with 42% thinking that some action is being taken but more needs to happen.⁵⁷ In third place, it was habitat destruction.

CONTINUE →

⁵⁶ Note: The respondents were asked to rate their concern about the damage being caused to UK seas by selecting one of the following options: [5] Extremely concerned; [4] Very concerned; [3] Somewhat concerned; [2] Not really concerned; [1] Not at all concerned. Map was created with the help of a template retrieved from Your Free Templates.

⁵⁷ Surfers Against Sewage (2021): Ocean & Climate Report, available at: <https://www.sas.org.uk/wp-content/uploads/SAS-Ocean-Climate-Report-2020-Digital.pdf>

Figure 11: Public opinion about the damage being caused to UK seas by region





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

Ranking of threat as perceived by those concerned about the health of the UK seas⁵⁸:

- 1 Pollution from agriculture, industry, oil, plastics or sewage
- 2 Climate change, attributed to human activity
- 3 Habitat destruction.

The survey also asked about the different types of sea pollution when respondents highlighted concern about sea pollution; the main concern by respondents being plastic pollution, followed by industrial and sewage pollution.

The findings of this survey validate the findings of a smaller and recent survey by Ware and Callaway (2019)⁵⁹. The study used a UK survey to investigate the perceived importance of coastal habitats.

The majority of respondents considered plastic pollution (77.8%, n = 154) and habitat loss (70.9%, n = 139) to be very important factors affecting the health of coasts in the UK and of the 200 respondents, 94.5% were concerned about the loss of coastal habitats in the UK.

Almost all plastic is derived from fossil fuels, thus contributing to climate change and the impacts above.⁶⁰ Yet, in our supporter survey (2021) only 13% of respondents believed that plastic pollution was a cause of climate change whilst 80% mentioned the cause was environmental destruction. Unanimously, 97% of respondents to the SAS supporters survey thought that more action was needed to tackle the ocean and climate crisis.

There is therefore a warranted and urgent need to act to restore the ocean.

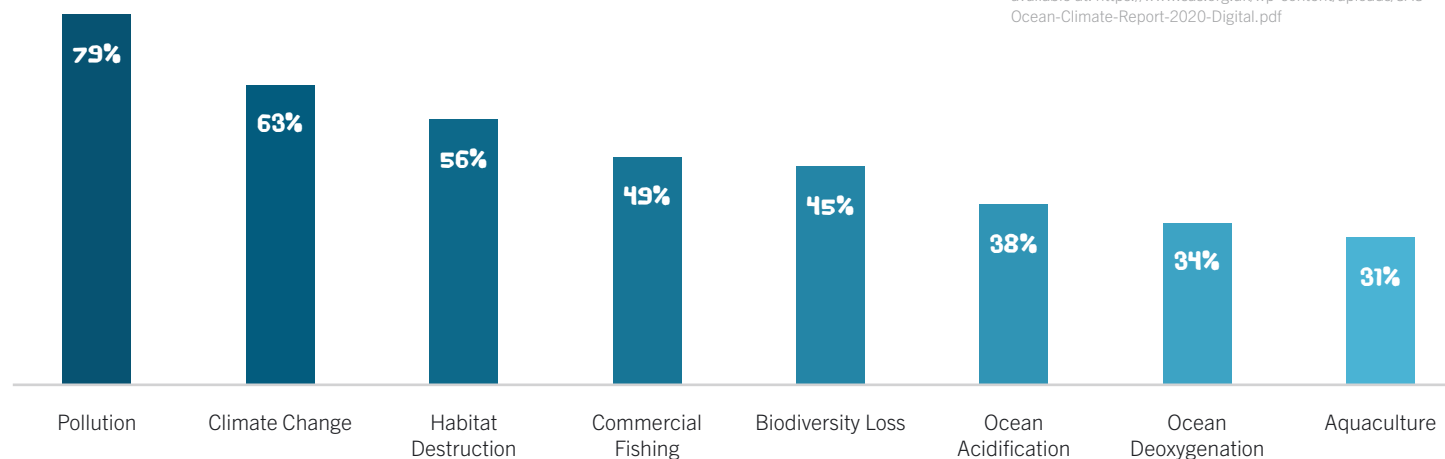
NEXT →

⁵⁸ Note: Percentages were calculated based on the total number of respondents with some degree of concern about the health of the UK seas (n=9,789)

⁵⁹ Ware J, Callaway R (2019) Public perception of coastal habitat loss and habitat creation using artificial floating islands in the UK. PLOS ONE 14(10): e0224424. <https://doi.org/10.1371/journal.pone.0224424>

⁶⁰ Surfers Against Sewage (2021): Ocean & Climate Report, available at: <https://www.sas.org.uk/wp-content/uploads/SAS-Ocean-Climate-Report-2020-Digital.pdf>

Figure 12: Ranking of threat as perceived by those concerned about the health of the UK seas





THE NEED FOR MARINE PROTECTION

Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

Today, Marine Protected Areas (MPAs) cover about a quarter of UK seas, but few of them are effectively managed and only three are classified as No-take Zones, permanently set aside from direct human disturbance and where all methods of fishing and extraction are prohibited.

Moreover, fishing, pollution and climate change are putting increasing pressure on marine ecosystems, jeopardising their future. In 2019, the UK seas failed to meet government standards on good environmental health against 11 out of 15 indicators, including those relating to birds, fish and seabed habitats. In addition, UK coastal habitats are being lost at a fast pace. The current rate of annual loss is estimated at 3% and could be further lost if more people want to use and benefit from these.⁶¹

There is a new surge in support, however, for increasing protection, acknowledging the crucial role that the seas may play in the fight against climate change but equally the importance for the UK economy.

Moreover, as highlighted in ‘**Health Benefits Linked to the Blue Space and Ocean Recovery**’, they can provide well-being benefits and save money in public health budgets. Evidence is also being gathered on the threats and benefits from marine conservation.

In particular, two recent reports have been published in the last year that have looked at the importance of marine conservation. They both highlight the need for greater marine protection and the potential benefits increased protection could lead to. The Value of UK Sea report looked at the potential value of restored UK seas whilst the second analysed the ocean in relation to the climate.⁶² This report focused on the downsides of business as usual but also on how much we would gain if there were concerted actions.

The report lays out a holistic approach with action based on four key pillars:

- Restoring local coastal ecosystems;
- Fully protecting a third of UK seas;
- Making fisheries and seafood production nature and climate positive; and
- Supporting net-zero climate action.

CONTINUE →

61 RPA (2020): The value of restored UK seas, Final Report for WWF, July 2020, Norfolk. Available at: <https://www.wwf.org.uk/sites/default/files/2021-01/WWF2009-01%20Value%20of%20restored%20UK%20seas%20report%20v6%20%28002%29.pdf>

62 <https://www.wwf.org.uk/sites/default/files/2021-01/WWF2009-01%20Value%20of%20restored%20UK%20seas%20report%20v6%20%28002%29.pdf>

RPA (2020): The value of restored UK seas, Final Report for WWF, July 2020, Norfolk. Available at: <https://www.wwf.org.uk/sites/default/files/2021-01/WWF2009-01%20Value%20of%20restored%20UK%20seas%20report%20v6%20%28002%29.pdf>



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

The report concludes that:

The benefits of marine conservation could accrue to more than £50 billion and potentially create 100,000 full-time jobs⁶³.

Our Ocean & Climate Report focused on the impacts that climate change is having on the ocean, namely warming of waters, ocean acidification, biodiversity and ecosystems and sea level rise.⁶³ Summer 2021 has also seen unprecedented flooding in parts of Europe. These phenomena will become more regular in the future. The study notes that over the past five years the ocean have reached its hottest temperature on record.

The UK Government claims to be committed to increase marine protection and has joined the Global Ocean Alliance, which supports the target to protect at least 30% of the global ocean by 2030. Although this is within achievable targets (as the UK government is currently claiming 38% of the UK seas are protected), the level of protection needs to be significantly improved.

New actions include the designation of Fully and Highly Protected Marine Areas (HPMAs), with minimal, no extractive or no other damaging practices, such as fishing, mining, and oil and gas development.

The Benyon Review into HPMAs generated a series of recommendations for the UK government to improve its marine conservation efforts. More specifically these recommendations are:

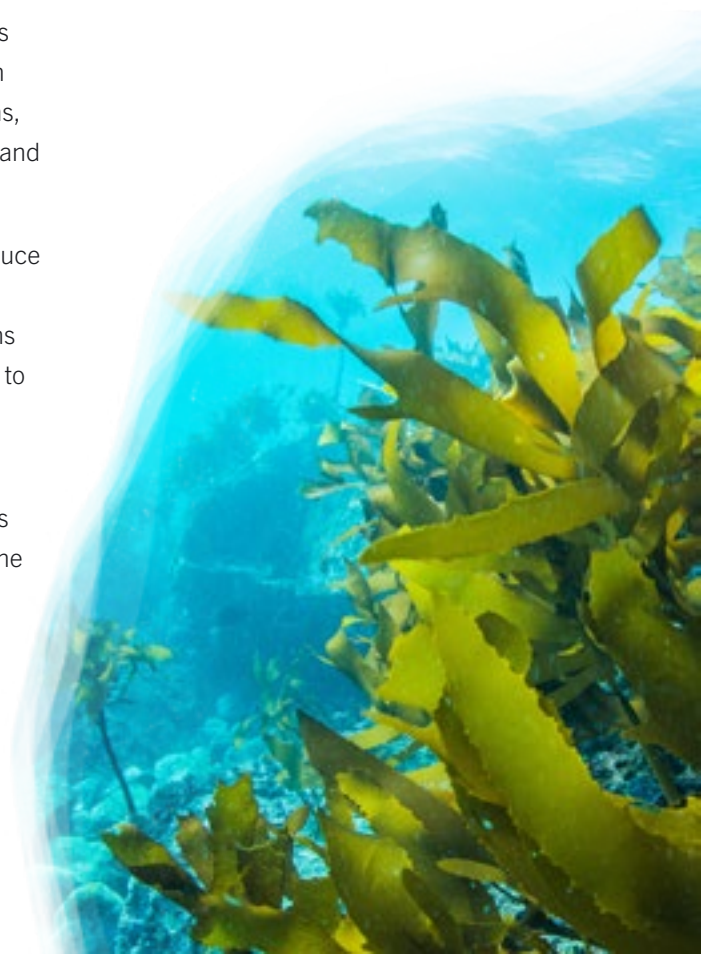
- HPMAs should be defined as areas of the sea that allow the protection and recovery of marine ecosystems, prohibiting extractive, destructive and depositional uses;
- The UK Government should introduce HPMAs in conjunction with the existing MPA network (and sections of existing MPAs can be upgraded to HPMAs);
- The UK Government must set conservation objectives for HPMAs that allow full recovery of the marine environment and its ecological processes;

- The UK Government must take a 'whole site approach' to HPMAs to conserve all habitats and species within the site boundary. This includes mobile and migratory species that visit or pass through the site.⁶⁴

CONTINUE →

⁶³ Surfers Against Sewage (2021): Ocean & Climate Report, available at: <https://www.sas.org.uk/wp-content/uploads/SAS-Ocean-Climate-Report-2020-Digital.pdf>

⁶⁴ Department for Environment, Food & Rural Affairs (2020): Benyon Review Into Highly Protected Marine Areas.





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

The recommendations would help the UK achieve many of the environmental goals set out in the 25 Year Environment Plan.

Recognising the slow progress in cutting emissions, governments are being pushed to more stringent targets. The UK has successfully cut CO₂ emissions by 44% since 1990 and aims to reach net zero by 2050. The 'Ten Point Plan' will help to deliver this target, but a comprehensive strategy on how this will be delivered is yet to be set out. In addition, the UK is still not on track to meet the Paris Agreement and, despite being one of the countries with the most ambitious targets, it will still have to implement more policies to ensure that the benchmark is met. Coastal ecosystems could capture a third of the UK's emissions from 2018.

One tool to help stop the loss of habitats is through the designation and the effective protection of a network of HPMAs.

Restoring and stopping deterioration of coastal ecosystems – tripling the area of seagrass and increasing the area of other habitats by 15% – could prevent the loss of almost 40 million tonnes of carbon dioxide equivalent (MtCO₂e) and store a further 137 MtCO₂e by 2050, equivalent to the emissions from 86,000 long-haul flights.⁶⁶

The Ocean is a natural carbon sink that can help the UK government to meet the Paris Agreement. Restoring and stopping deterioration of coastal ecosystems could prevent the loss of almost 40 million tonnes of carbon dioxide equivalent and store a further 137 MtCO₂e by 2050.

There are also actions that individual can pursue, e.g. reduce the use of plastics, use of public transport, shift to a plant-based diet, reduce marine littering, etc.

NEXT →

**TRIPLING THE AREA
OF SEAGRASS AND
INCREASING THE AREA
OF OTHER HABITATS BY
15% – COULD PREVENT
THE LOSS OF ALMOST
40 MILLION
TONNES OF
CARBON
DIOXIDE**

66 RPA (2020): The value of restored UK seas, Final Report for WWF, July 2020, Norfolk. Available at: <https://www.wwf.org.uk/sites/default/files/2021-01/WWF2009-01%20Value%20of%20restored%20UK%20seas%20report%20v6%20%28002%29.pdf>



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

PUBLIC UNDERSTANDING OF MARINE PROTECTION

Enhancing and understanding Ocean Literacy (OL) is key to delivering action on climate change and achieving Net Zero, and in supporting the UK Marine Strategy⁶⁷

The attitudes towards marine protection are likely to be influenced by the level of literacy. Ocean Literacy has been defined as ‘an understanding of the ocean’s influence on a person and their influence on the ocean’.⁶⁸ The final section examines the willingness to pay for marine protection.

Through the survey we examined the public attitudes and understanding of marine protection; it also examines who should be responsible for the actions.

47% OF RESPONDENTS HAVE NOT HEARD OF MPA AND 67% DO NOT KNOW WHAT HPMA'S ARE.

This is a surprising finding as MPA cover over 30% of the UK seas. On the other hand, of those that have heard of the terms, a good number could provide a figure for the area that is currently designated (21% of the total).

58% of the respondents noted that MPA designation is not being particularly effective at protecting the UK seas

CONTINUE →

67 Defra (2021a): Ocean Literacy in England & Wales: Headline Findings Report. Defra project ME5239 available at: <http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=20644>

68 Defra (2021a): Ocean Literacy in England & Wales: Headline Findings Report. Defra project ME5239 available at: <http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=20644>





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

Regarding HMPA, 49% of respondents that have heard about HMPA, would say that their level of knowledge is small.

It is recognised that MPA are a tool towards marine protection, but these have to be comprehensively managed. The latest report on MPA progress has stated that MPAs are missing key components to meet protected area classification, including adequate management plans and monitoring. It is also noted that many MPAs allow fishing activity to take place, including the most damaging of fishing practices such as scallop dredging.⁷⁰ Thus, there is a need to do more on MPA and a high proportion of respondents to the survey subscribed to this.

78% OF RESPONDENTS ARE IN FAVOUR OF ACTION TO HELP IN OCEAN RECOVERY AND MPAS.

⁶⁹ Note: Percentages were calculated based on the total number of respondents to the survey (n=10,064)

⁷⁰ RPA (2020): The value of restored UK seas, Final Report for WWF, July 2020, Norfolk. Available at: <https://www.wwf.org.uk/sites/default/files/2021-01/WWF2009-01%20Value%20of%20restored%20UK%20seas%20report%20v6%20%28002%29.pdf>

⁷¹ Note: Percentages were calculated based on the total number of respondents to the survey (n=10,064)

Figure 13: Perceived level of protection by MPA designation⁶⁹

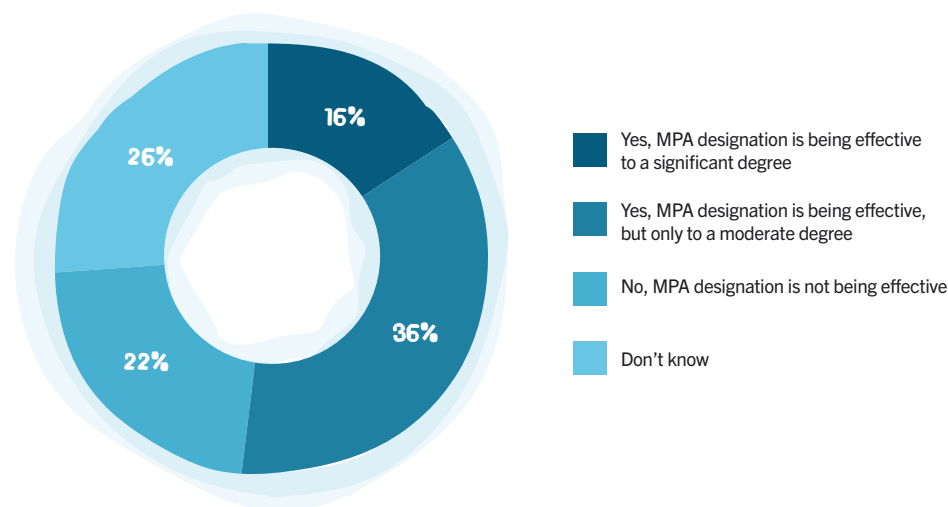
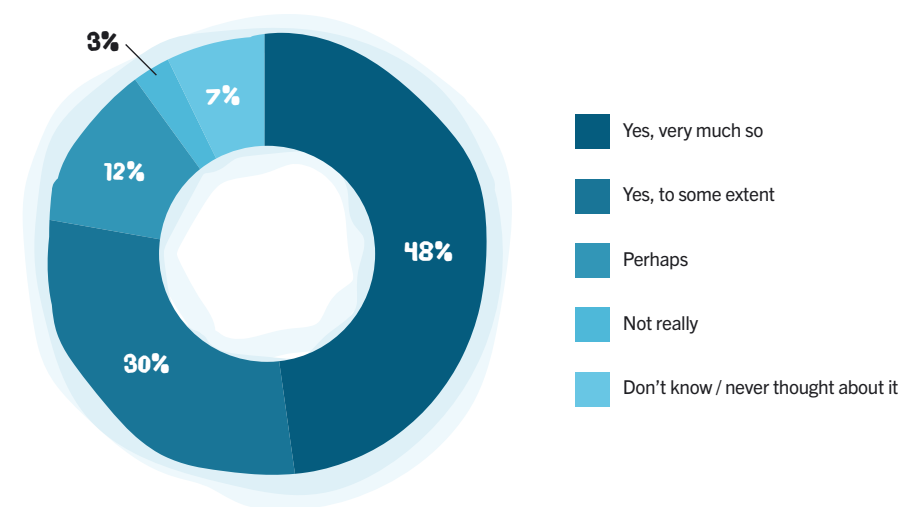


Figure 14: Are you in favour of actions to help in ocean recover and MPAs⁷¹



CONTINUE →



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

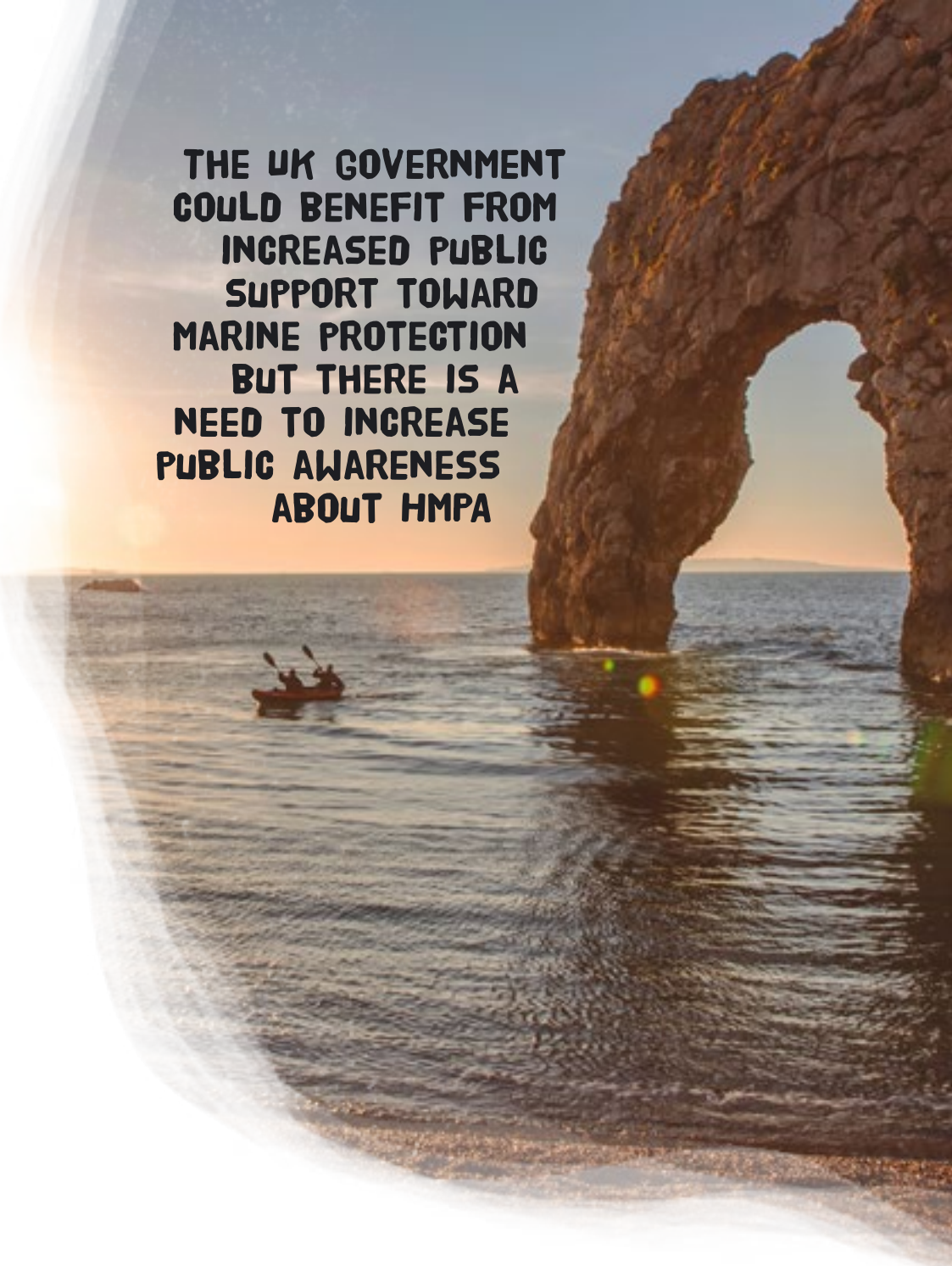
Ruiz-Frau et al (2019) looked at the different societal preference classes and economic support for coastal MPAs in Wales.⁷² There was unanimous support of MPAs, but responses were not as supportive of HMPAs where no activities could be carried out (n=354). The respondents all supported those MPAs where non-damaging recreational activities were permitted. There were strong opinions expressed both for and against proposed high levels of protection. Coastal communities and businesses were concerned about unacceptable socio-economic impacts with little evidence of the benefits.

The researchers concluded that HPMAs combined with adjacent areas with differing levels of use-access, such as areas permitting non-damaging recreational activities, would be the type with the greatest public support whilst still ensuring effective conservation.

The UK government could benefit from increased public support toward marine protection but there is a need to increase public awareness about HMPA.

NEXT →

**THE UK GOVERNMENT
COULD BENEFIT FROM
INCREASED PUBLIC
SUPPORT TOWARD
MARINE PROTECTION
BUT THERE IS A
NEED TO INCREASE
PUBLIC AWARENESS
ABOUT HMPA**



⁷² The researchers utilized a latent class choice experiment approach. Ruiz-Frau et al (2019): Preference classes in society for coastal marine protected areas, available at: <https://peerj.com/articles/6672/>



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

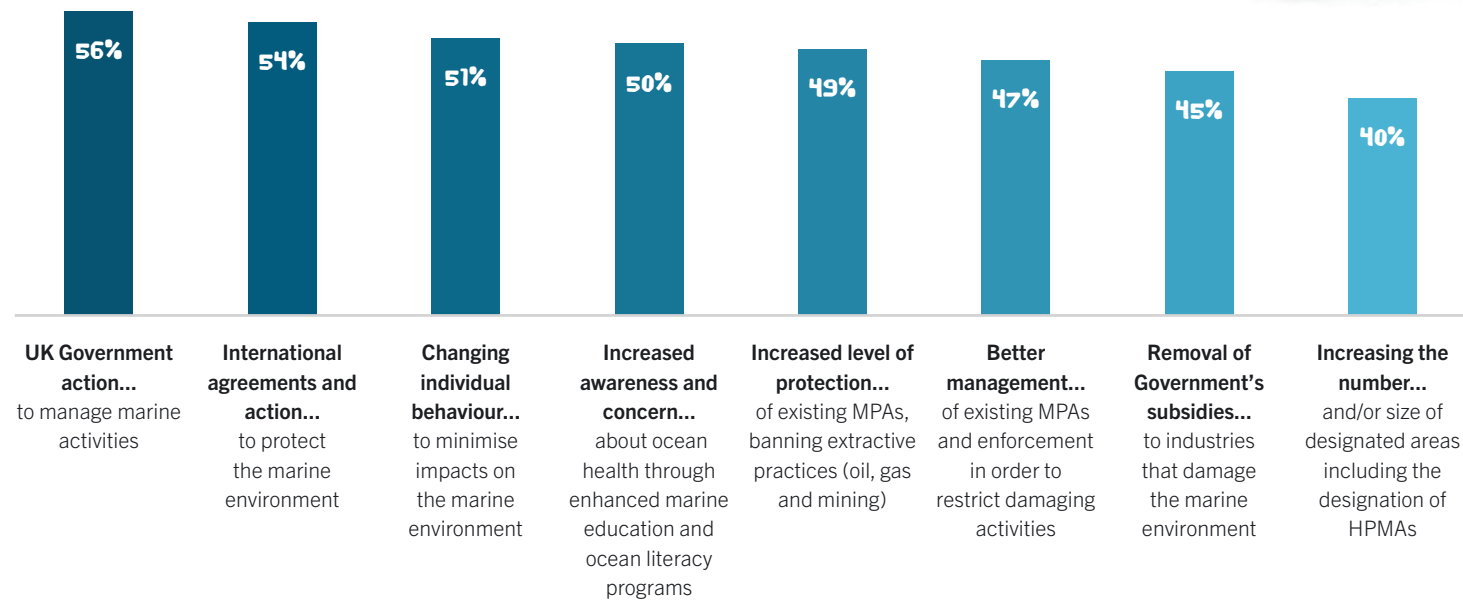
Our Call

PUBLIC ATTITUDES TOWARDS MARINE PROTECTION

We asked the British public what actions they thought would be effective to restore and conserve the UK seas.

Their responses are summarised in the next table. As it can be seen, 56% of the respondents thought that Government action would be effective, followed up by international agreements (54%) and changing individual behaviour (51%).

Figure 15: Public opinion on the effectiveness of different actions to restore the UK Seas



CONTINUE →



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

As noted earlier, the Department for Environment, Food & Rural Affairs (Defra) has recently undertaken a large-scale survey to understand the levels of ocean literacy in England and Wales⁷³. The survey had two research questions:

- What is the link between Ocean Literacy and climate-related behaviours?
- What are the levels of Ocean Literacy and climate-related behaviours in the adult population of England and Wales?

The Defra survey uncovered a range of findings on numerous topics. When asked the impact of their lifestyle on the marine environment **53% thought their lifestyle has an impact**. 25% said they've already made changes but plan on doing more, whilst 45% said it's quite or very likely they will make changes.

These findings agree with the percentages that reported individual action as a means to achieve marine protection, but still below government action.

⁷⁴ Defra (2021a): Ocean Literacy in England & Wales: Headline Findings Report. Defra project ME5239 available at: <http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=20644>

⁷⁴ Note: Percentages were calculated based on the total number of respondents to the survey (n=10,064)

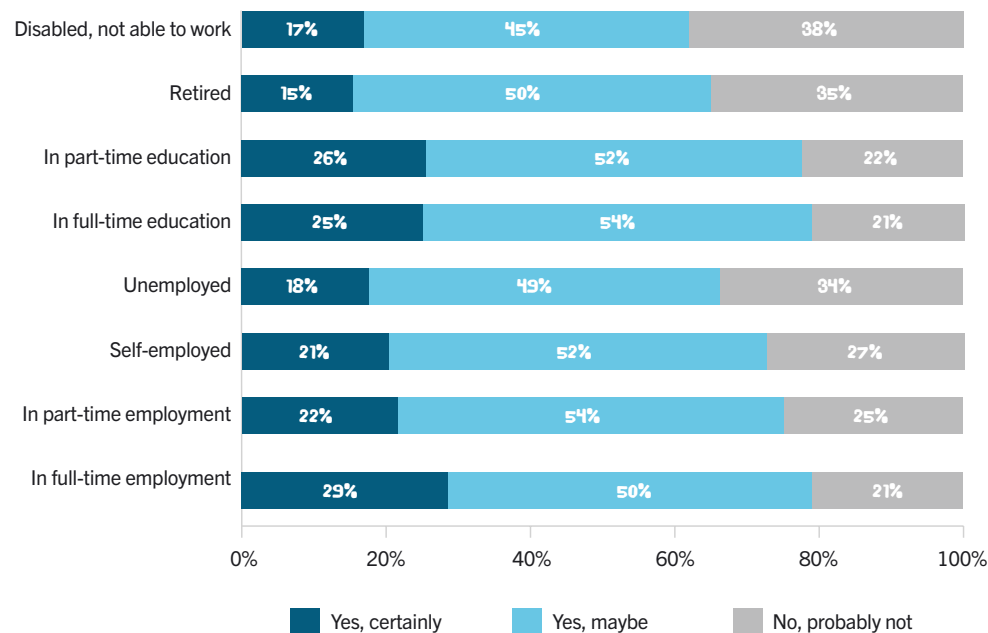
When asked about the willingness to contribute financially to sea recovery and marine area protection, 23% of respondents to our survey would certainly contribute and a further 51% would likely contribute.

73% of respondents stated that they would be willing to contribute financially to sea recovery and marine area protection. 27% however would not contribute.

As depicted in figure below, the willingness to contribute is dependent on the age and employment status of the respondents with younger respondents (between 16 and 34 years old) and those in full-time education, part-time education and full-time employment more willing to financially contribute.

CONTINUE →

Figure 16: Are respondents willing to contribute financially to sea recovery and marine areas protection? (WTP by employment status)⁷⁴





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

Among the reasons for not contributing, **41% of the respondents thought that it was the joint responsibility of government and industry to take action and fund marine recovery.** 21% thought that it was the government's responsibility and 17% thought that industry should take action.

Another 22% argued other reasons (e.g. they cannot afford to do so, or they choose to support other causes). These percentages are lower than those reported in SAS supporter survey (2021)⁷⁵, where 96% of supporters thought that the Government needs to take urgent action.

Our survey included a question about the amount that the public would be willing to contribute, either monthly or as a one off. The results show that:

- **67% of respondents who agreed to contribute would do this monthly;** with 36% of these contributing with £5/month and 22% with a monthly payment of £10.
- **33% would contribute on a one-off basis.** The amounts quoted vary from £5 to £25.

There are other studies that have looked at willingness to pay on aspects to do with the marine environment and specific species protection. Tyllianakis et al (2020) produced an ecosystem-services-mapping tool that calculated the monetary value of several ecosystem services for areas covering both MPAs and non-managed areas.⁷⁶

Using the southwest of the UK as their case study, where parts are under MPA designation, the study developed a framework for an effective GIS-based and ecosystem based (ES)-mapping tool which included monetary values for different ecosystems, including recreational angling and carbon sequestration.

The study estimated a yearly value of the ecosystem service of carbon sequestration and storage in the area to be between £16 and £62 thousand. Recreational benefits from angling were also significant. This highlights the multiple benefits that MPAs can have in addition to those human health benefits highlighted above.

In Wales, Ruiz-Frau et al (2019)⁷⁷ quantified societal preferences and economic support for coastal MPAs. Results showed a general support for the protection of the marine environment in the form of MPAs and that society is willing to bear the costs derived from conservation.

CONTINUE →

⁷⁵ Surfers Against Sewage (2021): Ocean & Climate Report, available at: <https://www.sas.org.uk/wp-content/uploads/SAS-Ocean-Climate-Report-2020-Digital.pdf>

⁷⁶ Tyllianakis et al (2020): Mapping Ecosystem Services for Marine Planning: A UK Case Study. Resources, 9 (40).

⁷⁷ Ruiz-Frau et al (2019): Preference classes in society for coastal marine protected areas, available at: <https://peerj.com/articles/6672/>



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call


Other sources of global literature also validate the findings from our survey; although they could be regarded as less transferable. Brouwer et al (2016)⁷⁸ estimated the public willingness to pay (WTP) for alternative management regimes of a network of offshore MPAs in the North Sea. Beach visitors and coastal and non-coastal residents were asked for their preferences. Despite the lack of public awareness and familiarity with the offshore marine areas, 70% of people were found to be willing to pay extra tax for their protection. Dutch households were willing to pay on average maximum 0.25% of their annual disposable income to improve management.

Batel et al (2014) investigated visitor environmental perception and willingness to pay (WTP) for marine conservation of the Cres-Lošinj Marine Protected Area (CLMPA) in Croatia with a focus on bottlenose dolphins. Over 80% of interviewees were willing to pay more for their holiday in support of marine conservation, an additional 6 to 10% over their average daily expenditure.

NEXT →

77 Ruiz-Frau et al (2019): Preference classes in society for coastal marine protected areas, available at: <https://peerj.com/articles/6672/>

78 Brouwer, R., Brouwer, S., Eleveld, M.A., Verbraak, M., Wagtenonk, A.J., van der Woerd, H.J. (2016): Public willingness to pay for alternative management regimes of remote marine protected areas in the North Sea, available at: <https://ur.booksc.eu/book/51778935/6b51d9>



**70% OF
PEOPLE WERE
WILLING TO
PAY EXTRA TAX
FOR OFFSHORE
MARINE AREA
PROTECTION**



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

OUR CONCLUSIONS

CONTINUE →





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

Now more than ever, the pandemic has revealed the fragile state of humankind. It has shown us just how important the natural world is for both our physical and mental health.

The ocean has played a key role during the global health crisis, providing solace for many during extremely challenging times, and will play an even more important role as global society tackles the environmental, social, economic and health challenges we face.

This study has shown that despite the Coronavirus restrictions, the level of engagement with the marine environment remained strong in 2020.

More people reported visiting the coast to relax and unwind in 2020 than previous years, with the majority of respondents to the survey reporting that spending time by the seaside makes them feel refreshed and revitalised (85%), and calm and relaxed (86%). This highlights the significant mental health benefits of visiting the ocean and opportunities for 'blue prescribing'.

The costs of NHS specialist mental health care can reach £1,125 per case. Despite the limited evidence to establish a clear link between visits to the sea and mental health effects, there is evidence that people living in close proximity to the sea have better mental health and a reduced risk of depression.

This could indicate that visits to the sea through 'blue prescribing' might help as an alternative, perhaps cheaper, mental health treatment.

Moreover, there is experimental evidence that has suggested that people feel more restored and happier when there is a more natural and conserved marine environment. Although it is difficult to estimate the impacts that continuous degradation is having on human health with any accuracy, it highlights the risk that continued degradation of the marine environment could have on public mental health.

In addition, we have seen more and more people taking to the ocean to surf, paddle board, swim and kayak over the course of the pandemic.

THE RESULTS OF THIS STUDY SHOW THAT PARTICIPATION IN WATER SPORT ACTIVITIES HAVE MORE THAN DOUBLED IN 2020 COMPARED TO PREVIOUS YEARS.

Using the threshold value by the National Institute for Health and Clinical Excellence (NICE) on Quality Adjusted Life Years (QALY), we have been able to estimate the QALYs gained from physical activities as reported by respondents to the survey. This has allowed us to calculate the financial benefits from coastal physical activity, from surfing to swimming. The findings show that there may be more human health benefits from water sport activities than originally anticipated.

THE ANNUAL HEALTH BENEFITS COULD REACH BETWEEN £14.6BN AND £20.2BN, WELL ABOVE OTHER ESTIMATES PROVIDED IN DEFRA'S RECENT SYSTEMATIC REVIEW.

CONTINUE →



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

There is clearly considerable public concern regarding the state of the ocean. Over half of the respondents to our survey thought that the UK seas are somewhat threatened and in poor health and almost 80% of respondents are in favor of action to restore the ocean. Almost 60% of respondents to the survey thought that greater government action would be most effective in restoring and conserving UK seas. However, of those respondents that had some knowledge of ocean recovery interventions such as Marine Protected Areas (MPA), almost 60% noted that MPA designation is not being particularly effective at protecting the UK seas. This clearly highlights the public demand and support for greater protections such as Highly and Fully Protected Marine Areas.

Almost three quarters of respondents to the survey would be likely to contribute financially to ocean recovery and marine area protection. Respondents who wouldn't contribute financially believed that it is the joint responsibility of government and industry to act and fund marine recovery. Certainly, this is warranted on the grounds of the 'free' human health and wellbeing benefits that the ocean delivers for us annually.

Finally, the finding of this study suggests there is considerable scope to improve ocean literacy almost the general populations. Despite the fact that over 30% of UK seas are designated as MPA's, 47% of respondents have not heard of MPA and 67% do not know what HPMA's are. Increasing ocean literacy is a critical element of driving action on ocean recovery.

OVERALL, THIS STUDY HIGHLIGHTS THE OVERWHELMING VALUE THAT THE OCEAN HAS FOR HUMAN HEALTH & WELLBEING.

It is clear that the continued degradation of the ocean will have a significant impact on public health and therefore there is an urgent need to reverse the trend of decline, both for nature and humanity. It is clear that current protections in place are inadequate and ineffective at creating the conditions within which the ocean can rebound and recover. There is a clear public backing for greater intervention and for the government to take **URGENT ACTION NOW**.

NEXT →

CONTINUED OCEAN DEGRADATION AND LACK OF ACTION CAN COMPROMISE SIGNIFICANT BENEFITS IN TERMS OF HUMAN HEALTH & WELLBEING AND THIS IS A RISK FOR THE UK GOVERNMENT NOT WORTH TAKING, ESPECIALLY IN THE AFTERMATH OF COVID-19.





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

**OUR AMBITION IS FOR
30% OF THE UK SEAS
TO BE HIGHLY
PROTECTED
BY 2030.**

CONTINUE →



Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

WE ARE CALLING FOR...

POLICY AND LEGISLATION THAT ENSURES MARINE HABITATS ARE ABLE TO RECOVER TO THEIR NATURAL STATE

→ We need 30% of UK waters to be designated as Highly Protected Marine Areas (HPMAs) by 2030.

- HPMAs allow marine ecosystems to recover to a mature state by designating a whole ecosystem for protection rather than an individual species or habitat, thus giving nature the best chance to recover.
- In order for these sites to be effective they must be adequately funded, well managed and, most importantly, enforced to ensure No Take Zones (NTZ) are effective.

→ We need integrated management of marine, freshwater and terrestrial environments.

- The ocean is inevitably affected by nutrient and raw sewage pollution that enters into the fresh water environment. Whole catchment approaches are needed to protect ecosystems which incorporate estuarine, freshwater and coastal environments.
- We need explicit, legally binding targets for the recovery and improvement of the marine environment to drive forward the implementation of HPMAs.

CONTINUE →

OUR AMBITION IS FOR 30% OF THE UK SEAS
TO BE HIGHLY PROTECTED BY 2030.





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

WE ARE CALLING FOR...

BUSINESS PRACTICES THAT ALLOW THE OCEAN TO RECOVER

- We need to ensure that fisheries are truly sustainable and **fully integrated with wider marine protection**. Fishing quotas must be fairly allocated across the entire fleet based on sustainability criteria and these quotas effectively monitored and enforced. Subsidies and exemptions for industrial fishing must end.
- We need to **end the extraction of fossil fuels from the marine environment and the government subsidies which sustain them**. Instead, we need to invest in and support the creation of low impact renewable energies built with a requirement to leave the marine environment in a better state than it was found.
- We need to **support projects that encourage the rewilding of marine environments** that increase biodiversity and store blue carbon as a central part of our blue recovery from the health crisis.
- We need to **reduce the amount of dangerous chemical and plastic pollutants from entering the marine environment** by reducing their consumption and production at source and developing circular systems that keep materials within use.

CONTINUE →

OUR AMBITION IS FOR 30% OF THE UK SEAS
TO BE HIGHLY PROTECTED BY 2030.





Introduction

The Relationship Between Blue Space, Ocean Recovery and Human Health & Wellbeing

- Current Level of Protection of Blue Space
- Level of Engagement with the Blue Space
- Health Benefits Linked to the Blue Space and Ocean Recovery

Public Attitudes and Understanding of Marine Protection & Ocean Recovery

- Public Perception of the State of the Ocean
- The Need for Marine Protection
- Public understanding of marine protection
- Public attitudes towards marine protection

Our Conclusions

Our Call

WE ARE CALLING FOR...

INCREASED AWARENESS AMONGST SOCIETY ABOUT THE BENEFITS OF OCEAN RECOVERY

- We need to **educate and increase awareness** amongst the general public about the need for ocean recovery in order to develop a popular mandate for the introduction of HPMAs.
- We need to **highlight the positive economic and health and wellbeing benefits** that ocean recovery provides for society.
- We need **ocean activists to engage in projects that restore and rewild the ocean** and to become increasingly aware that their individual actions also have an effect on the ocean.
- We need to **raise awareness that the ecological and climate crisis are intrinsically linked**.

#THRIVINGOCEANTHRIVINGPEOPLE

OUR AMBITION IS FOR 30% OF THE UK SEAS
TO BE HIGHLY PROTECTED BY 2030.





SURFERS AGAINST SEWAGE

Unit 2, Wheal Kitty Workshops, St Agnes, TR5 0RD

Email: info@sas.org.uk | Telephone: 01872 553 001 | www.sas.org.uk



facebook.com/SurfersAgainstSewage



instagram.com/SurfersAgainstSewage



twitter.com/sascampaigns

Printed on 100% recycled paper and using vegetable inks for minimum impact on the environment.

COMPANY REGISTERED NUMBER: 02920815 | CHARITY REGISTERED NUMBER: 1145877