

Marine Management Organisation

Decision document:

Studland Bay MCZ

November 2021

...ambitious for our seas and coasts

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Executive Summary

The MMO has a duty under the Marine and Coastal Access Act, 2009 to exercise all relevant functions that best furthers the conservation objectives for marine conservation zones (MCZ). This includes a requirement to introduce appropriate management measures where marine non-licensable activity is deemed likely to hinder the conservation objectives of the site.

To this end, the MMO ran a call for evidence and engagement period to seek views on the draft marine non-licensable activity assessment and draft management measures for Studland Bay MCZ.

The MMO received a large amount of feedback in the call for evidence and engagement events. The MMO have considered and reviewed all feedback and updated the draft assessment and associated documents accordingly.

This decision document details the MMO's response to key themes raised by stakeholders through the call for evidence and engagement period.

The MMO has considered the best available evidence, including that submitted through the call for evidence and engagement, to inform its decision on the management required for Studland Bay MCZ. The MMO concludes that in order to comply with its duties outlined above, the Studland Bay MCZ Habitat Protection Strategy will be introduced. This strategy includes a phased voluntary approach for the management of anchoring over 2021 and 2022, details on the monitoring approach for other marine non-licensable activities and guidance on moorings.

1. Introduction

This document presents the MMO decisions on the management approach for marine non-licensable activities in Studland Bay MCZ, as well as a summary of the call for evidence and engagement that has taken place to date.

This document provides information about the decision-making process only. Please view the Studland Bay MCZ Habitat Protection Strategy (available online¹) for full details on the management approach for Studland. This strategy includes a phased voluntary approach for the management of anchoring over 2021 and 2022, details on the monitoring approach for other marine non-licensable activities and guidance on moorings.

2. Studland Bay Marine Conservation Zone

Studland Bay Marine Conservation Zone (MCZ) was legally designated on 31 May 2019 by the Department for Environment Food and Rural Affairs (Defra)². Studland Bay MCZ lies within the 6 nautical mile limit in English waters, on the Dorset coast. The site has four designated features: intertidal coarse sediment, long-snouted seahorse (*Hippocampus guttulatus*), subtidal sand and seagrass beds (*Zostera marina*).

The conservation objectives set for the features of Studland Bay MCZ are set out in the site's designation order² and are that protected habitats:

- are maintained in favourable condition if they are already in favourable condition; and
- be brought into favourable condition if they are not already in favourable condition.

Natural England advises a combination of 'maintain' and 'restore' targets for different attributes of the site's features³.

When discussing seagrass throughout this report, it is in reference to the species *Zostera marina*, which is the only species present in Studland Bay MCZ as detailed in Natural England Conservation Advice and supporting studies⁴. It is also commonly known as eelgrass, but for the purposes of clarity, it shall be referred to as seagrass henceforth.

3. Assessment of the effects of marine non-licensable activities in Studland Bay MCZ

In 2020, the MMO drafted an assessment on the impacts of marine non-licensable activities in Studland Bay MCZ⁵. Considering advice from Natural England, the draft

¹ Studland Bay MCZ Habitat Protection Strategy. Available online.

² The Studland Bay MCZ Designation Order 2019. Available <u>online</u>.

³ Natural England Supplementary Advice on Conservation Objectives. Available <u>online</u>.

⁴ Seasearch site surveys 2015. Available <u>online</u>.

⁵ Studland Bay MCZ marine non-licensable activities assessment. Available <u>online</u>. Please note, this assessment is no longer draft.

assessment concluded that the conservation objectives of long-snouted seahorse (*Hippocampus guttulatus*), subtidal sand and seagrass beds are at risk.

The activities assessed included anchoring, mooring, sailing or powerboating with an engine (launching and recovery, participation), sailing without an engine (launching and recovery, participation), and diving and snorkelling. Due to their potential to hinder the conservation objectives of the MCZ, management options were explored for these activities. The options identified ranged from the introduction of a monitoring and control plan (no immediate restriction of activities), to whole site prohibition. These options were shared with the public during the call for evidence along with the draft assessment, so that people could provide their views and relevant evidence.

4. Call for evidence

The call for evidence was an informal stage of consultation that the MMO decided to carry out to gather evidence and views from the public. It ran between 28 October and 15 December 2020. The call for evidence gathered feedback from the public via two online surveys as well as email. Annex 1 provides a summary of the call for evidence responses and responses from the MMO, where relevant. Please note, some MMO responses have been updated since the decision document was last published following the call for evidence in February 2021.

• Studland Bay MCZ online survey

This online survey presented multiple management options for the activities of interest. Questions sought evidence and views from stakeholders on management options for each activity and asked for information about the designated features and activity in the site. 455 responses were received for this survey.

Information on the type and level of activities at Studland Bay MCZ online survey

This online survey gathered detailed information on the different activities occurring within Studland Bay, for example, the seasonality, location and intensity of activities as well as any change in activities over time. 291 responses were received for this survey.

• Email responses

Stakeholders also had the option to respond to the call for evidence via email. Some stakeholders responded both via email and through the online surveys above. In these instances, email responses were considered alongside the survey responses. There were 17 novel responses received from emails.

Following the call for evidence, the MMO reviewed the feedback received and considered this whilst updating the draft assessment and planning the next steps. New evidence was incorporated into the draft assessment subject to quality assurance processes. The next steps in the approach were announced to the public in February 2021 and are summarised below:

• Anchoring: Further engagement required to determine appropriate management.

The MMO detailed how a monitoring and control plan was determined not to be sufficient to protect the MCZ features.

• Mooring: Monitoring and control plan to be put in place.

The MMO detailed that no further restrictions would be implemented at this stage. This is due to moorings being managed through the MMO marine licensing process. The installation and/or maintenance of moorings is managed as a licensable activity under Part 4 of the Marine and Coastal Access Act 2009⁶. Please see our pages '<u>Do I need a marine licence</u>' for further information.

• Sailing or powerboating with an engine: Monitoring and control plan to be put in place.

The MMO detailed that no further restrictions would be implemented at this stage. This activity will be monitored to identify any changes in activity levels which may lead to reassessment of the site and future management if required.

The MMO also highlighted the Dorset Council Water Safety byelaw that is in place in Studland Bay for watercraft which includes a 5 knot speed limit within the specified area. Further details can be found <u>online</u>.

- Sailing without an engine: Monitoring and control plan to be put in place. The MMO detailed that no further restrictions would be implemented at this stage. This activity will be monitored to identify any changes in activity levels which may lead to reassessment of the site and future management if required.
- **Diving and snorkelling: Monitoring and control plan to be put in place.** The MMO detailed that no further restrictions would be implemented at this stage. This activity will be monitored to identify any changes in activity levels which may lead to reassessment of the site and future management if required.

The MMO also detailed that impacts to seahorses are managed through wildlife licences. For activities, such as diving and snorkelling where people are intending to seek out seahorses, a wildlife licence is required by the MMO. This is because both long snouted (*Hippocampus guttulatus*) and short snouted (*Hippocampus hippocampus*) are protected species under the Wildlife and Countryside Act 1981⁷. See the <u>GOV.UK guidance</u> for further information.

5. Engagement period

Following the MMO's decision to engage further to determine appropriate management for anchoring, an engagement period was held in March 2021. Dorset Coast Forum facilitated two engagement events for the MMO to gain further input from stakeholders about three draft anchoring management options. This included an event for representatives from key stakeholder groups on 18 March and a public event on 25 March.

⁶ Marine and Coastal Access Act 2009, c.23. Available online.

⁷ Wildlife and Countryside Act 1981. Available online.

Dorset Coast Forum have produced a report which summarises the feedback received during the engagement period, please view this report on the <u>Dorset Coast</u> <u>Forum Have Your Say website</u> for full details. In addition, Annex 2 provides further details about how the MMO has considered the feedback in the decided approach.

6. Decision and next steps

The MMO would like to thank everyone who participated in the call for evidence and engagement events. The MMO has reviewed all feedback received and taken this into consideration whilst planning the approach going forward.

The MMO will be introducing a voluntary management measure for anchoring within Studland Bay MCZ. The MMO has produced the Studland Bay MCZ Habitat Protection Strategy¹ which provides details of the management approach for marine non-licensable activities in Studland Bay MCZ. In addition, guidance is provided to individuals or developers planning to install moorings.

The contents of the strategy are summarised below:

- **Part 1** details the MMO's management approach for anchoring in Studland Bay MCZ. This involves a phased voluntary approach for the management of anchoring over 2021 and 2022. The 2021 phase for the voluntary measure will be introduced on 17 December.
- **Part 2** details the MMO's approach for other marine non-licensable activities in Studland Bay MCZ. In summary, a monitoring and control plan will be put in place for all marine non-licensable activities, no further management is being introduced for other activities at this time.
- **Part 3** provides guidance on moorings to clarify the process of applying for a marine licence to install moorings, as well as the MMO's remit for managing moorings.

Annex 1: Call for evidence responses

The following sections summarise the responses received during the call for evidence. Please note, some responses were received that were less relevant to the call for evidence. MMO responses to other points raised can be found in the Frequently Asked Questions <u>online</u>.

Respondent type	Number
Recreational boaters	158
Member of public/private individuals	96
Boat business owners/workers	14
Private companies/businesses	11
Non-Governmental Organisations/charities	9
Other	4
Local University staff/students	4
Local café/restaurant owners/workers	3
Non-motorised water sport business owners or participants	3
Members of the fishing industry	2
Government agencies	2

1. Feature evidence

In the call for evidence stakeholders were asked whether they had information about the location, condition, or sensitivity of the designated features in Studland Bay MCZ.

All information received has been reviewed by the MMO. Where appropriate, and subject to the MMO's quality assurance process, information has been used to update the draft assessment for the site. Natural England is the MMO's statutory advisor and provider of conservation advice for marine protected areas in England from 0 to 12 nautical miles. The conservation advice is informed by extensive literature reviews to summarise available scientific knowledge and thus understand potential pressures impacting species and habitats.

Some responses in the call for evidence have commented on the validity of the conservation advice used in the assessment. The conservation advice and associated evidence is considered by the MMO to be sufficiently robust for informing the assessment of the site and subsequent management decisions⁸. The MMO is aware that evidence gaps exist, however, we must use the best available evidence to fulfil our statutory duty under the Marine and Coastal Access Act 2009⁹ to assess

⁸ Please note, Natural England consulted on the conservation advice for Studland Bay MCZ in 2020. Respondents have been contacted by Natural England in follow up to this.

⁹ Marine and Coastal Access Act 2009, c.23. Available online.

the site and exercise relevant powers to best further the conservation objectives of the site where needed.

The MMO must fulfil its statutory duty under the Marine and Coastal Access Act 2009⁹ to assess the site and exercise relevant powers to best further the conservation objectives of the site where needed. The MMO will use the best available evidence and apply precautionary approaches when needed. The assessment of the site and any management measures will be routinely reviewed in order to assess the suitability of any measures for meeting the conservation objectives of the site.

Key themes which emerged from the call for evidence responses are outlined below. Supporting evidence has been included, where provided in responses.

• Evidence that seagrass has expanded/stayed the same

- Anecdotal evidence from visiting the bay that seagrass has expanded or stayed the same over the long term.
- Aerial photography of Studland Bay between 1972 and 2011 provided to support expansion of seagrass. Aerial photographs have been collated by the Boat Owners Response Group (BORG)¹⁰ or via a YouTube video¹¹. It was stated that this is also supported by underwater video sample survey¹². The Coastal Channel Observatory website¹³ was also referenced as a source of this data and Google Earth images were also supplied. Additionally, a paper titled 'BORG critique of NERC111'¹⁴ was submitted regarding the use of aerial data in this project.
- Reference to a paper on seagrass monitoring in Studland Bay by Seastar Survey which is stated to show no consistent evidence of differences in seagrass health between a voluntary no anchoring zone and a control zone (Axelsson *et al.*, 2012). There was further reference to this paper regarding findings that shoot density in Studland is similar to wider Weymouth and Portland area (Axelsson *et al.*, 2012).
- Statement that the Collins *et al.* (2010) paper incorrectly determines sandy patches in seagrass beds to be due to anchoring, aerial images indicate bare patches are found throughout the site even where anchoring does not occur. Changes take days or weeks and the scars were not sighted when anchoring actually occurred. This is also the only paper that describes the drop in seabed level caused by scars. Additionally, the speculation that continuing erosion of the mooring scar edges would increase the area affected is demonstrated to be untrue by historic aerial images; the scars have not increased in size with time.
- Statement that seagrass is a new feature of the area and it was previously kelp.
- Reference to a study showing Studland to have third greatest leaf length in British Isles (Jones and Unsworth, 2016).
- Statement that the increase in seagrass is due to nitrogen run-off from agriculture.

¹³ <u>https://www.channelcoast.org/</u>

¹⁰ http://boatownersresponse.org.uk/Aerial-1972-2011.pdf

¹¹ https://m.youtube.com/watch?v=RZOZAFO-iGg&feature=youtu.be

¹² http://boatownersresponse.org.uk/Studland Underwater Videos.pdf

¹⁴ http://boatownersresponse.org.uk/critique_of_NECR111.pdf

- Statement that Japanese knotweed used to exist in Studland Bay rather than seagrass which has expanded.
- Use of underwater imagery to establish state of seagrass (Unsworth *et al.,* 2017).
- Google Earth imagery submitted to show that seagrass is patchy in north end of Studland Bay where there is no anchoring, proving patchiness is not caused by anchoring.
- BORG report regarding the features of the site titled 'On the evidence supporting the Studland Bay recommended marine conservation zone'¹⁵.

• Evidence for seagrass resilience and recovery

- Seagrass loss in 2013 reported to be 2,624 m² compared to 1,504.7 m² in 2017, indicating increased coverage¹⁶ (Jackson *et al.*, 2013a; Unsworth *et al.*, 2017).
- Reference to a paper by BORG on anchoring density which demonstrates minimal impacts to the seabed¹⁷.
- Evidence against the forming of rhizome mats in growth of seagrass in the UK. Statement that there have been incorrect assumptions based on *Posidonia oceanica*¹⁸, explained in a BORG workshop presentation (slide 8)¹⁹.
- BORG evidence overview providing supporting evidence for recoverability of seagrass²⁰
- BORG report on eelgrass recolonization²¹
- BORG eelgrass raking study²²
- BORG commentary on MB0102²³
- BORG report on eelgrass resistance and resilience²⁴
- BORG report on the MarLIN MarESA Sensitivity Review²⁵

• Information on seahorses

- Statement that seahorses are not found in Studland Bay. Some thought that in occasional circumstances seahorses may have been carried there on spring tides or in strong winds.
- Statement that seahorses are in Studland due to spill over from Poole Harbour, there is no resident population in Studland, referencing the Seahorse Trust 2015 Winter Newsletter²⁶ and BORG Poole Seahorses report²⁷.
- Statement that seahorse numbers have declined due to scientific research.

¹⁵ <u>http://boatownersresponse.org.uk/Studland-evidence.pdf</u>

¹⁶ BORG paper: 'Studland Bay NE Targets'. Not publicly available online.

¹⁷ www.boatownersresponse.org.uk/anchoring-density.pdf

¹⁸ https://i1.wp.com/www.eduardoinfantes.com/wp-content/uploads/2016/02/Eelgrass-rhizome.jpg?ssl=1

¹⁹ <u>http://boatownersresponse.org.uk/Workshop_presentation7.pdf</u>

²⁰ <u>http://boatownersresponse.org.uk/Evidence-overview-Sept14.pdf</u>

²¹ http://boatownersresponse.org.uk/Eelgrass-recolonisation.pdf

http://boatownersresponse.org.uk/Eelgrass-Raking-Study.pdf
 http://boatownersresponse.org.uk/Commentary-on-MB0102.pdf

http://boatownersresponse.org.uk/Eelgrass-Resilience-and-Resistance.pdf

 ²⁵ http://boatownersresponse.org.uk/Marlin-Maresa-Eelgrass-Review.pdf

²⁶ https://www.theseahorsetrust.org/wp-content/uploads/2018/01/Newsletter-Winter-2015.pdf

²⁷ http://boatownersresponse.org.uk/Poole-Seahorses.pdf

- Statement that seahorse numbers have increased, are rising or are not declining. Some stated this increase occurred during COVID-19 restrictions in 2020.
- Statement that seahorse numbers declined following the lifting of COVID-19 restrictions in 2020 and the subsequent increase in activity.
- Statement that seahorses are found in other locations, such as Poole Bay.
- Statement that seahorses are often trawled up by fishers.
- Statement that the habitat is suitable for seahorses as studies show they are not selective about their environment and referring to studies where seahorses thrive in the polluted lagoon of Mar Piccolo of Taranto (Woodall *et al.*, 2018; Pierri *et al.*, 2020; Gristina *et al.*, 2014).
- Seahorse surveys have been undertaken and there is a database of records, held by the Seahorse Trust.
- Studies show that smaller clear areas of sand may be beneficial to seahorses (OSPAR, 2013).
- Study showing that seahorses frequent edges of bare sand patches (Garrick Maidment *et al.*, 2010b). Diagrams found in in BORG report²⁸.
- BORG report on seahorse evidence²⁹.
- BORG report on Studland seahorse numbers between 2008 and 2013³⁰.

• Evidence for seagrass damage

- Paper on the perilous state of seagrass in the British Isles (Jones and Unsworth, 2016).
- Paper on the impacts of anchoring and mooring in seagrass, Studland Bay, Dorset, UK (Collins *et al.,* 2010).
- An assessment of anthropogenic impact on marine angiosperm habitat (Jackson *et al.*, 2013b).
- Anecdotal evidence that stakeholders have seen impacts to seagrass from recreational impacts such as anchoring, mooring, and fast boats.
- Statement that strong winds and storms cause seagrass to wash up on the shore. Submission of photographs from December 2020 which show seagrass on the beach stated to be due to easterly gales in the winter months.
- Statement that freshwater outflows contain fertilizers and toxins which impact seagrass, aerial photos show where seagrass is unhealthy in the same areas as these outflows.

• Disturbance is beneficial to seagrass

- Statements that the removal of seagrass, for example by anchors, and subsequent dropping of the seagrass in other areas would allow it to spread.
- Statements that anchoring has a positive 'pruning effect' on seagrass.

• Other evidence provided

- Observations concerning nitrate mitigation in Poole Harbour³¹.
- Pollution in Poole Harbour information³².

²⁸ <u>http://boatownersresponse.org.uk/seahorses%20like%20moorings.pdf</u>

²⁹ http://boatownersresponse.org.uk/Great-Seahorse-Deception.pdf

³⁰ http://boatownersresponse.org.uk/Studland-Seahorse-Population.pdf

³¹ Submitted during call for evidence. Not publicly available.

³² Submitted during call for evidence. Not publicly available.

- Impacts of invasive non-native species, organic enrichment and propeller wash as well as information about species found in Studland Bay.
- SCOPAC website describing significant changes to the shoreline in Studland³³.
- BORG evidence that leisure vessels are not key vectors in non-native invasive species dispersal³⁴.
- BORG website and associated papers³⁵.
- BORG response³⁶ to Studland rMCZ consultation and associated flyer³⁷.
- BORG 'Commentary on aspects of the MMO Draft Assessment for Studland Bay MCZ'³⁸.
- Paper on the development of a novel (DNA-based) method for monitoring inshore fish communities using a programmable large-volume marine eDNA sampler species characterisations (Natural England, 2020).
- Dorset Wildlife Trust Seasearch Site Surveys 2013³⁹, 2014⁴⁰, 2015⁴¹.
- Draft MMO Studland Bay MCZ non-licensable activity assessment⁴².
- Life ReMEDIES Project⁴³.
- Poole Harbour Commissioners Aquatic Management Plan⁴⁴.
- RYA Advanced Mooring Systems⁴⁵.
- RYA Studland Bay Anchoring with Care Guidance⁴⁶.
- Studland Bay A Vision for Future Management (Prior, 2014).
- Studland Bay, Dorset: A study assessing the feasibility of leasing the bay for conservation purposes (Dawson, 2008).
- Studland Bay MCZ Striking a Sustainable Balance paper⁴⁷.
- Torbay Code of Conduct⁴⁸.
- The Green Blue⁴⁹.
- \circ The Seahorse Trust⁵⁰.

2. Activity evidence

The call for evidence asked questions to stakeholders about the type, location, and frequency of marine non-licensable activity in Studland Bay MCZ. Figure 1 (a-d) displays a summary of survey answers regarding general activity in Studland Bay. For Figure 1c, a follow up question was asked about whether any change between 2019 and 2020 was perceived to be due to COVID-19 restrictions. 67% of respondents thought that the change was probably or definitely due to COVID-19 restrictions, 17% were not sure and 4% thought probably not. Table 5 displays a

³³ https://www.scopac.org.uk/scopac_sedimentdb/stud/stud.htm

³⁴ http://boatownersresponse.org.uk/Tidal_stream_dispersal.pdf

³⁵ http://boatownersresponse.org.uk/

³⁶ http://boatownersresponse.org.uk/MCZ-Consultation-Studland.pdf

³⁷ http://boatownersresponse.org.uk/Why-Studland.pdf

³⁸ Submitted during call for evidence. Not publicly available.

³⁹ http://www.seasearch.org.uk/downloads/Studland-rMCZ-2013-v2-FINAL.pdf

⁴⁰ http://www.seasearch.org.uk/downloads/Studland-Bay-rMCZ-2014%20Seasearch%20Report.pdf

⁴¹ http://www.seasearch.org.uk/downloads/Studland-rMCZ-2015.pdf

⁴² Draft Studland Bay MCZ non-licensable activity assessment. Available <u>here.</u>

⁴³ <u>https://www.gov.uk/government/publications/life-recreation-remedies-project</u>

 ⁴⁴ <u>https://www.phc.co.uk/environment/management/aquatic-management-plan/</u>
 ⁴⁵ <u>https://www.rya.org.uk/e-news/inbrief/advanced-mooring-systems</u>

⁴⁶https://www.rya.org.uk/SiteCollectionDocuments/legal/Web%20Documents/Environment/AnchoringWithCare_Studland.pdf

⁴⁷ Submitted during call for evidence. Not publicly available.

⁴⁸ https://www.tor-bay-harbour.co.uk/media/1017/seagrass-map.pdf?fbclid=lwAR1otu0LaH7NOQdnR7BI-

pSvsvM2mhuAOGCJy1W

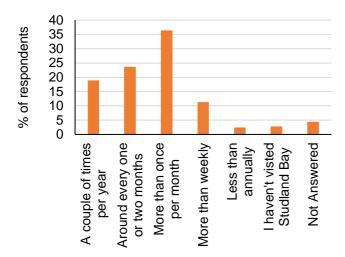
⁴⁹ https://thegreenblue.org.uk/

⁵⁰ <u>https://www.theseahorsetrust.org/</u>

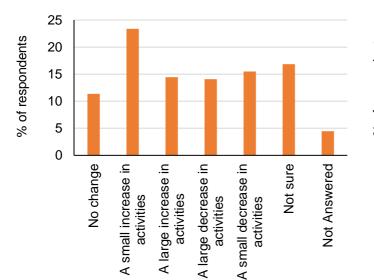
summary of activity levels and locations by activity type as indicated by the results of the call for evidence.

Figure 1: Summary of survey answers regarding general activity at Studland Bay

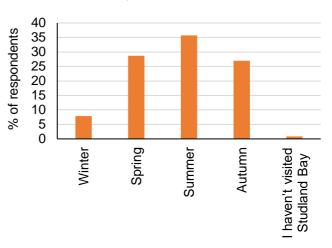
a) On averge, how often do you visit Studland Bay?



c) On average, have you seen a change in the level of activities this year compared to last year?



b) Generally, in which seasons do you visit Studland Bay?



d) Have you seen a change in activities over the long term (last five years)?

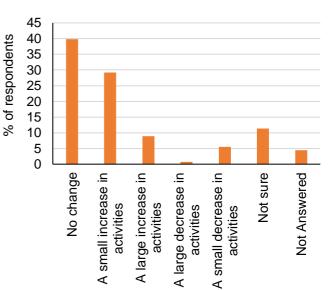


Table 2: Summary of activity levels and locations as indicated from the results of the survey

Activity	When is activity highest?	Where is activity most common?
Moored powerboats or sailing boats	Spring and summer	South Beach area
Anchored powerboats or sailing boats	Spring and summer	South Beach area
Powerboats or sailing boats – launching, underway/sailing, or recovering	Spring and summer	Middle Beach area
Non-motorised watercraft (e.g. kayaks, windsurfing, dinghies)	Spring, Summer and Autumn	Middle Beach area
Motorised personal watercraft (e.g. jet-skis)	Spring, Summer and Autumn	South Beach and Middle Beach area
Diving and snorkelling	Spring and Summer	South Beach area

Further information relating to activities in Studland Bay were provided in responses and have been listed here for ease of reference. Key themes which emerged from open text responses included:

General activity

- Stakeholders who participate in these activities would like to be part of the process to develop management measures.
- Information about the numbers of visitors⁵¹.
- Recreational use of the bay protects the bay from fishing.
- Studland Bay is used for a variety of recreational activities including: sailing, motor boating, anchoring and mooring of vessels, diving, snorkelling, swimming, kayaking, canoeing, paddle boarding, jet skiing, water sports (e.g. water skiing, wakeboarding, banana boats), wind surfing, kite surfing, rowing, fishing (commercial and recreational) and aquatic hover/ flyboards.
- Concern about safety of swimmers, snorkelers, divers, and users of nonmotorised watercraft users when the bay is very busy with boats and jet skis, often travelling at high speeds.
- There were contradicting statements about the activity levels in the bay. Many stakeholders are concerned about the number of boats that visit the bay in the summer due to overcrowding, safety and/or impacts on the environment. Many believe activity is increasing and needs to be managed. The bay is busiest in the summer and linked to the weather, whereas it is much quieter in

⁵¹ https://ntpurbeckcoast.files.wordpress.com/2018/04/coursework-help-pack-april-20181.pdf

the winter months. Conversely many stated, activity levels are only high on a handful of weekends and generally activity is low.

• BORG analysis of local leisure marine economy⁵².

General boating activity

- Studland is one of the only sheltered beaches on the south coast where it is safe for children and families to access by boat.
- Concern about the sewage and litter generated by boats in Studland Bay.
- There is a National Trust dingy boat park and a slipway for small dinghies.
- Motorboats tend to only stay during the daytime whereas yachts anchor overnight, often arriving on Friday evening and departing Sunday evening.
- Reference to RYA Coastal Atlas⁵³ data which shows information about recreational boating, including vessels with and without GIS. This shows that Studland lies within an area of moderate to high intensity recreational use (AIS vessels) and part of a General Boating Area (non-AIS vessels).
- There was an increase in non-local boats anchoring in Studland in summer 2020, following the easing of COVID-19 lockdown restrictions within the UK. As less people were able to go abroad.
- The Yachting and Boating World Forum page on Studland provides information about how Studland is used by the boating community (link not provided).
- Evidence relating to number of boats in Studland Bay during the summer⁵⁴.

Anchoring and mooring

- The south west corner of the bay is preferred for anchoring and mooring due to the shelter it provides.
- Many stakeholders highlighted the importance of Studland Bay as a safe refuge for stopping (by anchoring or mooring).
- Statements that people anchor and moor at Studland Bay in order to visit the local pubs, cafes, and restaurants as well as to access the beach and local walks. Boat users wade ashore or use small tenders that they pull up on the beach to get from their anchored/moored vessels.
- Information about the moorings in the bay and indication of ownership. One response stated that out of 50 original moorings only 13 remain. Six moorings are thought to be owned by the Bankes Arms pub and the remaining moorings thought to be privately owned and used only by their owners.
- Moorings are mostly suitable for small motorboats as they are too shallow for larger yachts. Many anchor in the bay because there are not enough moorings.
- Information about where different sized vessels can safely anchor in Studland Bay. Vessels typically avoid seagrass. It is too shallow in the northern area of the bay. Many state that, as boat users, they consciously avoid the seagrass and sensitive areas. Others have stated that they do not anchor beyond the yellow buoys (some believe this to be a no anchor zone, whereas others are aware that this is the speed restriction zone). Admiralty charts display where it

⁵² <u>http://boatownersresponse.org.uk/Marine-economy-Poole.pdf</u>

⁵³ https://www.rya.org.uk/knowledge-advice/planning-environment/Pages/uk-coastal-atlas-of-recreational-boating.aspx

⁵⁴ https://www.youtube.com/watch?app=desktop&v=9cbASO1sSFc&feature=youtu.be

is safe to anchor in the bay, this would be where vessels would aim to anchor in an emergency.

- Papers related to the impacts of anchoring/mooring (Abadie *et al.*, 2016; Collins *et al.*, 2010; Luff *et al.*, 2019).
- Information about the pros and cons of advanced mooring Systems⁵⁵.
- Suggested management approach for advanced mooring systems with the public moorings approach in Whitsunday Islands, Australia⁵⁶.

Diving and snorkelling

- Contradictory statements were received about diving and snorkelling. Some noted that snorkelling and diving is rare due to the number of boats and high-speed craft. Others noted how snorkelers/divers did not only arrive by boat but also from the beach as well as that many snorkelers carry out spear fishing. Others state that there has been an increase in diving as people want to seek out seahorses.
- Concern about illegal non-licenced diving in the site as a wildlife licence is required when seeking seahorses but many do not have this.

3. Impacts of the measures

In the call for evidence, stakeholders were asked about the potential impacts of each of the management options proposed for each activity. This includes either impacts on themselves or other impacts. Section 3.1 covers responses that are relevant to all the activity types. Sections 3.2 to 3.6 cover responses which are relevant to a specific activity only. Many responses contained information that was not describing an impact of the proposed measure but was relevant to the site. These responses have also been summarised below.

3.1 All activities

Table 3 summarises comments received which are applicable to all the activities assessed. These comments have been addressed here to avoid repetition in later sections. Please note, some MMO responses have been updated since the decision document was last published following the call for evidence in February 2021.

⁵⁵ <u>http://boatownersresponse.org.uk/Marine-economy-Poole.pdf</u>

⁵⁶ https://parks.des.qld.gov.au/___data/assets/pdf_file/0033/199590/public-moorings-whitsundays.pdf

Table 3: Summary of responses that covered all activities

Theme	Comments received	MMO Response
	Studland Bay is a safe refuge for a number of activities. Management measures will remove access to the bay in emergencies, or access to prevent emergency situations occurring. How will emergency situations be defined/proven?	Safety of life at sea will always come first, and, regardless of restrictions in place, the MMO will not prosecute anyone taking legitimate action in the case of a genuine emergency. The right to anchor within any MCZ under emergency conditions will continue to be provided for within section 141 of the Marine and Coastal Access Act 2009 ⁵⁷ . The MMO will continue to engage with stakeholders to inform the development of management measures which minimise any safety risks.
	There may be resultant increased pressure on search and rescue, the RNLI and Coastguard due to an increase in incidents elsewhere.	
Safety	 Comments and concerns about water safety in Studland Bay. For example: Divers/snorkelers/swimmers being close to moorings/anchored boats/ boats underway. Divers not carrying correct signal (a flag). Close incidents with swimmers/divers/snorkelers and moving boats. Speeding boats. Verbal abuse between divers and boat users. 	Dorset Council manage impacts on water safety in the area. There is a water safety byelaw in place which restricts the speed of vessels in a designated area. The Marine Management Organisation is working with Dorset Council to ensure that management of different aspects of activities in Studland Bay MCZ is effective.
	If the MMO use AIS to monitor activity this will result in people switching it off which will be a	The MMO is aware of the implications of monitoring and management measures put in place. The MMO will not

⁵⁷ Marine and Coastal Access Act 2009, c.23. Available <u>online</u>.

	safety concern.	implement measures which will cause the safety of people to be put at risk.
	Concern about a 'blanket ban' on all recreational activities in Studland.	The MMO is not proposing a blanket ban on all recreational activities. A range of options for each activity were presented during the call for evidence. At this stage, the MMO are introducing management for anchoring only, please see section 6 for more details.
Impacts to economy, recreation and tourism	 Management measures will negatively affect the local economy, tourism and/or recreation. Including: Lower boat ownership/relocation and resultant impact on Poole Harbour and local businesses serving the boating community. Impact to those who use Studland as a training ground for engine tests, boat handling and sea trials. There may financial implications for local dive operators if they are unable to use Studland Bay for dives. Reduced incentive to live in Poole. Impact to health and wellbeing. Reduced amenity of Studland Bay, reduced visitors. Impact to Studland businesses, e.g. cafés and restaurants. 	The potential socio-economic impacts associated with any management measures for Studland Bay were considered during the designation process. In designating Studland Bay MCZ, the Secretary of State decided the environmental case for designation outweighed these potential impacts. Now that the site is designated, the Marine and Coastal Access Act 2009 ⁵⁸ requires that the MMO exercises relevant powers to best further the conservation objectives of the site. Social and economic factors cannot be used as a reason not to provide the protection required to further the site's conservation objectives. The MMO will always seek to ensure that the social and economic costs of management are minimised, as long as the required level of environmental protection can be assured. The MMO have engaged with stakeholders that may be affected to explore concerns raised in this call for evidence. Feedback received has been considered in deciding the approach.

⁵⁸ Marine and Coastal Access Act 2009, c.23. Available online.

 Any signage installed will make the area less attractive and reduce tourism. Restriction of activities associated with boats, e.g. swimming and snorkelling. Restrictions on activities in Studland Bay are against human rights/public freedoms/rights of navigation/civil liberties. 	 conservation objectives stated for an MCZ in England. The provision that may be made by a byelaw under this section includes, in particular, provision – a) prohibiting or restricting entry into, or any movement or other activity within, the MCZ by persons or animals; b) prohibiting or restricting entry into, or any movement or other activity within, the MCZ by vessels or (where appropriate) vehicles; c) restricting the speed at which any vessel may move in the MCZ or in any specified area outside the MCZ where that movement might hinder the conservation objectives stated for the MCZ; d) prohibiting or restricting the anchoring of any vessel within the MCZ; e) prohibiting or restricting the killing, taking, destruction, molestation or disturbance of animals or plants of any description in the MCZ; f) prohibiting or restricting the doing of anything in the MCZ which would interfere with the seabed or damage or disturb any object in the MCZ.
Any restrictions will have an impact on access to the bay, beaches and surrounding area.	While access may be reduced through management, depending on the nature and location of restrictions, access to Studland is available by other means, for example, from moorings or by car, public transport and ferry from Poole.
Restrictions in Studland will cause displacement of activities elsewhere, either to other areas of the MCZ, or to nearby areas such as Swanage, Brownsea and/or Bournemouth. This may cause overcrowding, safety issues and environmental impacts in those areas. This may result in management elsewhere.	The MMO is not currently proposing additional management for activities other than anchoring, so displacement impacts will be kept to a minimum. Impacts of any management measures will be carefully considered before a final decision is made. Monitoring will determine if any displacement is occurring in other areas and monitoring of those areas would determine whether any management is required.

	What would a monitoring and control plan look like in practice?	Monitoring and control plans will be produced and used by the MMO for the marine non-licensable activities assessed. Please see Annex 4 (Monitoring and Control Process) in the draft Studland Bay MCZ non-licensable activity assessment ⁵⁹ for an overview of this process.
	How will measures be enforced? Concern that measures will be ignored. Concern about costs of the measures or the view that this is an unnecessary use of money.	The MMO's compliance activities at this site will, if required, take place as part of the MMO Compliance and Enforcement Strategy ⁶⁰ , which takes a risk based and intelligence led approach.
Compliance	To aid compliance, any measures need to be clearly marked and delineated.	The MMO is assessing options for effective and clear marking of potential management measures and has received feedback from stakeholders regarding this.
Compliance, enforcement and monitoring	Widespread communication and education about the measures will be important to support enforcement and give visitors a fair opportunity to observe the rules in the bay. How will the MMO ensure this is done?	The MMO have produced the Studland Bay MCZ Habitat Protection Strategy ¹ to guide the public on the management approach. There will be a focus on education and awareness raising throughout summer 2021 to support the introduction of the voluntary measure for anchoring.
		Currently no statutory measures are being proposed. If a management measure is statutory in nature (i.e. through a legal measure sure as a byelaw), the MMO will provide notification directly to stakeholders, online, and through partner organisations and local stakeholder groups to ensure that people are aware of the restrictions and how to comply with them. The MMO will make sure appropriate engagement is in place to support the implementation of any management measures.

 ⁵⁹ Draft Studland Bay MCZ non-licensable activity assessment. Available <u>online.</u>
 ⁶⁰ <u>https://www.gov.uk/government/publications/compliance-and-enforcement-strategy</u>

	What would the penalties for non-compliance be?	Currently no statutory measures are being proposed. For information, if a statutory measure is introduced, the MMO will take a proportionate approach to non-compliance in alignment with the MMO Compliance and Enforcement Strategy. The MMO has a range of enforcement options, which include verbal and written warnings up to prosecution and an unlimited fine ⁶¹ .
	Management measures would result in a reduction of goodwill/ trust amongst the public and so will not be supported.	Where management measures are necessary, where possible the MMO will work with stakeholders to develop appropriate and fair measures that are supported. Please note, currently no statutory measures are being proposed.
	The control element of option 1 could lead to prohibition anyway.	If monitoring suggests that further management is required as conservation objectives of the site are still being hindered, then the MMO would consider measures to control these activities. However, we would always seek to engage stakeholders on any potential management measures.
Privacy concerns	Monitoring will be an invasion of privacy for users of the bay.	Monitoring is important to collect data about the protected features of the bay and activity levels. No personal data will be collected unless necessary, and always in line with data protection legislation.
Lack of evidence	There is insufficient evidence for the impacts of anchoring, mooring, sailing/powerboating with an engine, sailing without an engine and/or diving and snorkelling in Studland Bay. A monitoring and control plan should be the first option to gather evidence of the need for management.	Natural England is the MMO's statutory advisor and provider of conservation advice for marine protected areas in England. Natural England's conservation advice and scientific literature demonstrates that these activities may have a significant impact on the features of the site. It is the statutory responsibility of the MMO to investigate the need for management measures where conservation objectives of an MCZ may be hindered by an activity. Therefore, these activities were taken forward for further assessment by the MMO. Natural England and the MMO used the best available evidence, including a range of peer reviewed scientific literature to support the assessment and subsequent

⁶¹ Section 139 of the Marine and Coastal Access Act 2009. Available online.

	decision making.
	For anchoring, the MMO has determined that management is required to avoid negative impacts on the site. A monitoring and control plan alone is not sufficient to further the site's conservation objectives. Appropriate management measures have been decided, please see section 6 for details.
	For powerboating, sailing, diving and snorkelling, no further restrictions will be implemented at this stage. These activities will be monitored to identify any changes in activity levels which may lead to reassessment of the site and future management if required. Mooring applications in Studland Bay are subject to a maximum advised number detailed in the Habitat Protection Strategy.
Seagrass has been expanding in Studland Bay over time, and mooring scar edges have not increased over time as indicated by aerial imagery. The mapping of the sea grass beds in Figure 1 of the Studland Bay MCZ draft assessment is not a complete and accurate representation	Seagrass extent is not the only factor to consider in the health of seagrass meadows. Factors include, but are not limited to, the overall seagrass biomass (influenced by leaf length and shoot density) and rhizome mats. These factors are important for overall seagrass meadow health and resilience to natural and human activity. Seagrass is a vital part of the ecosystem and has the capacity to support a diverse number of communities.
of the location of the sea grass beds.	Published scientific journal articles reference reports dating from the 1930's which document a <i>Zostera</i> bed decline along the Atlantic coast of North America and Europe by 90-99% due to the wasting disease now known as ' <i>Labyrinthula zosterae</i> ' (Muehlstein, 1989). The extent of seagrass in Studland Bay may have increased since this time, however, pressures such as those from anchoring may be impacting seagrass health in different ways. Fragmentation of seagrass undermines the resilience of seagrass meadows to natural and other

	 anthropogenic pressures (Jackson <i>et al.</i>, 2013a). Disturbance to seagrass beds can cause habitat fragmentation, this is defined as the emergence of discontinuities in a habitat patch (Jackson <i>et al.</i>, 2013). Natural England conservation advice highlights that pressures from activities such as anchoring, are contributing to seagrass fragmentation. Aerial imagery can be indicative of seagrass extent but does not reliably represent seagrass fragmentation/recovery and the health of seagrass and should not be used in isolation to assess seagrass extent. Aerial photographs must be accompanied by ground truthing, for example, dark patches may not be seagrass and could instead be decaying drift algae washed in on the tide or attached macroalgae. Video drop down, and side scan sonar methods provide a greater certainty compared to aerial photographs.
The existing area of seagrass is sufficient habitat for seahorses so does not need recovering. References to Natural England draft Supplementary Advice on Conservation objectives ⁶² which states there were 82 hectares of seagrass and the paper by Garrick-Maidment <i>et al.</i> (2010b) that the area occupied by seahorses is 200m ² , thus proving the current area is sufficient.	Natural England is the MMO's statutory advisor and provider of conservation advice for marine protected areas in England. Natural England conservation advice is that seahorses are sensitive to disturbance caused by anchoring and mooring activity. Disturbance to seahorses may result in seahorses leaving their territory, increase their risk of predation and impact
There is evidence for increase in seahorses, so management measures are not needed.	There was an observed increase in the number of seahorses in Studland Bay MCZ in 2020 during a period of inactivity. COVID- 19 restrictions meant that people were not able to visit the bay

⁶² Natural England Supplementary Advice on Conservation Objectives for Studland Bay MCZ. Available online.

seahorses data supp and aneco confuses r of sighting can be sig days. Refe Numbers i Activity lev COVID-19 managem unable to sig	Bay is largely free of seagrass and so there is no problem. There is no orting this, only 'expert judgement' lotal evidence. Seahorse data number of seahorses with number s, for example, the same individual hted several times on different erence to BORG paper: 'Seahorse <u>n Studland Bay: the Truth'⁶³.</u> vels were not normal in 2020 due to o so this is insufficient to base ent decisions on. Boat owners were sail further afield due to full and rinas/destinations and quarantine s, so this resulted in higher	for some time. This appeared to have a positive impact on the seahorse numbers in the bay, but this is anecdotal evidence and not confirmed. However, the overall trend based on best available evidence is of a decline in seahorse numbers at the site so a 'recover' general management objective has been set for seahorses at this site, the MMO has determined that ongoing management of anchoring is required. Seagrass beds and long-snouted seahorses (<i>Hippocampus guttulatus</i>) are both designated features of the MCZ. Conservation advice provided by Natural England describes the habitats and species of the bay to include seagrass and long-snouted seahorses and long-snouted seahorses (Jackson <i>et al.</i> , 2013b; Environment Agency, 2018; Garrick-Maidment <i>et al.</i> , 2010a). Please also refer to the feature map for Studland Bay MCZ found within the site assessment ⁶⁴ which shows large areas of seagrass within the site. The MMO acknowledges that restrictions in place during 2020 due to COVID-19 may have caused activity levels to vary in comparison to previous years. The assessment considers data over the most recent five years to ensure that a long-term assessment of activity informs decisions and takes into account anomalous years.
How can t principle b something	at Studland Bay. he use of the precautionary e justified? Just because might happen, and it might cause	The MMO complete assessments to ensure the most robust as possible scientific evaluation of the potential impacts of marine non-licensable or fishing activities on the designated features of
narm, is n	o reason in itself to prevent it.	marine protected areas. The precautionary principle requires that the MMO does not postpone or delay the assessment due to lack of evidence or scientific certainty. The precautionary principle is

 ⁶³ <u>http://boatownersresponse.org.uk/Seahorse-numbers-the-truth.pdf</u>
 ⁶⁴ Draft Studland Bay MCZ non-licensable activity assessment. Available <u>online.</u>

		defined in the 1992 Rio Declaration ⁶⁵ , to which the UK Government is a signatory.
		The MMO must fulfil its statutory duty under the Marine and Coastal Access Act 2009 ⁶⁶ to assess the site and exercise relevant powers to best further the conservation objectives of the site where needed. The MMO will use the best available evidence and apply precautionary approaches when needed.
	The conservation advice from Natural England is incorrect. The advice commonly uses expert judgement/anecdotal evidence and therefore should not be used by the MMO for this assessment.	Natural England is the MMO's statutory advisor and provider of conservation advice for marine protected areas in England. The MMO consider the draft Natural England advice as part of the suite of best available evidence to understand the ecology of the site.
		The conservation advice refers to use of expert judgement, this means that Natural England has used a wide range of evidence and applied it, through a vulnerability assessment. It is appropriate for expert judgment to be used in this way to apply research.
		Natural England has recently run a consultation on their conservation advice package for Studland Bay MCZ. Natural England have responded to representations made on this conservation advice. Any future changes to conservation advice will be communicated to the MMO and amendments will be made to the assessment if necessary.
	The assessment reported "No significant risk of hindering the achievement of the site's	In the assessment, the summary table on pages 5 to 6 show that multiple activities are listed as significant risk of hindering the

⁶⁵ 1992 Rio Declaration. Available <u>online</u>.

⁶⁶ Marine and Coastal Access Act 2009, c.23. Available <u>online</u>.

	conservation objectives" under all headings. Therefore, despite the effects of activities such as anchoring, the environment is surviving and thriving, and restrictions are not justified. Strong easterly winds cause seagrass to wash up on the beach. This is what causes damage to the seagrass, not activities such as anchoring and mooring.	 conservation objectives in the Part B outcome column. This comment may refer to the in-combination column where no activities are considered a significant risk to hindering the achievement of the site's conservation objectives in-combination that aren't already alone. Storm events and strong winds cause high energy conditions which may impact seagrass. This is why seagrass is only found in sheltered bays, such as Studland Bay. Strong easterly winds in Studland can therefore cause the uprooting of seagrass in Studland and this subsequently washes ashore. However, this is a natural event which occurs irregularly. Seagrass is resilient to this event and is able to recover from damage if the events are not too regular and other pressures are minimal. The impacts of these pressures, such as those caused by marine non-licensable activity, would add to the pressure of storm events.
Responses uncertain about impacts	The impact of these measures will depend on the location/size of the area affected, or how they might interact with other management measures for other activities.	The coverage of the management measure for anchoring has been decided through appropriate levels of engagement and consideration of feedback submitted by stakeholders.

3.2 Anchoring

This section summarises responses received in the call for evidence for anchoring. Anchoring is defined as the use of a device to secure a vessel to the seabed, temporarily, in order to prevent it drifting with the wind or current (Griffiths *et al.*, 2017). Anchors are designed to dig into or hook onto the seabed. In order to create hold, the anchor is dropped, and a length of chain is laid out on the seabed to hold it horizontally on the seabed (Griffiths *et al.*, 2017). The anchor is 'set' (fixed in position) as some pulling force is exerted on the chain but not enough to drag it and break it free (Griffiths *et al.*, 2017).

Figure 2 summarises the responses from stakeholders in the call for evidence when asked about the potential impacts of each of the management options proposed for anchoring. Table 4 addresses the impacts, concerns and questions raised for anchoring which are not covered in section 3.1. Please note, some MMO responses have been updated since the decision document was last published following the call for evidence in February 2021.

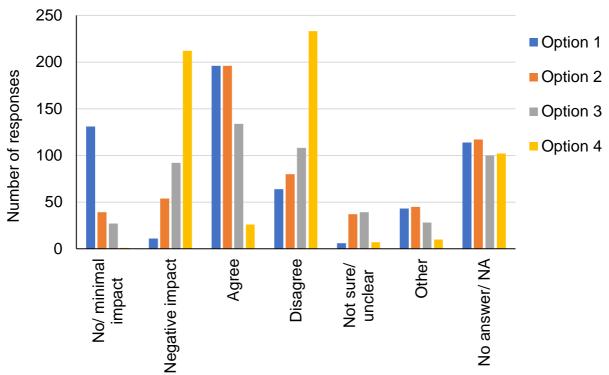


Figure 2: Response summary for anchoring

The following sections summarise stakeholder responses to each of the proposed management options.

Option 1: No additional management. Introduce a monitoring and control plan within the site

196 stakeholders agreed with this measure for a number of reasons. These included:

• Monitoring is required to better understand the activities and impacts occurring. There is currently insufficient evidence for stricter measures.

- Least impact on recreation, humans are more important than the environment
- Stricter options would have severe safety impacts.
- This option would work in conjunction with education, installed moorings buoys and/or setting up a stakeholder group.
- This measure will protect the environment.

Option 2: Voluntary no anchor zones

196 stakeholders agreed with this measure for a number of reasons. These included:

- As long as the voluntary no anchor zones are well marked, leave sufficient space to anchor safely, are developed with boat owners and are sufficiently publicised.
- Voluntary no anchor zones could be implemented in conjunction with other methods such as monitoring, installing moorings/advanced mooring systems and/or education and guidance.
- Agreed with voluntary no anchor zones and gave suggestions on where the zones could be located (see no anchor zones section for more details)
- Would mean it is safer for other water users such as kayakers, paddle boarders and snorkelers.
- Have worked well in Studland and/or other areas previously.
- Would protect the most sensitive areas.
- May lead to self-regulation amongst the boating community.
- Agreed with voluntary no anchor zones and gave suggestions about enforcement, for example, a marine warden or volunteer patrols.

Option 3: No anchor zones

134 stakeholders agreed with this measure for a number of reasons. These included:

- As long as the no anchor zones are well marked, leave sufficient space to anchor safely, the zones are monitored, the zones are developed with boat owners and the zones are sufficiently publicised.
- No anchor zones could be implemented in conjunction with other methods such as monitoring, installing moorings/ advanced mooring systems and/or voluntary methods.
- Agreed with no anchor zones and gave suggestions on where the zone could be located (see no anchor zones section for more details).
- Good compromise between recreation and the environment.
- Will protect the environment.
- If option 1 is ineffective, no anchor zones would be appropriate.
- Would mean it is safer for other water users such as kayakers, paddle boarders and snorkelers.
- Agreed with no anchor zones but that it should apply to larger vessels to start off with then be re-evaluated.

Option 4: Prohibition of anchoring

26 people agreed with this measure for a number of reasons. These included:

• Prohibition of anchoring is preferable for the purposes of environmental protection, and/or reducing disturbance.

- Agreed with prohibition of anchoring if mooring buoys were provided instead.
- Agreed with prohibition of anchoring if it doesn't apply in emergencies.
- Would mean it is safer for other water users such as kayakers, paddle boarders and snorkelers.
- Agree with prohibition of anchoring if other options prove to be insufficient.

Table 4: Summary of responses for anchoring

Theme	Comments received	MMO Response
	Restricting anchoring will result in an increase of high-speed watercraft and jet skis in the area which will cause safety issues.	The MMO have engaged with stakeholders and relevant organisations to inform the development of management measures which will minimise any safety risks.
Safety	Restrictions would mean reduced space for anchoring so less chain/rope is used, and this would increase the chance of the anchor dragging and boats hitting.	It is the responsibility of boat owners to safely anchor and leave sufficient distance between vessels.
Compliance/ enforcement	Voluntary no anchor zones do not work/have not worked in the past. How will any new measures be different? A voluntary no anchor zone exists already.	A voluntary no anchor zone (VNAZ) was implemented in Studland Bay in 2009 and remained in place until 2013 when the study ended (Axelsson <i>et al.</i> , 2012). This zone was found to be largely adhered to by boat users, with an increase in observance of the zone over time. The Seastar survey report on the VNAZ (Axelsson <i>et al.</i> , 2012), states that increasing observance over time is to be expected because it takes time for new arrangements to be understood by the majority of users and because conformity to the new arrangements will increase commensurately as growing numbers of visitors observe the VNAZ (Axelsson <i>et al.</i> , 2012). Furthermore, there are multiple examples of successful VNAZs, including the Helford Voluntary Marine Conservation Area and Skomer Marine Conservation Zone (Prior, 2011).

Lack of evidence	Automatic Identification System (AIS) data does not clearly indicate boats anchoring, data for static boats should be separated out.	 AIS data, has been used to indicate where vessels typically travel within Studland Bay MCZ (Figures 5-7 in the assessment). Live AIS data was used to count the number of vessels that were stationary over the seagrass feature at different times between 11/07/20 and 26/07/20 (Figure 9 in the assessment). The assessment makes clear that this is a prediction of where anchoring occurs and that anchoring occurrences are likely to be much higher as not all vessels are fitted with AIS. The assessment of the site groups these activities together due to the way conservation advice is structured. However,
	Anchoring is a small-scale short duration event and recovery is possible.	the impacts of each of these activities are discussed separately and management measures have been considered separately. Despite this, anchoring and mooring activities are interlinked so there will be recognition of this in the management approach.
Provision of mooring buoys	Mooring buoys (either traditional or advanced mooring systems) should be supplied by the MMO rather than restrictions on anchoring. Moorings would help alleviate pressure from anchoring.	The MMO is not planning to install moorings or advanced mooring systems within Studland Bay MCZ. However, the MMO have produced guidance ¹ around the introduction of advanced mooring systems to support those interested. Installations must be compatible with the site's conservation objectives and other marine licensing considerations.
Fishing activity	Restricting anchoring in the bay will increase fishing activity. Anchoring currently acts as a barrier to fishing, such as trawling.	Impacts of fishing will be monitored, assessed and managed by Southern Inshore Fisheries and Conservation Authority (Southern IFCA). The MMO and Southern IFCA will liaise regarding any potential impacts of management measures on other activities. Fishers do not target the site outside popular recreational periods, for example, October to April, when there are low numbers of vessels anchored/moored. This suggests that the site is not favourable for fishing.

No Anchor Zones

Stakeholders were asked about what proportion and/or which parts of the site they thought should be subject to no anchor zones (voluntary or otherwise). Table 5 provides a high-level summary of responses. 229 stakeholders who accessed this survey either did not answer or did not provide an answer relevant to the question, so these have not been included.

Response	Count of responses
Disagree with zones	62
Minimal area (<10%)	9
Part of MCZ (>10%)	12
Half of MCZ	6
All of MCZ	5
Over part of seagrass	36
Over all seagrass	14
Away from main anchoring areas	28
Shallow areas	8
Most sensitive areas	15
Agree – no detail	12
Other	13
Not sure	15

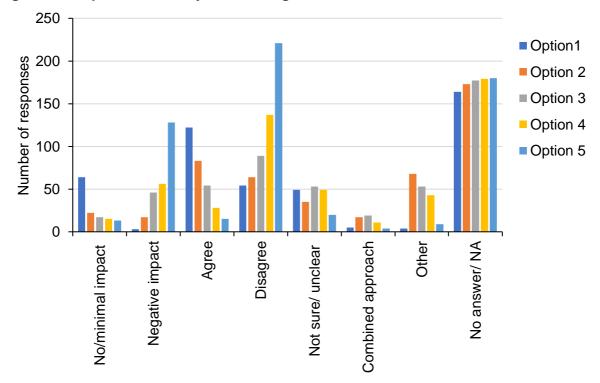
For responses in the 'other' category, comments included:

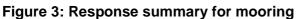
- Suggestions that zones should be developed with a stakeholder steering group.
- Suggested specified areas for zones including the use of landmarks such as the World War 2 lookout, Redend Point, Middle Beach Cafe and Old Harry Rocks.
- Suggestion that zones are not needed on sand.
- Suggestion that zones could be within the yellow speed limit marker buoys.
- Suggestion to link zones to other activities (e.g. swimming and kayaking).
- Suggestion that zones should be sufficient to allow effective monitoring in comparison to a control area.
- Some stakeholders were unsure or agreed with zones but gave no views on the extent or location.

3.3 Mooring

This section summarises responses received in the call for evidence for mooring. Mooring includes conventional swing mooring, trot mooring or advanced mooring systems. Swing moorings are the most widely used and consist of a buoy attached by chain to an anchoring point (block or anchor) (Griffiths *et al.*, 2017). Trot moorings are deployed in rows of multiple, connected moorings (Griffiths *et al.*, 2017). Advanced mooring systems (also known as eco-moorings) avoid the placement of large mooring blocks on the seabed and chain abrasion through the use of alternate methods (Griffiths *et al.*, 2017). Fixing methods including swivel and screws and the use of floats or elastic lines to avoid chain abrasion (Griffiths *et al.*, 2017).

Figure 3 summarises the responses from stakeholders in the call for evidence when asked about the potential impacts of each of the management options proposed for mooring. Table 6 addresses the impacts, concerns and questions raised for mooring which are not covered in section 3.1. Please note, some MMO responses have been updated since the decision document was last published following the call for evidence in February 2021.





The following sections summarise stakeholder responses to each of the proposed management options.

Option 1: No additional management. Introduce a monitoring and control plan within the site.

124 people agreed with this measure for a number of reasons. These included:

• There is no evidence of damage to seagrass from mooring activity.

- Preferred as no management of the area is required/manages status quo. No damage to the environment as seagrass has expanded and seahorses are still present despite historic anchoring activity.
- Enables further study, data gathering and monitoring to inform any further measures if required.
- More suitable option for safety reasons can continue the use of the sheltered area of the bay.
- Avoids unnecessary impacts to users.
- Current number of moorings is very low and only requires monitoring.

Option 2: Voluntary use of advanced mooring systems for mooring applications

94 people agreed with this measure for a number of reasons. These included:

- Will reduce the need for anchoring and any impacts of anchors dragging.
- Would be well placed in the areas on the south side where most boats anchor
- Enables measures to work alongside the leisure users of the bay in a manner that reduces environmental impacts.
- Could look to provide moorings with the capacity to hold several boats.
- The most, or the only realistic and least disruptive option.
- Additional moorings would be welcomed. Many state that free to use or moorings accessible to the public would be welcomed.
- It seems to have worked well in other countries to deliver conservation (United States, Spain and the Mediterranean area).
- If installed in the most sensitive areas, it will make anchoring in these areas unfeasible and discourage water-skiing in the area also.
- If well installed and maintained, they provide a safe option.
- If coupled with monitoring it will help gather data on boating behaviours.
- It would provide a controlled trial to assess economic, functional and practical impacts.
- Enables people to stay overnight during longer journeys and channel crossing.
- Enables people to use the bay when seeking shelter in poor weather.
- As the technology advances the knowledge of impacts will increase and provide better techniques/technologies.
- The measure is likely to be supported by most boat users.
- Could generate revenue.

Option 3: Prohibit use of 'traditional moorings', only allow use of advanced mooring systems for mooring applications

69 people agreed with this measure for a number of reasons. These included:

- Still allows usage of the area.
- Enables the location of moorings to be controlled.
- Would keep pollution away from the seagrass.
- Enables better monitoring and management of the number of boats using the area.
- The measure should be the minimum option to deliver the required protection.
- Measure would be supported by users.

- Would see less anchoring and therefore damage to the seabed.
- More moorings would limit room to anchor and discourage water skiing.
- Could help generate revenue cover costs of upkeep and encourage reasonable use of the area, and/or be used to further conservation at the site.
- Benefits both boat owners and habitats.
- Have seen seagrass growth in Poole Harbour after removal of chain moorings.

Option 4: No mooring zones

29 people agreed with this measure for a number of reasons. These included:

- Would increase biodiversity and improve greater diving experiences.
- Would be clearer and fairer approach to environmental management.
- No mooring areas would also reduce effluent in the marine area.
- Would have minimal visual impact.
- Agreed providing the zones were in a certain area(s) or not too large.
- Would protect habitats and allow people to continue to use and enjoy Studland Bay.

Option 5: Prohibition of mooring

15 people agreed with this measure for a number of reasons. These included:

- This conferred the best protection for the designated features.
- A byelaw prohibiting mooring would mean the measure could not be ignored.
- Some wanted to also see anchoring prohibited alongside mooring.

Theme	Comments received	MMO Response
Anchoring and mooring management measures in parallel	The boating community tend not to use moorings. If moorings are not placed carefully or in consultation with the boating community, it could lead to a no anchor zone. This could cause safety issues if it's in the most sheltered areas as boats will be forced to anchor in deeper, more exposed areas. How would anchoring and mooring measures interact? Provision of sufficient moorings would reduce the need to anchor, particularly at peak times. However, it will not be possible to provide sufficient moorings to meet demand and the costs will be too high. A mix of management is required, with a mooring area, an anchoring area and prohibited zones. Moorings could be helpful to mark where sensitive or prohibition zones are	Mooring applications in Studland Bay are subject to a maximum advised number detailed in the Habitat Protection Strategy. Where further management measures are proposed, the MMO will engage with stakeholders to develop these. The MMO recognise that anchoring and mooring are interconnected activities. The Studland Bay MCZ Habitat Protection Strategy therefore provides guidance on the anchoring management as well as mooring applications. Future additional moorings will continue to be controlled through the marine licensing process which is chargeable, regardless of management measures in place. The MMO is not planning to install moorings (including advanced mooring systems) within Studland Bay MCZ or introduce any charging schemes. However, the MMO have
	Iocated. If anchoring is banned and only mooring permitted, it could be dangerous for those mooring in the dark or in poor weather.	produced guidance ¹ around the introduction of advanced mooring systems to support those interested. Installations must be compatible with the site's conservation objectives and other marine licensing considerations.
Existing moorings	Owners of existing moorings in Studland Bay would need to be compensated if measures changed the mooring rules. Will existing moorings be removed, or can they be moved? This could incur costs, cause environmental damage and a subsequent increase in anchoring through removal of current moorings.	Many of the moorings have been in place for many years and predate the marine licensing system introduced under the Marine and Coastal Access Act 2009, and the designation of the MCZ. MMO are not currently planning to remove them but will keep this under review.

Table 6: Summary of responses for mooring

Cost concerns New mooring / practice suggestions	Visitors cannot be expected to invest in moorings in Studland Bay. Moorings should be free to use/not prohibitively expensive. Any funds from charging should be used for conservation purposes or to pay for installation and maintenance of the moorings. The placement of moorings is key and should be done in consultation with the boating community. Moorings need to accommodate for the range of sizes of vessels requiring different depths of water, but also the range of sea conditions. Could mooring pontoons be installed for use by multiple smaller boats? Moorings should be bookable in advance to	The MMO does however, encourage licence applications to upgrade existing moorings to an advanced mooring system. Please see the Studland Bay MCZ Habitat Protection Strategy ⁶⁷ for further information. Please note, it is the responsibility of boat operators to decide upon the suitability of moorings for their vessel. This is a risk for the use of any mooring, whether traditional or advanced mooring systems.
Environmental impacts Advanced mooring systems	 know availability in advance of journey and ensure aid in journey planning. Permanent moorings (in sufficient numbers to meet demand) will cause more damage in the long-term than anchoring. The seabed could be damaged if moorings are used incorrectly. For example, if a boat that was too big for a mooring caused it to be ripped from the seabed. Advanced mooring systems technologies are more expensive to install and maintain. How would they be paid for, and who would own 	
systems	would they be paid for, and who would own them? They should be owned by the Local Authority or a Public Body. Alternatively, could	

⁶⁷ <u>https://www.gov.uk/government/publications/managing-marine-non-licensable-activities-studland-bay-next-steps</u>

	local yacht clubs pay to install some, with the support of grants?	
	Advanced mooring systems consist of plastic buoys and synthetics ropes, contributing to plastic pollution.	
	Spain, United States and Australia have used advanced mooring systems which help protect seagrass. Could we implement a similar	
	system? 'No mooring zones' are not required if advanced mooring systems technologies have little impact on the seabed and can be used	
	over the seagrass areas. Advanced mooring system technologies are not known to be suitable for use in Studland Bay due to the tidal range and low depth. Insurance companies would not deem them safe/provide coverage for their use. How will boat owners know if moorings have been maintained and are safe/covered by liability insurance?	Trials of (advanced mooring systems) AMS technologies in similar tidal ranges are underway as part of the project by Natural England on reducing and mitigating erosion and disturbance impacts affecting the seabed (ReMEDIES) project ⁶⁸ . The ReMEDIES project has ongoing research into the acceptance of AMS by insurance companies. It is recommended that all vessel owners seek clarification from insurance companies about their coverage for use of AMS in advance of using these facilities. As with any mooring, it is at the risk of the user whether they deem the mooring suitable for their boat. This is not an exclusive concern to AMS. It is the responsibility of the mooring owner to maintain them in good working condition.
Marine	How would you ensure moorings are marked	maintain them in good working condition. The installation of moorings is a marine licensable activity
Licensing	appropriately to indicate the maximum boat size and depth?	and the MMO can specify signage requirements as part of the conditions on a licence. Please view the guidance

⁶⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/954263/ReMEDIES-newsletter-winter-2020_21.pdf

Will there be sufficient number of licences available to meet demand? Will the MMO specify what types/brands of moorings are acceptable? The MMO and The Crown Estate licensing is complex and expensive. Funding	provided on moorings in the Studland Bay MCZ Habitat Protection Strategy ¹ . Please view the guidance provided on moorings in the Studland Bay MCZ Habitat Protection Strategy ¹ .
should be available.	

No Mooring Zones

Stakeholders were asked about what proportion and/or which parts of the site should be subject to no mooring zones. Table 7 provides a high-level summary of responses. Additionally, 239 stakeholders who accessed this survey either did not answer or did not provide an answer relevant to the question, so these have not been included.

Response	Count of responses
Disagree with zones	41
No mooring zones necessary,	
encourage advanced mooring	3
systems	
Keep current mooring areas (no	10
expansion)	
Part of MCZ (>10%)	11
Half of MCZ	4
All of MCZ	5
Over part of seagrass area	12
Over all seagrass area	13
Away from main anchoring areas	8
Depth-dependent	6
Multiple zones	1
Most sensitive areas	2
Other	21
Not sure/unclear	86
No answer	236

Table 7: Summary of	f stakeholder responses	s regarding no	mooring zones

For responses in the 'other' category, comments included:

- Moor in the seagrass beds/most sensitive areas (mostly advanced mooring systems only).
- Area based South side, away from area between beach café area and Banks Arms; nearest Old Harry Rocks; from Middle Beach out to Old Harry Rocks to 300m offshore; no more than 500m out from main beach; 0-3nm North-South and not covering a large area; halfway down South Beach; out to sea, running parallel to Ballard Down; Central part of the bay; small area and still able to use SW corner of the bay; 50% of the area to be studied (control study) to assess impacts between Old Harry Rocks to 100m from shore high tide around to the beach.
- Depends on anchoring restrictions no moorings in anchoring zones.
- Discussion with boating community needed to decide zones.
- Dependent upon overall costs/enforcement needs/impacts on other sites.

3.4 Powerboating or sailing with an engine

This section summarises responses received in the call for evidence for powerboating or sailing with an engine. This activity is defined as the launching and recovery of motorised vessels or motorised vessels which are underway on the water. Motorised vessels include motorboats, powerboats and yachts which have an engine (Natural England, 2017a). This also includes water sports that are towed behind a motorised vessel, including wakeboarding, water skiing and parascending (Natural England (2017a). The MMO considers motorised personal watercraft (such as Jet-Skis and Sea-Doos) to fall into this category.

Figure 4 summarises the responses from stakeholders in the call for evidence when asked about the potential impacts of each of the management options proposed for powerboating or sailing with an engine. Table 8 addresses the impacts, concerns and questions raised for powerboating or sailing with an engine which are not covered in section 3.1. Please note, some MMO responses have been updated since the decision document was last published following the call for evidence in February 2021.

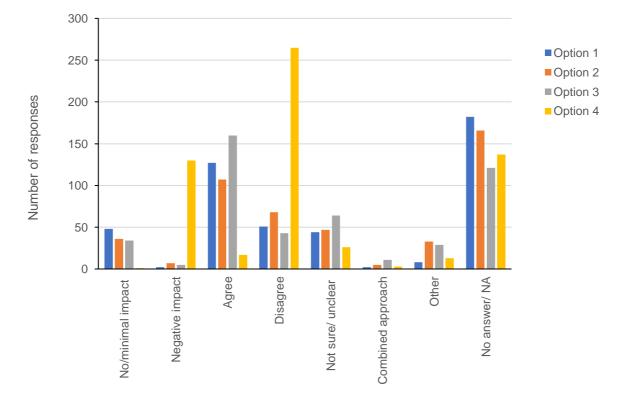


Figure 4: Response summary for powerboating or sailing with an engine

The following sections summarise stakeholder responses to each of the proposed management options.

Option 1: No additional management. Introduce a monitoring and control plan within the site

132 people agreed with this measure for a number of reasons. These included:

• This is already happening, this option maintains the status quo.

- Enables further data to be gathered, or long-term studies to be conducted to inform any future measures.
- The measure can be used alongside education of users of the bay.
- Lack of evidence to demonstrate a need for management measures.
- Seagrass has been expanding for decades.
- There is no demonstrable evidence that extending the current speed limit will provide benefits.
- Any restrictions will impact the local economy, reduce tourism and impact the safety of mariners.
- Better spending of Public funds.
- Would have the least impact upon recreational activities.

Option 2: Voluntary speed restrictions within the MCZ

119 people agreed with this measure for a number of reasons. These included:

- Would reduce speed and noise within the bay.
- Would reduce impact to underwater noise, turbulence but also the scouring impact as a result of boat wake.
- Benefits users of the bay and the environment.
- Speed restrictions could be staged depending upon proximity to the seagrass.
- A speed restriction would be welcomed by many as the existing speed restriction is ignored.
- Would increase the safety of the bay and increase enjoyment of the bay for many different users.
- Helpful to start with this measure and monitor.
- Some support in increasing the area of the current speed restriction zone/focussing this in the southern area of the bay.
- Would have little impact upon many boat owners as they travel at slow speeds anyway.

Option 3: Speed restrictions within the MCZ

172 people agreed with this measure for a number of reasons. These included:

- Presents the best option for the majority of users of the bay but impacts jet skiers and water skiers.
- Supports the environment and safety in the bay by reducing speed and noise disturbance which currently impacts user's enjoyment of the area.
- Reduces underwater noise, turbulence and the scouring of anchoring and mooring chains from the wakes of higher speed vessels.
- Environmental justification and safety issues are well documented.
- Helps address anti-social behaviour.
- Speed restrictions should form the first step to precede any prohibition measures, if they are proven to be needed.

Option 4: Prohibition of powerboats and sailing boats with an engine within the MCZ

17 people agreed with this measure for a number of reasons. These included:

• Enforcement will be easier – it will be obvious if a boat has an engine or not.

- The measure protects the MCZ.
- Also prevents the discharge of effluents from boats in the area.
- Would be unpopular, but delivers environmental protection, reduces noise pollution and risk of damage from propellers.
- Will manage speed issues in the bay and increase enjoyment of other activities.
- Manoeuvring will be easier under sail and the bay will be less crowded

Table 8: Summary of responses for powerboating or sailing with an engine

Theme	Comments received	MMO Response
Impacts to	Restricting motorboats would be discrimination to those	The MMO is not currently proposing to introduce any
recreation	that are unable to use sailing boats for health reasons.	measures to restrict sailing with or without an engine.
	How will an MMO speed limit fit alongside the existing	Where management measures are necessary, the
	Dorset Council speed restriction byelaw and will it be	MMO will ensure the most sustainable methods of
	better enforced?	enforcement are used.
	Clarity is needed as to whether this applies to all vessels	
	with engines or only vessels using engines. How will the	Dorset Council manage impacts on water safety in
Compliance/	MMO deduce whether a vessel is using/has an engine in	the area and have a water safety byelaw in place
enforcement	order to enforce this?	which restricts the speed of vessels in a designated
	Voluntary speed restrictions, do not/have not worked in	area.
	the past, and could cause tensions amongst boat users.	The MMO will work with Dorset Council to ensure
	Enforcement in the form of engine powered patrol boats	
	would contradict any restrictions on sailing or	that management of different aspects of activities in Studland Bay is effective.
	powerboating.	Stadiana Day is ellective.
	The use of an engine is sometimes necessary to ensure	
Sofoty	safety (e.g. when manoeuvring a vessel/during difficult weather conditions). This could result in health and safety	
Safety	incidents if not permitted to use engines.	
	More or better enforced speed restrictions would be	
	welcome as it would help make it safer for other activities.	
	Speed restrictions should be placed on certain high-	
	speed vessels, the impacts of sailing boats are not	
Vessel/area	comparable/similar to those of power boats and should	
dependent	not be placed under the same restrictions.	
measures	Could different areas of the bay be assigned different	1
	speed restrictions or activities? E.g. a water-skiing area,	
	or the current speed restriction area expanded?	

3.5 Sailing without an engine

This section summarises responses received in the call for evidence for sailing without an engine. This activity is defined as the launching and recovery of sailing boats or sailing boats which are underway on the water. This only includes sailing boats which do not have an engine (Natural England, 2017c).

Figure 5 summarises the responses from stakeholders in the call for evidence when asked about the potential impacts of each of the management options proposed for sailing without an engine. Table 9 addresses the impacts, concerns and questions raised for sailing without an engine which are not covered in section 3.1. Please note, some MMO responses have been updated since the decision document was last published following the call for evidence in February 2021.

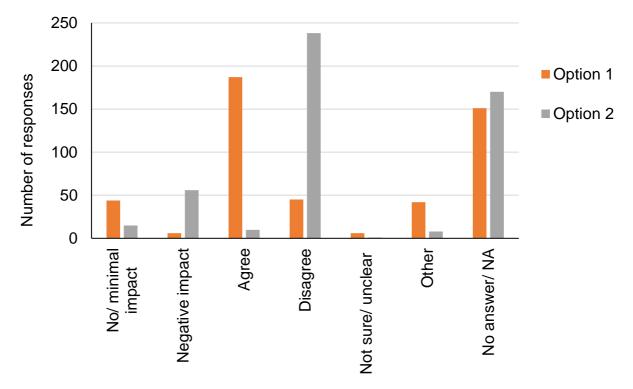


Figure 5: Response summary for sailing without an engine

The following sections summarise stakeholder responses to each of the proposed management options.

Option 1: No additional management. Introduce a monitoring and control plan within the site

- This option would gather sufficient evidence to understand impacts.
- This measure is sufficient because there is no/minimal impact from this activity.
- This option would work in conjunction with other options, for example, education, no anchoring, allocating launch/recovery areas and/or allowing boats with engines.

- This measure would be the least costly.
- Preferred option because it is no change from the present which works well.
- This option would allow sufficient balance between recreation and the environment.
- Control is necessary to protect the environment.
- Monitoring is required but not control as this suggest enforcement.

Option 2: Prohibition of sailing boats without an engine within the MCZ

- This measure will protect the MCZ.
- This measure is fine if it is voluntary.
- This measure would make the area more enjoyable to carry out other activities.

Table 9: Summary of responses for sailing without an engine

Theme	Comments received	MMO Response
Impacts to recreation	This would mean unjustified restrictions to personal watercrafts such as kayaks and paddleboards.	Sailing without an engine does not include non-motorised personal watercraft such as kayaks and paddleboards. This activity type was not included for proposed management options as it was assessed to not have a significant impact in the preliminary stages of the assessment.
Safety	Management measures are only needed with regards to safety of swimmers and sailing boats.	Dorset Council manage impacts on water safety in the area. There is a water safety byelaw in place which restricts the speed of vessels in a designated area.
	Restrictions in Studland Bay will force sailing boats into the channel where they are at risk from collision with large cross channel ships and ferries.	The MMO is not currently proposing to introduce any measures to restrict sailing with or without an engine. Please note, Studland Bay MCZ does not extend past the headlands of the coast ⁶⁹ , therefore any restrictions within the MCZ would not force vessels out into the channel.
Compliance/ enforcement	Enforcement in the form of engine powered patrol boats would contradict any restrictions on sailing.	The MMO is not currently proposing to introduce any measures to restrict sailing with or without an engine. Please note, where management measures are necessary,
	All watercraft would need to be banned if sailing boats are prohibited from the bay.	the MMO will ensure the most sustainable methods of enforcement are used, where possible.
Lack of evidence	The only potential impacts occur in launching/recovery areas, measures should only apply here and not to underway vessels.	The MMO is not currently proposing to introduce any measures to restrict sailing with or without an engine.
Provision of mooring buoys	Mooring buoys (either traditional or advanced mooring systems) should be supplied by the MMO rather than implementing restrictions on sailing activity. If there were restrictions within the MCZ, moorings should be provided outside of the MCZ.	The MMO is not currently proposing to introduce any measures to restrict sailing with or without an engine. The MMO is not proposing to install moorings or advanced mooring systems within Studland Bay MCZ. Please see Annex 1, section 3.3 for more details.

⁶⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/915334/studland-bay-mcz-boundary.pdf

3.6 Diving and snorkelling

This section summarises responses received in the call for evidence for diving and snorkelling. This activity is defined as swimming either underwater or on the surface, using Self Contained Underwater Breathing Apparatus (SCUBA) or snorkelling equipment (Natural England, 2017b).

Figure 6 summarises the responses from stakeholders in the call for evidence when asked about the potential impacts of each of the management options proposed for diving and snorkelling. Table 10 addresses the impacts, concerns and questions raised for diving and snorkelling which are not covered in section 3.1. Please note, some MMO responses have been updated since the decision document was last published following the call for evidence in February 2021.

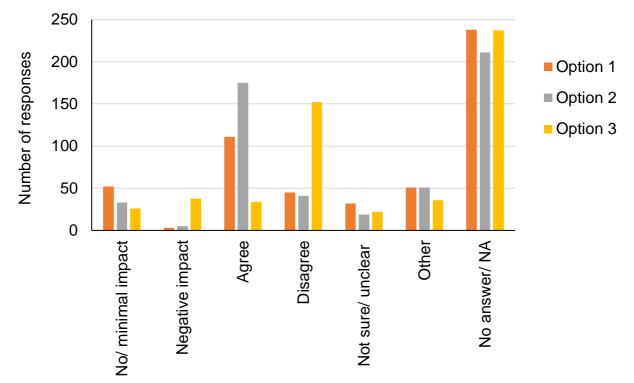


Figure 6: Response summary for diving and snorkelling

The following sections summarise stakeholder responses to each of the proposed management options.

Option 1: No additional management. Introduce a monitoring and control plan within the site

- This measure will allow collection of data to assess and understand the impacts of diving/snorkelling on the marine environment.
- This option is the most sensible and fairest option.
- Required to protect the environment.
- This is the best option as the activity has minimal impact (or there is limited evidence of impact) on the marine environment.

- This option could be used in conjunction with other methods, for example, seahorse sightings and/or education of bay users.
- This option is a good start to decide whether further management is needed.
- Agree because I do not participate in this activity.

Option 2: Introduce code of conduct for diving and snorkelling within the MCZ

175 stakeholders agreed with this measure for a number of reasons. These included:

- Because the level and/or impacts of the activity do not require stricter management than this option.
- This option would be good in conjunction with other methods, for example, signage, educating bay users, publicity amongst the diving community, licences/permits for diving and/or supported by patrols.
- Divers studying seahorses cause harm so should be managed.
- A code of conduct could help divers contribute to monitoring (e.g. reporting damage) and aid collection of data (e.g. for citizen science projects).
- This would help to educate people about the environment and best practice.
- This option is the most sensible, practical and would be supported by divers.
- This option would benefit the safety of divers.
- This option would be acceptable if option 1 is insufficient.
- This option could be a good start and further measures implemented if it does not work.
- This option provides a good balance between recreation and the environment.
- This option would work as long as the code of conduct is reasonable.
- Agreed but should only apply to diving.
- Suggestion that snorkelling could be allowed only in the swimming zone.
- Agreed as long as it is developed with appropriate consultation and dialogue with diving community.
- Agree because I do not participate in this activity.

Option 3: Prohibition of diving and snorkelling within the seagrass feature of the MCZ

- Because it reduces impacts to, and helps preserve, the marine environment.
- Agreed if other options are proved to be insufficient.
- Because it would provide a better experience for other activities, such as paddlers.
- Agree if there is evidence that these activities cause damage.
- Because it is enforceable (unlike other options).
- Agreed but with the caveat that it allows holiday makers to snorkel from the beach.
- We should ban diving/snorkelling where (and if) anchoring is prohibited.
- Agree but it should only allow led groups, research and education diving/snorkelling in the seagrass.
- Because it would mean fishing whilst diving is banned.
- Agree because I do not participate in this activity

Table 10: Summary of responses for diving and snorkelling

Theme	Comments received	MMO Response
Impacts to economy, tourism and recreation	Management measures will reduce people's education of the area and marine life which encourages them to protect the environment. Management measures for diving and snorkelling may lead to a ban of swimming too.	The MMO is not currently proposing to introduce any measures to restrict diving and snorkelling. Please note, the MMO will always seek to ensure that education and awareness of the environment is supported. The MMO assessment considered diving and snorkelling only. Swimming without snorkelling or diving is not part of this category.
Environmental impacts	Management measures will draw attention to seahorses and result in disturbance. People would seek out the seahorses if they are made aware of them being there.	The MMO is not currently proposing to introduce any measures to restrict diving and snorkelling. Long-snouted seahorses are a designated feature of Studland Bay MCZ, and the bay is well known for its seahorse population, so potential measures are unlikely to draw additional attention. In addition, both species of UK seahorses, long-snouted (<i>Hippocampus guttulatus</i>) and short-snouted (<i>Hippocampus hippocampus</i>), are protected under the Wildlife and Countryside Act 1981, under Section 9 for offences including disturbance ⁷⁰ .
	Divers are best placed to monitor the site so management will be counter-productive for environmental protection.	The MMO is not currently proposing to introduce any measures to restrict diving and snorkelling. Please note, diving or snorkelling monitoring activity may also require a wildlife licence if it could result in disturbance to protected species, such as seahorses. In determining wildlife licences ⁷¹ , the MMO will ensure that any monitoring activities are carried out with licence conditions and appropriate training which will minimise species disturbance.
Safety	Management measures would prevent underwater safety activities (e.g. inspecting boats).	The MMO is not currently proposing to introduce any measures to restrict diving and snorkelling. Please note, in developing any management measures, the MMO would seek to minimise or eliminate safety related risks.

https://www.legislation.gov.uk/ukpga/1981/69/contents
 https://www.gov.uk/guidance/understand-marine-wildlife-licences-and-report-an-incident

Compliance/ enforcement	How is diving/snorkelling defined? Would management of this activity cover fishing whilst diving?	The MMO is not currently proposing to introduce any measures to restrict diving and snorkelling. Please note, any management measures would be explicit about activities being restricted. This activity is defined as swimming either underwater or on the surface, using Self Contained Underwater Breathing Apparatus (SCUBA) or snorkelling equipment (Natural England, 2017b). If implemented, any management measures for diving would apply to anyone fishing whilst diving.
	A code of conduct already exists in Studland Bay.	The MMO is aware of the code of conduct produced by the Seahorse Trust, available on their website ⁷² .
Lack of evidence	Reports about the impacts of diving are biased as the researchers will also disturb the seahorses.	The MMO is not currently proposing to introduce any measures to restrict diving and snorkelling. Please note, all researchers diving to study the seahorses must have a wildlife licence as both species of UK seahorses - long-snouted (<i>Hippocampus guttulatus</i>) and short-snouted (<i>Hippocampus hippocampus</i>) are protected under the Wildlife and Countryside Act 1981. In determining wildlife licences ⁷³ , the MMO will ensure that any monitoring activities are carried out with licence conditions and appropriate training which will minimise species disturbance.
	Measures should only cover diving, there is insufficient evidence for snorkelling impacts. Snorkelling is no different to swimming.	The MMO is not currently proposing to introduce any measures to restrict diving or snorkelling. For information, the relevant potential pressure caused by diving and snorkelling is visual disturbance to long-snouted seahorses (<i>Hippocampus guttulatus</i>). Snorkelling and diving would cause a similar level of visual disturbance and so these activities have been considered together.

https://www.theseahorsetrust.org/userfiles/PDF/British%20Seahorse%20Survey%20leaflet%20for%20the%20web.pdf
 https://www.gov.uk/guidance/understand-marine-wildlife-licences-and-report-an-incident

Annex 2: Engagement period feedback

Dorset Coast Forum have produced a report which summarises the feedback received during the engagement period, please view this report on the <u>Dorset Coast</u> Forum Have Your Say website for full details.

1. Stakeholder polls

Polls were used in the engagement events to gather feedback on proposed options. Key findings are detailed below.

Key stakeholder group representatives engagement event polls:

- 41% of representatives from key stakeholder groups did not have a preference about which draft no anchoring zone was best. In most cases, this was because they did not agree with any of the draft options. 22% of representatives did not answer.
- 34% of representatives from key stakeholder groups thought a voluntary measure would be effective. 22% of representatives did not answer.
- 56% of representatives from key stakeholder groups said they would support a voluntary measure. 19% of representatives did not answer.

Public engagement event polls:

- 46% of stakeholders that voted said they would support a smaller noanchoring zone for 2021, to enable people to apply for moorings, before one of the proposed measures in put in place in 2022.
- 41% of stakeholders that voted thought a voluntary measure would be effective.
- 66% of stakeholders that voted said they would support a voluntary measure

This feedback was considered by the MMO when deciding whether the measure for anchoring would be voluntary or statutory, the location of the no anchoring area and whether the measure would be introduced in phases. Please see section 6 for details on the decided approach.

2. Stakeholder feedback

Table 3 displays key points raised throughout engagement and details how the MMO have considered each of them in the decided approach. For details about the approach, please see section 6.

Feedback	MMO Response
Safety concerns.	The MMO regards safety as paramount and has considered concerns from stakeholders whilst deciding the approach. The MMO understand the need to anchor in emergency situations as well as to avoid an emergency situation developing. The voluntary approach allows boat users to use the area if required for safety reasons.
No anchor zones must allow an area along shore of South/Middle Beach for access, no seagrass grows there.	The MMO recognises the importance of this area for access and has considered this when deciding the area that the voluntary no anchor zones will cover. Please see the Studland Bay MCZ Habitat Protection Strategy for details.
Concern about economic and leisure impacts.	Socioeconomic impacts were considered in the MCZ designation process. These impacts do not remove the MMO's duty to further the conservation objectives of the site. Please see Table 3 for further details. Additionally, the Studland Bay MCZ Habitat Protection Strategy aims to allow recreational activities in Studland Bay to continue in a sustainable way.
How will MMO enforce measures?	A statutory measure is not being introduced at this time for anchoring. More information on MMO enforcement is detailed in Table 3.
Boaters need an alternative to anchoring if it is to be restricted. Suggested installation of moorings.	The MMO have produced the Studland Bay MCZ Habitat Protection Strategy which includes guidance around moorings to support those interested in applying for a licence to install them. Through this guidance the MMO aims to support boat users in creating an alternative to anchoring in sensitive areas.

Community support is essential for management.	The MMO have sought and taken on-board feedback from a
	large number of stakeholders. We recognise the importance
	of community support and would like to emphasise our aim to
	work with people to ensure the successful protection of
	Studland Bay MCZ and ensure the conservation objectives
	are met.
There needs to be an education plan alongside management.	There will be an education period during autumn and winter
	2021 to support the introduction of the voluntary approach for
	anchoring. Please see the Studland Bay MCZ Habitat
	Protection Strategy for details.
How are the MMO going to monitor measures?	The MMO will monitor measures and activity levels. The
	MMO will liaise with Natural England regarding their
	monitoring of ecological parameters. Please see the Studland
	Bay MCZ Habitat Protection Strategy for details.
Why can't the no anchoring zones be smaller?	Management must not cause displacement to other sensitive
,	areas in the MCZ. The MMO are introducing a phased
	voluntary approach to anchoring management which involves
	a smaller interim voluntary no anchor zone in the first phase.
	This will provide time for alternatives to anchoring to be
	explored before the zone is extended in 2022.
The timescales for introducing measures are too short.	We have been engaging with stakeholders since October
3	2020 and refining our management approach in response to
	feedback. As a result of feedback, we have decided on a
	phased voluntary approach over 2021 and 2022.
Boaters may not abide by a measure if it's voluntary.	A voluntary approach has been decided by the MMO to allow
, , , , , , , , , , , , , , , , , , ,	a participatory approach to management, allowing users of
	the bay to work collaboratively, with the MMO and each
	other. It is envisaged that through this collaboration, a
	voluntary approach will lead to better protection of the site. If
	the voluntary approach is found to not be effective, the MMO
	will need to consider whether a statutory byelaw is more

	appropriate, or where there is an urgent need to protect the site, the MMO may introduce an emergency byelaw.
There is not sufficient evidence to support measures.	Queries regarding the evidence have been covered in Annex 1, section 3. The MMO have sufficient evidence to support the introduction of management measures for anchoring in Studland Bay MCZ.

References

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