



Solent Marine Sites (SEMS)

Annual Management Report 2020

**Prepared by the Solent Forum on behalf of
the SEMS Management Group**

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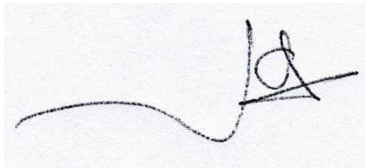
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Foreword

COVID 19, in particular the period since restrictions have been lifted, has seen a surge in activities and changes in the way the public has used our Marine Sites. Most of that has been good to see. Unfortunately, some behavioural aspects have not. Whatever the reason behind this change in the way people enjoy our Sites, it will have had an impact. We are fortunate in as much as very few bodies collate the data to look at this impact from such a broad perspective. SEMS is just such an organisation. Our ability to share this data and promote better practice to address these changes is perhaps more important than ever. As we all return to addressing our own individual roles and the impact of COVID (it is worth acknowledging that for some the lockdown period brought with it greater challenges), my hope is that the relevance of the SEMS group in informing decision making on how best to meet some of our post-lockdown challenges will be readily apparent.

Please feel free to contact me, Karen or Kate directly, whether you have a 'eureka' moment or a more modest idea, it could really make a difference. Thank you.

A handwritten signature in black ink, appearing to read 'Jason Scott', written on a light-colored background.

Jason Scott
Chair, SEMS
River Hamble Harbour Master

1 Executive Summary

In 2020, seventeen coastal and marine activities that take place in the Solent were surveyed for the Solent Marine Sites (SEMS) Annual Management Scheme. Of the thirty two Relevant Authorities in the Solent invited to complete the survey, twenty nine responded. Respondents were asked how participation in these activities had changed since the previous year, and whether they believed they were having an impact on SEMS.

This Annual Management Report evaluates and discusses the responses, including looking at existing management measures and identifying actions. Natural England provide guidance on the impacts that these activities may have on SEMS.

Supplementary information and additional resources on activities can be found on the SEMS website at: http://www.solentems.org.uk/sems/SEMS_Activities/. The Solent Forum's Natural Environment Group (NEG) takes forward strategic actions.

For changes in activity level participation or occurrence, the most common response for all activities was no change, this reflects a period of stability in the activities that take place within the Solent. There are areas, particularly land based recreational activities, where respondents have limited data, so supplementary data has been used such as Bird Aware Solent visitor data.

For those activities where respondents recorded a change in their annual survey return, this included increases in shore based fishing, dog walking, littering, operation of coastal FCERM schemes, port and harbour maintenance, recreational light aircraft, non-motorised watercraft and slipway/jetty maintenance. Respondents reported decreases in boat repair and maintenance, fishing, general beach recreation, coastal walking, mooring and anchoring and non-motorised watercraft.

Activities highlighted by multiple respondents potentially impacting on SEMS sites included shore-based fishing (bait digging), coastal walking with dogs, litter, and the use of recreational watercraft. The issue of bird disturbance is ongoing in the Solent and it is being addressed by the Bird Aware Solent partnership. Regarding litter, NEG has established a 'Clean Solent Shores and Seas' resource hub to collate evidence on the numerous existing initiatives that are happening locally and nationally to manage litter and educate people.

Respondents completed their Survey returns at the start of the Covid-19 pandemic, a few returns included the initial consequences of this, and we have included a short section on their experiences at the end of the Report. The full impact of lockdown and the subsequent opening up of coastal activities will be reflected in next year's report.

This Report also recognises the ongoing good work that is being undertaken by the Solent's Relevant Authorities, and the trade associations and user groups for recreational activities, to protect and conserve the Solent's designated sites. SEMS will continue to promote this work and share best practice across the Solent, working in partnership with all relevant coastal stakeholders to address the actions identified.

2 Introduction

The Solent Marine Sites (SEMS) Annual Management Report provides an overview of the SEMS Management Scheme, in which the SEMS Management Group of Relevant Authorities (RAs) act to comply with the Conservation of Habitats and Species Regulations 2017. It shows the content, structure and process of undertaking the Management Scheme. It summarises, evaluates and sets actions for each of the seventeen activities surveyed in the SEMS annual survey.

Actions to address the issues raised are debated at the annual SEMS Management Group meeting, which takes place each September. The Solent Forum's Natural Environment Group (NEG) takes forward and delivers proposed strategic actions, other actions are undertaken by the SEMS Management Group members or individual Relevant Authorities (RA).

2.1 European Marine Sites

European Marine Sites (EMSs) are Marine Protected Areas below mean high water designated as Special Areas of Conservation (SACs) or Special Protected Areas (SPAs). The management of EMSs was established under Regulation 38 of the Habitats Regulations. This gives RAs the responsibility for monitoring activities across designated sites, and for addressing any damaging issues.

Marine Conservation Zones are covered by separate legislation and are not currently included in the SEMS Management Scheme. However, for the first time this year, this designation was included in questions in the Annual Survey; respondents were asked if they were monitoring these sites, and if they had any concerns that activities were having an impact. Please see section 5 for more details.

2.2 Solent Marine Sites

The Solent is a complex site encompassing a major estuarine system. The Solent and its inlets are unique in Britain and Europe for the complexity of the marine and estuarine habitats present. Sediment habitats within the estuaries include extensive areas of intertidal mudflats, saltmarshes, eelgrass (*Zostera* spp.) and natural shoreline transitions, such as drift line vegetation. The rich intertidal mudflats, saltmarsh, shingle beaches and adjacent coastal habitats, including grazing marsh, support nationally and internationally important numbers of migratory and over-wintering waders and waterfowl, as well as important breeding gull and tern populations.

The Solent Marine Site (SEMS) Management Scheme applies to the Solent Maritime SAC, Solent and Southampton Water SPA, Portsmouth Harbour SPA and Chichester and Langstone Harbours SPA. It also includes the Solent and Dorset Coast SPA for foraging terns that covers most of the offshore area which was classified in January 2020.

Appendix 7.1 shows a map of the Solent Marine Sites.

2.3 SEMS Management Scheme

Within the Solent, a Management Scheme (MS) was first established in 2002 by the RAs working together; members of the scheme and the terms of reference can be accessed at: http://www.solentems.org.uk/sems/SEMS_Meetings/. The Solent Forum provides the secretariat for the SEMS MS.

The overall MS components include an Annual Survey and subsequent report, preparation of an Annual Management Report, an annual meeting of RAs, consultation with strategic stakeholders and an agreed action plan. These outputs are supported by the SEMS website, this provides more detailed resources and guidance on the report's content. Figure 2 shows the framework and timetable of the MS.

The context of the Management Scheme, in terms of the overall management of MPAs, is illustrated in Figure 1.

Figure 1.

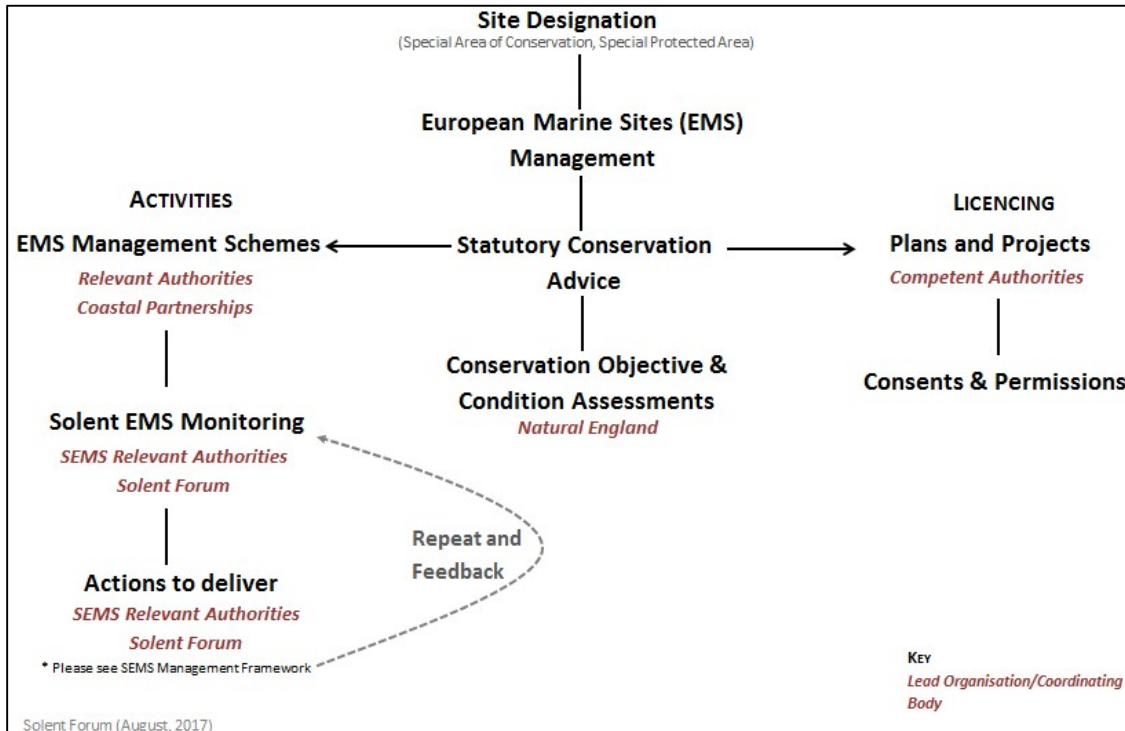
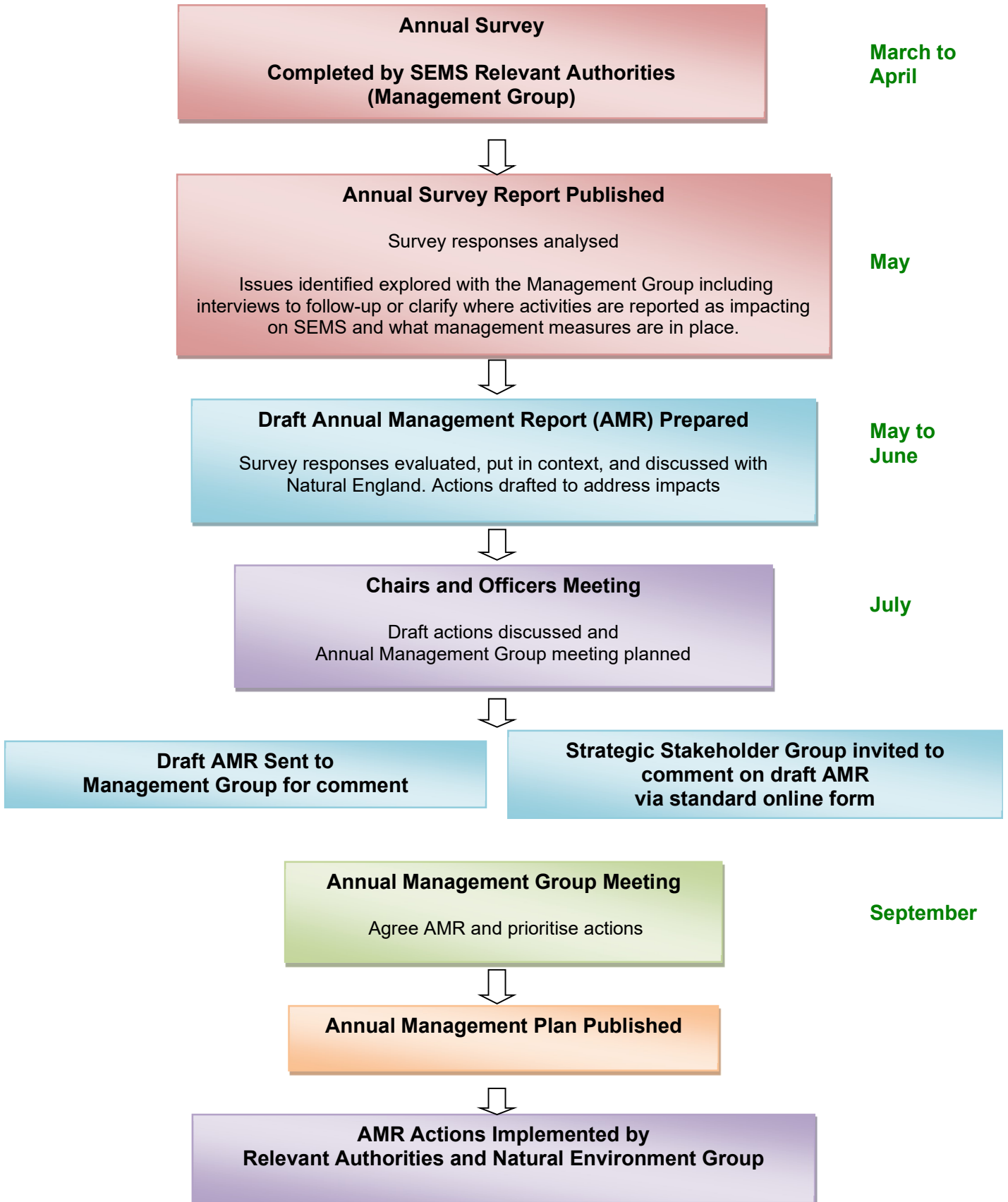


Figure 2. Framework and timetable for delivering the annual management scheme



2.3.1 Relevant Authority Responsibilities

The RAs individually report on SEMS activities within their area of responsibility. They provide information on activity participation change and potential impacts by completing an online survey every spring (see table 1). This survey data forms the basis of this Annual Management Report. Additionally, RAs need to have regard to the Habitats Regulations and aspire to good practice through their normal work and roles. Please see guidance at: http://www.solentems.org.uk/sems/SEMS_Actions_Guidance/.

2.3.2 Natural Environment Group

The Natural Environment Group (NEG) is open to all SEMS RAs who wish to be involved and other invited organisations with an interest in the natural environment. NEG assists the SEMS MG in the delivery of strategic actions. The Solent Forum provides the secretariat for NEG.

2.3.3 Strategic Stakeholder Group

The Strategic Stakeholder Group (SSG) exists to ensure that legitimate stakeholders are briefed and can comment on the content of the SEMS Annual Management Report. They are also asked to provide feedback to the management group on key strategic issues. Figure 2 shows how this group fits into the overall management scheme. A separate report with their comments is published on the SEMS website.

2.3.4 Bird Aware Solent

Bird Aware Solent is an initiative to raise awareness of the birds that spend the winter on the Solent, so that people can enjoy the coast and its wildlife without disturbing the birds. It is the brand name of the Solent Recreation Mitigation Partnership. Many of the Solent's RAs are members of this Partnership and use it to help fulfil their duties to mitigate bird disturbance from recreational activity.

It is made up of fifteen local councils, Natural England, the Royal Society for the Protection of Birds, Hampshire & Isle of Wight Wildlife Trust, and Chichester Harbour Conservancy. It implements measures to mitigate the impact of additional recreational activity resulting from planned housing development on the three Special Protection Areas in the Solent. It succeeds the Solent Disturbance and Mitigation Project which commissioned the initial research into the impact.

2.4 Annual Monitoring Survey, 2020

In 2020, thirty two RAs were invited to answer the survey and 29 responded (see table 1 below). Full details of the online survey results are given in the SEMS Annual Survey report 2020, which can be viewed at: http://www.solentems.org.uk/sems/Annual_Monitoring/.

Table 1. Organisations who completed the Survey, 2020	
Associated British Ports (ABP)	Natural England (NE)
Beaulieu River Management (BRM)	New Forest District Council (NFDC)
Chichester District Council (CDC)	New Forest National Park Authority (NFNPA)
Cowes Harbour Commissioners (CoHC)	Portsmouth City Council (PCC)
Chichester Harbour Conservancy (ChHC)	Queen's Harbour Master (Portsmouth) (QHM)
Environment Agency (EA)	River Hamble Harbour Authority (RHHA)
Eastleigh Borough Council (EBC)	Portsmouth International Port
Fareham Borough Council (FBC)	Southampton City Council (SCC)
Gosport Borough Council (GBC)	Southern IFCA (SoIFCA)
Hampshire County Council	Southern Water (SW)
Havant Borough Council (HBC)	Sussex IFCA (SxIFCA)
Isle of Wight Council (IoWC)	Test Valley Borough Council (TVBC)
Langstone Harbour Board (LHB)	West Sussex County Council (WSCC)
Lymington Harbour Commissioners (LHC)	Yarmouth Harbour Commissioners (YHC)
Marine Management Organisation (MMO)	
Organisations Who Did Not Respond	
Trinity House Lighthouse Service	
Wightlink Ferries (staff furloughed)	
Winchester City Council	

3 Activity Summary

Sections 3 and 4 review all the seventeen activities that were included in the SEMS Annual Survey Report, 2020. This report has been published at: www.solentems.org.uk/sems/Annual_Monitoring/SEMS_ASR_2020_Final.pdf and contains the detailed responses from individual Relevant Authorities.

There are three sections under each activity:

1. Summary of the survey response from 2020.
2. Discussion and evaluation. This includes sections written by Natural England on any potential impacts of the activity and whether it is currently impacting on SEMS. There is a final section detailing existing management measures
3. Actions

In the action section, actions are dated as to when they were first proposed, or are ongoing, the lead and partners and the progress made. NEG takes on strategic issues that affect the Solent widely, and delivers these actions via its biannual meetings.

3.1 Summary Tables of all Activities

Tables 2, 3 and 4 summarise the 2020 survey results, they show how activity participation levels have changed and whether relevant authorities believe that the activity is having an impact on the SEMS site. In the tables the mode value has been highlighted in green.

Table 2. Recorded changes in activity participation levels 2019 to 2020.

Activity	Increased	Decreased	No change	Don't know	Total Responses
Accidental vessel discharges/emissions including oil spill and clean-up	0	0	13	4	17
Boat repair and maintenance	0	2	8	5	15
Fishing (including shellfisheries)	0	3	10	4	17
Fishing (shore-based activities)	4	0	7	7	18
General beach recreation	0	1	8	7	16
Grazing and foraging	0	0	3	3	6
Land recreation - Dog walking	2	1	5	8	16
Land recreation - Walking (other than dog walking)	1	1	7	8	17

Littering and removal of litter	3	0	13	3	19
Mooring and anchoring	0	2	12	1	15
Operation of coastal flood and erosion risk management schemes	1	0	12	4	17
Operation of ports and harbours (maintenance of infrastructure)	3	0	10	2	15
Recreation - light aircraft	4	0	3	4	11
Recreation - non-motorised watercraft	2	1	8	8	19
Recreation - powerboating or sailing with an engine	0	0	12	4	16
Slipway and jetty cleaning and maintenance	1	0	10	5	16
Wildfowling	0	0	3	4	7
Source: SEMS Annual Survey, 2020					

Table 3. Trend data for activity level change in 2019 and 2020

At the SEMS Management Group meeting, 2019 a request was made to try and obtain trend data for changes in activity levels. Table 3 shows the mode response for activity change for a time series; currently we have data for two years.

Activity	Mode response 2020	Mode response 2019
Accidental vessel discharges/emissions including oil spill and clean-up	No change	No change
Boat repair and maintenance	No change	No change
Fishing (including shellfisheries)	No change	Decreased/no change
Fishing (shore-based activities)	No change	No change
Grazing and foraging	No change	No activity recorded
General beach recreation	No change	No change
Land recreation - Dog walking	No change	No change
Land recreation - Walking (other than dog walking)	No change	No change

Littering and removal of litter	No change	No change
Mooring and anchoring	No change	No change
Operation of coastal flood and erosion risk management schemes	No change	No change
Operation of ports and harbours (maintenance of infrastructure)	No change	No change
Recreation - light aircraft	Increase	No change
Recreation - non-motorised watercraft	No change	Increase/no change
Recreation - powerboating or sailing with an engine	No change	No change
Slipway and jetty cleaning and maintenance	No change	No change
Wildfowling	No change	No change
Source: SEMS Annual Surveys, 2020 and 2019		

Table 4. Records if RAs believe activities are impacting on SEMS sites

Please see table 1 for organisation abbreviations in the final column.

Activity	Yes	No	Total	Organisations who responded yes to an impact
Accidental vessel discharges/emissions including oil spill and clean-up	3	14	17	ChHC, PIP, BRM
Boat repair and maintenance	1	13	14	ChHC
Fishing (including shellfisheries)	2	13	15	ChHC, PIP
Fishing (shore-based activities)	6	12	18	LHB, EA, ChHC, SxIFCA, EBC, SCC
General beach recreation	3	12	15	ChHC, EBC, HCC
Grazing and foraging	2	4	6	ChHC, HCC
Land recreation - Dog walking	9	7	16	LHB, WSCC, ChHC, CDC, FBC, EBC, HCC, BRM, GBC
Land recreation - Walking (other than dog walking)	7	10	17	LHB, ChHC, CDC, FBC, EBC, HCC, GBC

Littering and removal of litter	8	11	19	EA, LHC, ChHC, IOWC, EBC, SCC, SW, GBC
Mooring and anchoring	3	11	14	ChHC, NE, BRM
Operation of coastal flood and erosion risk management schemes	3	14	17	EA, ChHC, EBC
Operation of ports and harbours (maintenance of infrastructure)	2	13	15	ChHC, PIP
Recreation - light aircraft	2	8	10	ChHC, EBC
Recreation - non-motorised watercraft	4	15	19	ChHC, IOWC, PIP, EBC
Recreation - powerboating or sailing with an engine	4	12	16	ChHC, PIP, EBC, BRM
Slipway and jetty cleaning and maintenance	1	14	15	ChHC
Wildfowling	1	5	6	ChHC
Source: SEMS Annual Survey, 2020				

3.2 Understanding the Condition of SEMS

3.2.1 Natural England's Conservation Advice

Natural England's (NE) conservation advice (CA) packages provide statutory advice which informs the SEMS MS. Most designated MPAs within SEMS now have a formal conservation advice package, this is available on Natural England's Designated Sites System at: <https://designatedsites.naturalengland.org.uk/>.

The CA package includes Advice on Operations (AoO) which identifies pressures associated with the most commonly occurring marine activities, and an assessment of the feature/sub-feature or supporting habitat sensitivity to these pressures. This advice also helps users understand which features could be impacted by a plan or project and help screen it as part of the initial phases of a Habitats Regulations Assessment (HRA).

For an activity, the risk of harm will be determined by its extent, magnitude and duration, together with the sensitivity of the feature/sub-feature or supporting habitat. Where available, site condition data is also used to inform this assessment. The aim of this process is to help the initial screening (i.e. tLSE) to identify whether the risks posed by an activity are likely to have a significant effect on the designated sites. The CAs are used as the basis to evaluate the potential impact of each activity within this SEMS Annual Management Report. Please note detailed advice can be provided by Natural England upon request.

Natural England are currently working on the conservation advice package for Solent and Dorset Coast SPA, with the hope to produce draft advice for March 2021.

3.2.2 Site Condition Assessments

During 2015-16, Natural England reviewed, refined and tested their SAC condition assessment methodology to provide more robust results. They employed this methodology to carry out a rolling programme of marine feature condition assessments starting in 2016-17.

Understanding SEMS site condition is important in supporting management decisions. Annual monitoring of activities by the SEMS MG aims to identify threats to site condition or, anecdotal signs of any deterioration, so that timely management action can be taken to avoid damage or further evidence can be collected.

The condition of EMSs are assessed by feature and reported on by NE every six years. The most recent site condition can be found on Natural England's Magic Map website at: (<https://magic.defra.gov.uk/>).

Condition assessments for SEMS interest features indicate if they are in favourable condition; identifying threats which have the potential to impact their condition and therefore require further monitoring or management. In this report, site condition is referenced where further action is needed.

Condition assessments have been completed for the Solent Maritime SAC, which shows all marine features and sub features, apart from coastal lagoons to be in unfavourable condition. This unfavourable status is largely due to a few key factors:

- Elevated nutrient levels
- Elevated aqueous contaminants
- Low infaunal quality index (IQI)
- Anthropogenic pressures including trampling

Condition assessments have also been completed for the South Wight Maritime SAC, which is in favourable condition, and for the Solent and Isle of Wight Lagoons SAC which is in broadly favourable condition. Links to these condition assessments are available at: http://www.solentems.org.uk/sems/Condition_assessments/.

A new methodology is being produced for SPA condition assessments, with the process anticipated to commence in 2020-21. Once the SPA condition assessments have been completed, they will also be available on NE's designated Sites System.

Recently, Natural England have begun to include terrestrial drivers into its advice on adverse condition/condition threat that reflect how land based activity can impact on coastal designated sites. In the Solent Maritime SAC, drivers now include forestry, freshwater inputs and agriculture.

3.2.3 Other Plans

Other plans also impact on the management and condition of SEMS, for example Catchment Management Plans and the South Marine Plans. The former embed collaborative working at a river catchment scale to deliver cross-cutting improvements to water environments. The Habitat Regulations Assessment for the South Marine Plan details a wide range of pathways and impacts of activities. See:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/725894/04_HRA_Appropriate_Assessment.pdf.

4 Individual Activities

Section 4 reviews each of the seventeen activities covered by the SEMS Management Scheme in greater detail, evaluating their impact and providing details of any management measures and any actions required.

4.1 Accidental vessel discharges/emissions including oil spill and clean-up

4.1.1 Survey Response Summary

The predominant response from the survey respondents was that the occurrence of this activity has not changed since last year and that it is unlikely to be having an impact on the SEMS sites. This activity was not reported as causing concern in previous surveys. Of the three respondents that recorded a concern, this was due to the impact on water quality from minor spills.

Respondents noted that it is not possible to prevent all accidental discharges, such as small leaks, but that measures are in place to investigate and address them if they do happen. Respondents also added that there are good plans and procedures in place to deal with oil spills. There is a move towards using electric and alternative fuels for marine vessels, such as LPG, this will help to minimise oil and diesel discharges.

Accidental vessel discharges/emissions including oil spill and clean-up				
<i>Activity includes accidental discharges and/or emissions from all types of vessels, including exhaust fumes, waste water, sewerage, oils, lubricants and chemicals, including oil spill and clean-up.</i>				
Change in Activity Level reported in 2020 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
0	0	13	4	17
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No		Total Responses
3		14		17
Source: SEMS Annual Survey Report, 2020				

4.1.2 Evaluation and Discussion

Potential Impacts

Materials such as oil are of concern in the marine environment due to their buoyancy and easy transport from one location to another on currents, and the damage it can cause to fish and seabird populations. PAH contamination can also lead to the lowering, temporarily or more permanently, of oxygen levels in the water.

Although there is insufficient evidence on the impacts of features within SEMS, it is known that wading birds can be directly impacted by contamination with hydrocarbon, and the accumulation of hydrocarbons caused by feeding on contaminated fauna can cause changes in migratory and breeding behaviour. Most effects are probably linked to chronic exposure to relatively low levels of pollutants.

Impacts on SEMS

Natural England do not consider this activity to be having an impact on the SEMS sites when considered alone. However, elevated contaminant levels are one of the reasons identified as causing Solent Maritime SAC to be in unfavourable condition. Therefore, Natural England support continued review as highlighted in the management measures section of this report.

Management Measures

The SEMS MG members, who have jurisdiction under this activity, already have policies and procedures in place to address accidental discharges. Regular emergency spill exercises will help to keep equipment and skills up to date. Information on procedures is available on the relevant authorities' websites and other publications such as harbour guides.

4.1.3 Actions

No current action required by SEMS MG.

4.2 Boat repair and maintenance

4.2.1 Survey Summary Response

Most respondents reported no changes for this activity, two recorded a decrease. One respondent thought that this activity is impacting on the SEMS sites. Their concern was disturbance to shoreline habitats and pollution through the release of fragments of plastics or fibre glass and TBT paints/treatments throughout the Harbour. Natural England also flagged up the potential for the spread of non-native species. Anecdotally, respondents noted that newer boats are more low maintenance and need less repair and maintenance. Any commercial hull cleaning that has the potential to release debris (e.g. biofouling, paint flakes) into the marine environment is prohibited within ABP's jurisdiction.

Boat repair and maintenance				
<i>Activity includes vessel maintenance and repair on land or afloat, including hull cleaning. Please also consider the vessels, machinery and vehicles associated with this activity.</i>				
Change in Activity Level reported in 2020 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
0	2	8	5	15
Do you think the Activity is having an impact on the SEMS Site?				
Yes	No			Total Responses
1	13			14
Source: SEMS Annual Survey Report, 2020				

4.2.2 Evaluation and Discussion

Potential Impacts

Natural England's draft Advice on Operations identifies a range of pressures arising from boat repair/maintenance that may impact breeding and non-breeding bird populations of SPAs. These include above water noise, visual disturbance, contaminants and the introduction or spread of invasive non-native species. A number of designated bird species within the SEMS are considered to be sensitive to these pressures, which can result in displacement and/or mortality. Similarly, the construction of boat repair/maintenance facilities may impact SPA supporting habitats and designated SAC features via pressures such as physical change or loss of habitat, smothering and siltation.

Boat repair/maintenance has the potential to introduce invasive non-native species (INNS) into the marine environment and it needs careful management. Recreational craft have been identified as one of several vectors by which INNS can be introduced to new areas. There is currently no legislation that requires businesses to take steps to deal with INNS, although the Wildlife & Countryside Act 1981 requires the prevention of spreading of INNS from a site where they are known to be present.

There is a distinction between construction of boat repair /maintenance facilities, and their operation. Construction of boat/repair maintenance facilities in SEMS is subject to planning

permission/marine licensing and is therefore subject to a Habitats Regulation Assessment (HRA). The HRA assesses both the construction and operational impacts. However, increased use or expansion of existing facilities could have potential environmental impacts such as pollution or the spread of INNS.

Impacts on SEMS

Whilst Natural England do not consider this activity to currently be impacting on SEMS it does have the potential to increase the presence and spread of Invasive Non-Native Species which has been listed as a condition threat for Solent Maritime SAC. Natural England advises that harbours and marinas should promote best practice.

The release of TBT into the marine environment from antifouling has long been of concern in the Solent. Changes in antifouling practice means that this has now become a legacy issue, however, levels of TBT are still reported above Threshold Levels, particularly in Southampton Water, suggesting that historical TBT is still present in sediments and slowly leaching into the wider environment. Environment Agency monitoring indicates that there is a declining trend of TBT with contamination limited to hotspots.

In addition, elevated contaminants levels are one of the reasons for unfavourable status of SEMS, this includes copper and other derivatives which have replaced TBT, and therefore, further evidence is required to identify the sources of these contaminants. The Environment Agency report that copper has never caused failures of WFD water bodies within SEMS and it is not currently undertaking any investigations into copper sources. However, previous work showed that copper concentrations are elevated in the Hamble estuary compared to elsewhere in the SEMS, probably linked to the high density of boats in the Hamble. More recent evidence indicates that copper in the Hamble has declined, suggesting that measures to reduce contamination are working and should be continued.

For more information please see the Open data, Water Quality archive at:

<http://environment.data.gov.uk/water-quality/view/landing> and the Open data, Biosys archive at: <https://data.gov.uk/data/search?q=biosys>

Management Measures

The GreenBlue initiative produces detailed guidance and undertakes education programmes on how to minimise the environmental impacts from boat maintenance and repair. It includes guides on:

- Antifouling
- Cleaning on board
- Sewage
- Oil and fuel

See: <https://www.thegreenblue.org.uk>.

The Check, Clean, Dry campaign is a national campaign run by the GB non-native species secretariat, designed to help stop the spread of invasive plants and animals in our waters. It has lots of resources and guidance for best practice and the impacts from INNS. See: <http://www.nonnativespecies.org/checkcleandry/>.

A Filtabund filtration system has been installed at Marina Developments Limited (MDL) Mercury Yacht Harbour. This is thought to be the first of its type to be installed in the Solent Region, with more planned for other MDL sites. The filtration system collects all water and associated solids

produced during the washdown of a vessel. The waste water is pumped through an automated 7-stage filtration system that removes solids (including paint particulates and non-native species), fine sediments, hydrocarbons, dissolved copper and zinc. Whilst other sites in the river have systems that remove solids, sediment and oils, albeit to a lesser degree, this system further enables additional pollutants to be removed, thus resulting in significantly cleaner water being drained back into the estuary.

For more resources and information please see:

http://www.solentems.org.uk/sems/SEMS_Activities/Boat_repair/.

4.2.3 Actions

1. **Action (ongoing):** Promote and share best practice in addressing the potential environmental impacts of boat repair/maintenance. For resources see: http://www.solentems.org.uk/sems/SEMS_Activities/Boat_repair/.
Lead/Partners: Harbour authorities and all others who have this activity in their jurisdiction.
2. **Action (ongoing):** Promote and share material on invasive non-native species (INNS) relevant to SEMS features.
Lead/Partners: NEG and Natural England
Action progress: Material on this topic has been and will continue to be added to the SEMS website: http://www.solentems.org.uk/sems/SEMS_Activities/Boat_repair/. The RAPID Life Project is now complete and is available at: <http://www.nonnativespecies.org/index.cfm?sectionid=58>.
3. **Action (2020):** Natural England to send an update on their monitoring work on INNS to the SEMS office for distribution once all survey work is completed (September 2020).
Lead/Partners: Natural England
Action progress: Final Report will be shared with SEMS to publish on the SEMS website once produced in October 2020.

4.3 Fishing (including shellfisheries)

4.3.1 Survey Summary Response

Two respondents were concerned that fishing was impacting on SEMS sites. Their concerns were that dredges are likely to negatively impact invertebrate and fish habitats on the seafloor and netting activities are removing juvenile fish from the harbour (Chichester) at various locations.

Langstone Harbour Board reported both a reduction in the number of fishing vessels by fifty percent and in the number of fishing days due to SolFCA byelaws. The EA reported a slight decline in both the Beaulieu Seine net fishery and the fyke net fishery for European Eel.

SolFCA reported that the overall activity within the Solent Marine Sites has decreased over the past 12 months in most fisheries. It noted that fishing activities have been excluded from a number of areas in the Solent at certain times due to the IFA2 cable route into the Solent, particularly where the cable makes landfall at Lee-on-the-Solent or around Chilling. They saw no indication that netting, lining or sea angling (from a vessel) has changed from previous years, although due to poor winter weather a decrease has been reported anecdotally.

ABP and QHM who have statutory harbour authority powers over large areas of the Solent work with the relevant IFCA to ensure that fishing gear does not affect the safety of navigation. They also report on illegal fishing activity when seen.

Please see the SEMS Annual Survey Report, 2020 for more detailed information on changes to fishing activity.

Fishing (including shellfisheries)				
<i>Activity includes anchored nets or lines, electrofishing, traps, pelagic fishing (or fishing activities that do not interact with sea bed), hydraulic dredges, dredges, demersal trawl, demersal seines, diving and sea angling.</i>				
Change in Activity Level reported in 2020 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
0	3	10	4	17
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No		Total Responses
2		13		15
Source: SEMS Annual Survey Report, 2020				

4.3.2 Evaluation and Discussion

Potential Impacts

Natural England's Advice on Operations identifies a range of pressures arising from shellfish dredging that may impact breeding and non-breeding bird populations within SPAs. These include above water noise and visual disturbance. A number of designated bird species within SEMS are considered to be sensitive to these pressures, which can result in displacement and/or mortality.

Similarly, shellfish dredging may impact SPA supporting habitats and designated SAC features via pressures such as abrasion/disturbance of the seabed and penetration/disturbance of the substratum below the seabed.

There are concerns over the impacts of discards on marine ecosystems, including changes in population abundance and demographics of affected species, and altered species assemblages and food web structures. However, discards also provide important food resources for some scavenging species, including seabirds. Pelagic/mid water trawls, drift nets, pelagic seines and long lines can result in the entanglement and bycatch of a range of fauna.

Impacts on SEMS

Natural England is content that the impacts of fishing (including shellfisheries) in SEMS have been correctly assessed by Southern IFCA and Sussex IFCA, and the current management measures continue to prevent adverse effects on site features/supporting habitats.

Management Measures

The Oyster Permit Byelaw, introduced in 2015 by Sussex IFCA, provides responsive adaptive management for oyster fisheries and supports the development of sustainable fisheries through catch restrictions, gear configuration through permit conditions. Sussex IFCA made a byelaw on 25 January 2020, which is with Defra for sign off, which will prohibit netting and trawling within Chichester Harbour to protect fish nursery and spawning areas.

Shellfish dredging in the Solent is managed through various mechanisms. The Solent Dredge Fishing Byelaw was brought in place to ensure that the conservation objectives of the site were not being impacted by shellfish dredging. Further to those measures, the Temporary Closure of Shellfish Beds byelaw was implemented in the Solent for the 19/20 season to close the oyster fishery due to low stock levels removing the vessels targeting oysters within the Solent. The Bottom Towed Fishing Gear Byelaw 2016 prohibits towed gear over the more sensitive areas of the Solent Marine Site. All fishing activities have been assessed through the revised approach process, and either led to the development of management or concluded no adverse effect. The assessments for the activities requiring a full, detailed HRA can be found at (<http://www.southern-ifca.gov.uk/management-of-mpas>).

Marine recreational fishing also needs to be considered in this activity category. The Sea Angling Diary Project aims to provide accurate estimates of recreational catches to improve the management of stocks, helping to achieve conservation goals and eventually improve the availability of fish to sea anglers. It is run collaboratively by Cefas and Substance. The project is funded by Defra and it is also supported by the national sea angling associations. See: <https://www.seaangling.org/>.

For further information and resources please see: http://www.solentems.org.uk/sems/SEMS_Activities/commercial_fishing/.

4.3.3 Actions

- 1. Action:** Continue to report to the IFCA's any illegal fishing activity around closed beds or illegal fish trapping.
Lead/Partners: SEMS MG Members
Action Progress: Ongoing

2. Action: Publicise and encourage recreational anglers to take part in the Sea Angling Diary project. See: <https://www.seaangling.org/>. Cefas have published findings of this study at: <https://www.cefas.co.uk/news/sea-angling-contributes-over-1-5bn-to-uk-economy/>.

Lead/Partners: SEMS MG Members

Action Progress: Ongoing.

4.4 Fishing (shore-based activities)

4.4.1 Survey Summary Response

Six respondents believed that this activity was impacting on SEMs sites. Concerns were reported at Southmoor on Hayling Island from trampling and mudflat disturbance due to bait digging, thought to be commercial in nature. There is also an issue around the Nutbourne and Printhead Channels in Chichester Harbour from shell pickers; Sussex IFCA has undertaken a Habitats Regulations Assessment of the activity and is proposing to bring in management of bait and shellfish collection within the near future. Shore based angling also takes place around Sandy Point, the head of the Fishbourne channel, and Nutbourne marshes.

In Southampton concerns were raised about damage to the inter-tidal area from commercial collection of shellfish at Weston Shore. Incidents are reported to the Police, IFCA and Port Health.

The EA are concerned that this activity is having a year-round impact at a wide range of locations, causing disturbance, plastic pollution and removal of species.

On the River Hamble, bait digging remains elevated and RHHA continues its provision of information and liaison with SolFCA and the police.

SolFCA reported that levels of intertidal hand gathering for shellfish appear to have increased in areas of the SEMs. Particularly Weston Shore, Hill Head, Hamble point and Lee-on-the-Solent. A level of activity also remains in Portsmouth and Langstone Harbours. It is understood that these include commercial and recreational gatherers. The increase in activity could be as a result of the increased presence of pacific oysters along the shorefront. SolFCA do not have evidence to suggest that the levels of bait digging have increased or decreased.

An issue of commercial shellfish collection at Hill Head took place in June 2020, this was investigated by Hampshire Police under modern day slavery exploitation

Fishing (shore based activities)				
<i>Activity includes crab tiling, bait digging, shellfish collection (including seed mussel) e.g. by hand (with or without digging apparatus), rake or through the use of 'tiles'. Also includes rod and line angling, the setting of pots and nets from the shore and the use of vehicles or vessels to access the shoreline.</i>				
Change in Activity Level reported in 2020 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
4	0	7	7	18
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No		Total Responses
6		12		18
Source: SEMS Annual Survey Report, 2020				

4.4.2 Evaluation and Discussion

The public have a right to dig bait as an ancillary part of the public right of fishery; this does not imply a right of access across private land or the collection of bait for commercial purposes. Ragworm, lugworm, crab, shellfish and other marine organisms are dug or foraged, mainly within the intertidal zone between high and low water.

The Angling Trust's view on whether bait collection is for personal or commercial use is down to if the bait is collected by or on behalf of the angler (and their friends or family) directly intending to use the bait, or whether it is to be sold or exchanged for another's use. It is not always possible to determine this from the collection technique or practice alone, but commercial operators will likely be more resource intensive, often working in gangs or using machinery.

The Angling Trust reported that with fishing being one of the first sports to resume following easing of the Covid-19 lockdown restrictions, many people took up angling for the first time. As a result, stores across the country sold out of fishing starter kits and rod licence sales increased. Anecdotal evidence country wide was this increase led to greater demand for bait, with more bait digging taking place to meet the needs of anglers, exacerbated by limited accessibility to bait shops. Recreational angling from boats was limited due to social distancing rules.

Potential Impacts

Natural England's Advice on Operations identifies a range of pressures arising from shore-based fishing activities that may impact breeding and non-breeding bird populations of SPAs. These include above water noise, visual disturbance and the removal of target and non-target species. A number of designated bird species within the SEMS are considered to be sensitive to these pressures, which can result in displacement and/or mortality. Similarly, shore-based fishing activities may impact SPA supporting habitats and designated SAC features via pressures such as abrasion/disturbance of the seabed and penetration/disturbance of the substratum below the seabed.

A great deal of evidence exists on the impacts of bait digging, for example, the literature reports that during the process of bait collection, by hand, mechanical digging or boulder turning, many animals and plants other than those being sought in the intertidal mudflat habitat will be damaged and their population levels reduced. Natural England consider that the collection of approximately 3lb of worms represents an amount permitted for personal use.

Impacts on SEMS

Natural England state that due to the extent and complexity of bait digging in the Solent a pilot is suggested, initially in one area of SEMS, using the Poole Harbour model (i.e. establishing a working group to develop a bait digging Memorandum of Agreement). NE remains committed to exploring the idea of piloting the Poole Harbour model with Southern IFCA.

Management Measures

The position of the Crown Estate is, that for the foreshore under their jurisdiction, they do not have any powers to manage bait collection that is exercised as a public right; leases that they grant to local authorities and other regulatory bodies for local management of Crown Estate foreshore are always subject to the public right of fishing, which includes bait collection. Any management would, therefore, need to be by way of the relevant authority exercising its statutory powers rather than by the landowner or one in whom the landowner may vest its rights. Regarding commercial collection, they have not been approached to date for their consent. If they were approached, they would consult with the relevant authorities before considering granting any permissions.

SEMS has produced a [Code of Conduct for Bait Collection](#). To evaluate and supplement this code, in 2020 a Solent Mudflat Disturbance Group was established by the Natural Environment Group. This will explore in more detail the location and nature of intertidal disturbance and what additional measures could be introduced.

RHHA continues to enforce its byelaw, details at:

<https://www.hants.gov.uk/thingstodo/riverhamble/waterways/byelaws#step-7>.

SxIFCA have produced [Guidance for Solent Relevant Authorities for monitoring shore-based fishing](#). See:

http://www.solentems.org.uk/sems/SEMS_Activities/Shore_based_fisheries/Monitoring_Shore_Based_Fishing.pdf).

Details of SxIFCA's Chichester Harbour European Marine Site (Specified Areas) Prohibition of Fishing Method Byelaw can be found at:

<https://secure.toolkitfiles.co.uk/clients/34087/sitedata/files/Seagrass-byelaw-Impact-Assessment.pdf>. This seeks to protect habitats and species, specifically sensitive eelgrass beds within Chichester Harbour, from both current and possible future increases in damaging fishing activities

SoIFCA has byelaws in place to protect the most sensitive features of the European Marine Site from Hand Gathering and Bit Digging in both the SPAs and SACs, details of these byelaws can be found at:

<http://www.southern-ifca.gov.uk/byelaws#>. It includes prohibition of gathering (seafisheries resources) in Seagrass Beds. Depending on the area or on the species harvested, gathering of shellfish may not be permitted due to food hygiene regulations ((EC) No 854/2004). It also works with the Gangmasters and Labour Abuse Authority to target organised shellfish gathering at low water. This ensures compliance with fisheries regulations and safeguards individuals that may be subject to modern slavery and illegal gang mastering.

SoIFCA have a byelaw in Poole Harbour in place to restrict the hand gathering of shellfish. In summary, this states that from 1st November to 31st March a person must not fish for or take from a fishery shellfish of any kind by using a handrake or similar instrument.

In 2001, a Special Nature Conservation Order (SNCO) was placed on the northern part of Fareham Creek to prevent commercial bait digging activity from occurring. This has, however, been ineffective due to the difficulty in distinguishing between commercial and recreational digging.

Relevant authorities also cautioned the need to take a Solent wide approach to prevent this activity being displaced to other locations if management measures are introduced.

See http://www.solentems.org.uk/sems/SEMS_Activities/Shore_based_fisheries/ for a resource list on this topic.

4.4.3 Actions

- 1. Action (ongoing):** Continue to report and liaise with the local IFCA, and if necessary the Marine police, where it is considered that bait collection or shellfish collection is commercial or having a detrimental impact. Use the [Guidance for Solent Relevant Authorities for monitoring shore-based fishing](#) to record this activity.

Lead/Partners: SEMS MG

Action progress: Ongoing

- 2. Action (ongoing):** Use the resources page on the SEMS website to access educational material and resources on bait digging, see:
http://www.solentems.org.uk/sems/SEMS_Activities/Shore_based_fisheries/.
Lead/Partners: SEMS MG
Action progress: Ongoing action.
- 3. Action (2020/21): Progress the Solent Mudflat Strategy**
Lead/Partners: NEG
Action progress: NEG established a working group which agreed the need for a Solent Mudflat Strategy. Once the Temith project outputs (University of Portsmouth, late 2020) are available, its mapping will show mudflat areas sensitive to disturbance, this will help to formulate the Strategy.
- 4. Action (ongoing):** Natural England continue to work with SolFCA on the bait digging issue, but the assessment and management of impacts within the Solent has been put on hold while clarity is sought regarding roles, responsibilities and timescales.
Lead/Partners: Natural England and IFCA
Action progress: NE to report to NEG on outcomes once progress has been made.

4.5 General Beach Recreation

4.5.1 Survey Summary Response

Three respondents reported that they thought this activity was impacting on SEMS sites. Concerns include trampling of sensitive sites, wildlife disturbance and the presence of litter. They noted that the levels of activity are dependent on infrastructure such as car parks and toilets and that the number of visitors is highly weather dependent.

With the push towards outdoor space and activities being beneficial for mental health, respondents noted that this could lead to an increase in general use of the beach all year around. No respondents noted fireworks being an issue this year.

General Beach Recreation				
<i>Activity includes other coastal land recreation and leisure activities such as educational or scientific studies, horse riding on the beach, fireworks displays, swimming, rock pooling, surfing and non-motorised land craft (e.g. sand yachting, kite buggying).</i>				
Change in Activity Level reported in 2020 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
0	1	8	7	16
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No		Total Responses
3		12		15
Source: SEMS Annual Survey Report, 2020				

4.5.2 Evaluation and Discussion

Unlike other marine recreational activities, general beach recreation is not covered by a national governing body or representative organisation. Good practice messaging regarding minimising impacts on the marine and coastal environment, including wildlife, tend to come from relevant authorities (e.g. Local Authorities) and environmental NGOs. Examples include interpretation boards, signage (e.g. to prevent trampling on sand dunes or directions to less sensitive sites), leaflets promoting codes of conduct and wardens (often volunteers) encouraging adherence to codes of conduct.

Increasingly, coastal events are beginning to improve their environmental performance, such as avoiding single use plastics and informing attendees about sensitive areas, to avoid.

Increases in population from new housing development around the Solent, has the potential to increase the impacts from this activity. Bird Aware Solent was set up to address this issue.

Potential Impacts

Natural England have published an evidence guidance note on general beach life at: (<http://publications.naturalengland.org.uk/publication/5458695407796224>). This identifies two

main pressures from this activity; abrasion/disturbance of the substrate surface, e.g. through general footfall (trampling) or digging holes and noise and visual disturbance, of hauled out seals and birds, from the presence and movement of people on the shore.

Impacts on SEMS

Recreational pressures, including trampling, are one of the reasons for the unfavourable status of seagrass beds within Solent Maritime SAC and therefore Natural England considers this activity is currently having an impact on some features within SEMS. Natural England is leading a LIFE funded project, partly looking at trampling pressures. See Mooring and Anchoring (section 4.10) for further details.

Management Measures

The RSPB have produced guidance on fireworks and bird disturbance (<https://www.rspb.org.uk/birds-and-wildlife/advice/how-you-can-help-birds/dangers-to-birds/fireworks-and-birds/>).

The Natural England evidence guidance note on general beach life provides lots of examples of issues and management measures (<http://publications.naturalengland.org.uk/publication/5458695407796224>). There are also guidance notes on surfing, coasteering, diving and snorkelling, and wildlife watching. These also include details of potential impacts and management measures, they can be accessed at: <http://publications.naturalengland.org.uk/publication/5615944092614656>.

The Survey respondents noted that there are lots of local codes of conduct at the coast to educate people and manage behaviour.

Please see http://www.solentems.org.uk/sems/SEMS_Activities/Land_Recreation/ for further resources and information.

4.5.3 Actions

- 1. Action (ongoing):** SEMS MG members to be aware of the Natural England recreational evidence notes and use this guidance to identify issues and management measures (<http://publications.naturalengland.org.uk/publication/5615944092614656>).
Lead/Partners: SEMS MG members
Action progress: Ongoing
- 2. Action (ongoing):** SEMS MG members to consider including information on potential impacts on designated sites when updating local codes of conduct or signage. Resources to assist this are available at: http://www.solentems.org.uk/sems/SEMS_Activities/General_Beach_Recreation/.
Lead/Partners: SEMS MG members
Action progress: Ongoing

4.6 Grazing and Foraging

4.6.1 Survey Summary Response

For 2020, this activity category was expanded to include foraging. It now includes grazing on saltmarsh or intertidal areas and the foraging of wild food such as plants, seaweeds, shellfish and crustaceans.

Coastal and floodplain grazing marsh is not a specific habitat but a landscape type which supports a variety of habitats; the defining features being hydrological and topographical rather than botanical. Grazing marsh is defined as periodically inundated pasture or meadow, typically with ditches or rills containing standing brackish or fresh water. They support bird species of high conservation value, and ditches can be especially rich in plants and invertebrates.

Chichester Harbour Conservancy have concerns that the hand gathering of clams and cockles is widespread and having negative impact on bird feeding areas and invertebrate populations; much of this hand gathering is of a commercial nature. Respondents also noted that foraging for personal use on public land doesn't require permission and is therefore not monitored. Please also see section 4.4 for information on hand gathering of shellfish.

Grazing and Foraging				
<i>Activity includes grazing on saltmarsh or intertidal areas.</i>				
Change in Activity Level reported in 2020 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
0	0	3	3	6
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No		Total Responses
2		4		6
Source: SEMS Annual Survey Report, 2020				

4.6.2 Evaluation and Discussion

Potential Impacts

Coastal grazing marsh is at risk from becoming too dry and/or subject to intensive grazing or early cutting. These management techniques are often incompatible with what is needed for populations of breeding waders. Some areas of grazing marsh are also at risk of change following restoration of naturalised floodplains and as sea-defences are realigned.

Foraging can lead to disturbance of intertidal habitats via trampling and disturb birds feeding and reduce their food sources, it can also negatively impact on invertebrate populations.

Impacts on SEMS

Natural England do not consider these activities to be currently impacting on SEMS.

Management Measures

Coastal floodplain and grazing marsh information is available from Natural England at: publications.naturalengland.org.uk/file/4605375663833088.

Information on the management of coastal saltmarsh is available at: <https://www.gov.uk/countryside-stewardship-grants/management-of-coastal-saltmarsh-ct3>.

Natural England have produced a seaweed harvesting code of conduct. This is available upon request.

Commercial harvesting of seaweed from areas of Crown Estate foreshore or seabed requires a licence from The Crown Estate. Seaweed collection for personal use, in small quantities does not require a licence. The Crown Estate does not licence harvesting of natural seaweeds in designated conservation areas.

For more information and resources please see: http://www.solentems.org.uk/sems/SEMS_Activities/Grazing/.

4.6.3 Actions

Action (ongoing): SEMS MG members to report any increases in foraging to the SEMS office direct or via the annual survey.

Lead/Partners: SEMS MG members

Action progress: Ongoing

4.7 Land recreation - Dog walking

4.7.1 Survey Summary Response

Out of all the activities surveyed this year, respondents said that dog walking was the one which could have the greatest impact on SEMS sites. Two reported an increase in this activity, one a decrease and five said no change. Respondents were concerned about dogs disturbing feeding and roosting waders and wildfowl particularly at tide roosts and breeding sites. Respondents also noted that dog fouling can cause water quality issues.

Fifteen of the local authorities in the Solent are Bird Aware partners, and they use this Partnership to help mitigate the impact of this activity in their area of jurisdiction.

Land recreation – Dog walking				
<i>Activity includes recreational participation with dogs, including the use of dogs in wildfowling.</i>				
Change in Activity Level reported in 2020 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
2	1	5	8	16
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No		Total Responses
9		7		16
Source: SEMS Annual Survey Report, 2020				

4.7.2 Evaluation and Discussion

Bird Aware Solent research show that over 60,000 new homes are planned around the Solent up to 2034; this will lead to more people visiting the coast for recreation, potentially causing additional disturbance to birds. Their winter Visitor Survey for 2019/20 showed that at most survey locations, the most common activity was either dog walking (61% of recorded activities overall) or walking (25% overall). It also showed that only 7% of interviewees said that they accessed the intertidal zone (below the strandline) as part of their route and only 3% accessed the water.

Potential Impact

Natural England's draft Advice on Operations identifies pressures arising from dog walking that may impact breeding and non-breeding bird populations of SPAs. These include above water noise, visual disturbance, litter and the removal of species. A number of designated bird species within the SEMS are sensitive to these pressures, which can result in displacement and/or mortality.

The research underpinning the Bird Aware Solent strategy, reports that human disturbance of the birds can have several impacts. Birds may be more alert, resulting in a reduction in the amount of food eaten, or they may move away from the disturbance. A bird which moves away forgoes valuable feeding time whilst in the air and uses energy in flying, a double impact on the bird's energy reserves. If the disturbance is substantial, then food-rich areas may be little used by the birds or

avoided altogether, leading to other areas hosting a higher density of birds and intensifying the competition for the available food.

Impacts on SEMS

While it is important to continue monitoring land recreation impacts via dog walking (and walking), Bird Aware has the potential to mitigate future impacts (through its rangers, awareness raising etc). On this basis Natural England advise that we should not seek to evaluate the impacts of dog walking (and walking) until the next round of SRMP monitoring has been completed in 2021.

Management Measures

Bird Aware Solent is a tool being used to reduce potential impacts from increased local housing development. Its planned mitigation measures are set out in the Bird Aware Solent Strategy. The main measure is a team of rangers to help coastal visitors and communities understand the importance of the different bird species and the impact of disturbance. Reports of the monitoring undertaken by Bird Aware Solent can be found at:

<http://www.birdaware.org/article/28103/Monitoring>. This includes visitor surveys which capture a snapshot of visitor numbers and access patterns, from interviews and counts at ten locations across the Solent (see appendices, section 7.0).

It must be remembered that Bird Aware Solent is only funded to mitigate the additional impact of new development since 2014. However, it is likely that, with sufficient support from all Partners, the mitigation measures will address some of the impacts of pre-existing development.

Additional work is taking place to encourage responsible dog walking and visits to less sensitive parts of the coast. The Bird Aware Solent team have secured £1.3 million of Local Growth Deal funding, which has been spent on creating or enhancing alternative local greenspaces for people who would otherwise have visited the coast.

Some public areas in England and Wales are covered by Public Spaces Protection Orders (PSPOs) previously called Dog Control Orders (DCOs). Fareham Borough Council have used such orders to direct people to put dogs on leads and issue fixed penalty notices to those that are causing a nuisance. See: <https://www.gov.uk/control-dog-public/public-spaces-protection-orders>.

Gosport Borough Council use improvements at the Alver Valley Country Park to act as a SANG to deflect pressure from dog walking away from the coast. They also undertook a renewal of their Public Spaces Protection (PSPO) Dog Control Order in 2020. The order has been extended and varied and is in force for a period of 3 years. The Isle of Wight Council are also looking to put PSPOs in place to help manage this activity.

Beaulieu River Management manage this activity with signage and educational articles in the River handbook.

The New Forest NPA are producing a Recreation Management strategy for the Park area, particularly concentrating on core Crownland areas but with strategic objectives relevant to the SEMS sites. They already engage with the New Forest Dog Owners Group and operate a project officer, on behalf of NFDC, that seeks to engage with dog owners to provide advice on best practice dog ownership and walking that respects wildlife sensitivities on terrestrial habitats.

4.7.3 Actions

- 1. Action (ongoing):** In 2021, when the 5 year monitoring of the effectiveness of the SRMP is complete, an assessment should be made as to how successful the mitigation strategy has been in reducing the impact of new housing development in the Solent, and whether baseline disturbance from existing housing has sufficiently reduced harm to birds through the promotion of the Bird Aware messaging by third parties (SRMP monitoring 2021). Due to COVID-19, the Bird Aware monitoring for winter season 2020/21 will be different from normal, so this data set will not form part of the overall initial monitoring period. Therefore the 'complete' data set is now not expected to be available until 2022.

Lead and partners: NEG

Action Progress: NEG will keep track of Solent Recreation Mitigation Partnership (SRMP) monitoring and continue with their liaising and support.

Future Action: Post 2021, evaluate whether the SRMS has achieved its objectives and assess whether it has mitigated bird disturbance impacts arising prior to 2010.
- 2. Action (ongoing):** RAs to identify and communicate with their own rangers and coastal staff details of how they can support Bird Aware Solent in the delivery of their educational messages. Also, for coastal staff to report bird disturbance issues to Bird Aware Solent.

Lead and partners: SEMS MG

Action Progress: Please feed details into the SEMS Annual survey if this action is undertaken.
- 3. Action (ongoing):** Local authorities to consider the use of Public Spaces Protection Orders as a measure to control dogs disturbing birds at sensitive sites.

Lead and partners: Local authorities

Action Progress: Please feed details into the SEMS Annual survey if this action is undertaken.

4.8 Land recreation - Walking (other than dog walking)

4.8.1 Survey Summary Response

Data from the Bird Aware Solent Visitor Survey 2019/20 shows that at most of their survey locations, walking was the second most popular activity (25% overall). See appendices, section 7.0, for more information.

Respondents concerns were that walking can lead to trampling of vegetation and disturbance to wildlife particularly birds (high tide roosts, feeding areas and breeding birds).

Respondents also noted that walking participation is very much dependent on the weather and the availability of infrastructure such as car parks and safe walking routes. They also noted the need to be prepared to cope with extreme events such as coastal storms and the dramatic fluctuations in participation due to unprecedented events like Covid-19.

As with dog walking, fifteen of the local authorities in the Solent are Bird Aware partners, and they use this Partnership to help mitigate the impact of this activity in their area of jurisdiction.

Land recreation – Walking (other than dog walking)				
<i>Activity includes walking on upper shore or intertidal zone (other than dog walking).</i>				
Change in Activity Level reported in 2020 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
1	1	7	8	17
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No		Total Responses
7		10		17
Source: SEMS Annual Survey Report, 2020				

4.8.2 Evaluation and Discussion

The England Coast Path is a new National Trail around all of England's coast. It gives people the right of access around all our open coast both along the England Coast Path, and usually, over the associated 'coastal margin'. It will incorporate all the existing coastal paths around the Solent. A European court judgement in April 2018 affected how Natural England could assess the impact of England Coast Path proposals on environmentally protected sites. Progress on the England Coast Path slowed as a result. Natural England continues to work towards opening as much of the England Coast Path as it can by 2020.

Currently, Natural England have stretches of the path at various stages of development throughout the Solent. The proposals go direct to the Planning Inspectorate rather than being assessed by local planning authorities. Please refer to: <https://www.gov.uk/government/publications/england-coast-path-in-the-south-of-england> to view the latest progress.

In the Bird Aware Solent winter Visitor Survey 2019/20 around half (48%) of interviewees were aware of the development of the England Coast Path, and 68% said that they expected its development would lead to them exploring new sections of the coast.

Due to COVID-19, the Bird Aware monitoring for winter season 2020/21 will be different from normal, so this data set will not form part of the overall initial monitoring period. Therefore the 'complete' data set is now not expected to be available until 2022.

Potential Impacts

Use of the coast for outdoor recreation can, if not carefully managed, add to environmental pressures such as the presence of people causing disturbance to wildlife or new paths leading to removal and fragmentation of habitat. Once published, Natural England's coast path assessments will give a comprehensive overview of the potential impacts from this activity on SEMS. An example from the Nature Conservation Assessment for the proposals between Gosport to Portsmouth is given below.

“For the feature groups listed, particularly strandline and vegetated shingle communities can be sensitive to concentrated trampling. Localised impacts could occur if changes in access lead to more frequent trampling of vegetation in sensitive areas. Increased use of an area by dog walkers could also have an impact on vegetated shingle as a result of eutrophication from dog fouling.”

Management Measures

As noted above, Natural England have been assessing the impacts from opening access to the coast as part of their work to deliver England's Coast Path. These assessments provide useful and detailed guidance on both the potential impacts from people visiting the coast to participate in coastal walking and the management measures that can be implemented to mitigate impacts. Once published the assessments will be linked to the SEMS website at: http://www.solentems.org.uk/sems/SEMS_Activities/Land_Recreation/.

Bird Aware Solent continues to mitigate the impacts from all coastal walking, please refer to the land recreation – dog walking (section in 4.7) for details.

The England Coast Path (ECP) Team at Natural England are looking to work with Bird Aware Solent and other local partners to develop new ECP interpretation panels across the Solent. They hope this will lead to joined up messaging regarding the sensitivities and behaviours that we want to see, clear branding and logos. The ECP team are hoping to initiate the design stage very soon.

4.8.3 Actions

Please also refer to actions on dog walking in 4.7.

- 1. Action (ongoing):** SEMS MG to read and be aware of the issues raised in the nature conservation assessments relating to the stretches of coastal path in their jurisdiction. To view please see: http://www.solentems.org.uk/sems/SEMS_Activities/Land_Recreation/. Look to include relevant information in any revised signage, publications or codes of conduct for walking.

Partners/lead: SEMS MG

Action progress: Ongoing.

4.9 Littering and removal of litter

4.9.1 Survey Summary Response

The presence of litter and its impact on designated sites is a key and ongoing issue reported by the SEMS Relevant Authorities. Eight respondents believe that this issue is having detrimental impacts. Respondents also noted this is a national issue with lots of national awareness rising and campaigning. They thought it requires a variety of actions, including legal action, to secure better standards of waste management by local businesses and residents.

The EA are concerned about the impacts of nurdle pollution (microplastic pollution) on SEMS sites. Nurdle hunts show this is an ongoing problem, particularly at Chessel Bay. The source is plastic manufacture and investigations are ongoing as to how this material gets into the water. SCC reiterated this concern reporting that the strandline and higher shore of the River Itchen is covered in plastic nurdles, bottles and other waste materials. ChHC and RHHA are also concerned that microplastic pollution is extremely widespread on the foreshore, but the impacts are still unclear. Chichester Harbour Conservancy held a micro-plastic symposium in 2019.

Local authorities reported that litter is of higher prevalence in the summer months at more popular locations. There are concerns of people not disposing of litter appropriately and/or litter blowing from bins inland. There is the additional pressure of the emptying of litter bins during busy times and a strict street cleaning regime, particularly in high traffic locations. In addition to Councils' statutory responsibilities in the disposal of waste and cleansing of streets, there are numerous community organisations undertaking litter picks on beaches throughout the Solent. These are sometimes coordinated by the Solent's Relevant Authorities but do require landowner permission.

Respondents noted that there are litter hotspots where the local conditions encourage it to collect. In accessible places this will be targeted by litter pickers, but it can accumulate in less accessible locations where picks are difficult. There is also the issue of disposing of the litter collected on picks, which can be a cost for local authorities.

If litter causes a danger to safety of navigation, for example large floating objects, then it will be removed by the relevant harbour authority.

NE noted that further work is needed to assimilate impacts from inert waste and litter on features, sub features and supporting features into its conservation advice.

Littering and removal of litter				
<i>This activity includes discharges from land, water or air, from all types of vessels, of particulate or solid wastes e.g. plastics, microplastics and other flotsam and jetsam (accidental vessel discharges are a separate category). The toxicity and damage caused by littering materials should be considered as should the cleanup of toxic debris. Please includes information on any strandline clearance and beach clean up.</i>				
Change in Activity Level reported in 2020 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
3	0	13	3	19
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No		Total Responses
8		11		19
Source: SEMS Annual Survey Report, 2020				

4.9.2 Evaluation and Discussion

Potential Impacts

Marine litter is any manufactured or processed solid material from anthropogenic activities that are discarded, disposed of or abandoned once entering the marine and coastal environment including: plastics, metals, timber, rope, fishing gear etc. and their degraded components, e.g. microplastic particles. Ecological effects can be physical (smothering), biological (ingestion, including uptake of microplastics; entangling; physical damage; accumulation of chemicals) and/or chemical (leaching, contamination).

Secondary effects of poor waste disposal can include the blocking of sewers and drains leading to raw sewage and blackwater overflows.

Impacts on SEMS

Natural England hasn't yet assimilated impacts from inert waste and litter on features, subfeatures and supporting features into its conservation advice, due to the variety of waste occurring and a lack of data on implications. However, it agrees that litter and waste present in SEMS will, in all likelihood, be impacting species and habitats to a currently unknown degree and therefore further study is required.

Management Measures

There are numerous litter campaigns, initiatives and clean-ups taking place around the Solent, both national and local. The Solent Forum is collating information on these as part of its Clean Solent Shores and Seas Campaign (CSSS) to help people to coordinate work and access information. See: http://www.solentforum.org/services/Member_Services/css/. Information is also available on the SEMS website at http://www.solentems.org.uk/sems/SEMS_Activities/Littering/.

The Great British beach Clean, provides data and information on the amount and type of litter found at the coast, see: <https://www.mcsuk.org/beachwatch/greatbritishbeachclean>. Data for 2019 showed that there were, on average, 558 items of litter on every 100 metres of beach that were cleaned and surveyed in the UK. Plastic and polystyrene pieces were the most common litter items found, cigarette stubs following in second place and glass pieces coming in third.

Southern Water have an Unflushables Campaign to educate people about preventing sewer blockages, see: <https://www.southernwater.co.uk/the-unflushables>.

Most harbours and marinas now have comprehensive waste facilities, that include recycling options, and encourage their users to make use of these facilities. The Green Blue have numerous resources on best practice for boating, see: <https://thegreenblue.org.uk/you-your-boat/info-advice/waste-recycling/>.

Local authorities can issue fixed penalty notices to deal with environmental issues like litter, see: <https://www.gov.uk/guidance/fixed-penalty-notice-issuing-and-enforcement-by-councils>. It is an offence to drop litter on land or into water that's accessible to the public even if it's private land. This applies to private land that the public can access, for example a right of way. Local authorities also have responsibility for litter collection, see: <https://www.gov.uk/guidance/litter-and-refuse-council-responsibilities-to-keep-land-clear>.

Seabins are beginning to be rolled out across the Solent which help to both remove litter and educate people about it in the water, see: <https://seabinproject.com/>.

Anglers National Line Recycling Scheme is a nationwide initiative to enable old fishing line to be recycled rather than going to landfill. There are recycling bins at locations across the country where anglers can take old fishing line to be recycled, or it can be sent in the post. See: <https://www.anglers-nlrs.co.uk/>.

4.9.3 Actions

1. **Action (Ongoing):** NEG to continue to develop the Cleans Solent Shores and Seas (CSSS) resource hub with the CSSS working group. SEMS MG members to use the hub to find information to support or coordinate any appropriate existing campaigns, policy making, communications, events etc. See: http://www.solentforum.org/services/Member_Services/css/.
Lead/partners: NEG (development) and SEMS MG (to use)
Action progress: Ongoing.

4.10 Mooring and anchoring

4.10.1 Survey Summary Response

Three respondents were concerned that this activity was impacting on SEMS sites. ChHC are worried about the impacts of erosion and scouring of mudflats and seabed at various locations. Anchoring during the summer months is a particular problem to the north and east of East Head where dozens of boats anchor temporarily. No surveys have been conducted on sub-tidal habitats, but the impacts could be significant. BRM are concerned about damage to seagrass at Below Needs on the Ore. Management measures include no anchoring during the winter months while works at the marina are taking place. No anchoring will be allowed in the future unless advance permission is received from the Harbour Authority or there is an emergency.

NE reported a concern about mooring and anchoring within or near sensitive habitats, most notably seagrass beds and supporting habitats. This takes place at various places across SEMS, year-round. The LIFE funded REMEDIES project hopes to reduce the impact of this activity.

IOWC reported that, following recent case law and changes in its approach to Habitat Regulations Assessment, any proposals within the footprint of a designation needs Appropriate Assessment and use of evidence to support it. This means that there can be further certainty that new proposals for structures, replacement or extensions to existing ones will not be having a significant impact on the marine sites.

ABP noted that commercial shipping lines are generally allocating larger vessels to serve the key deep sea trade routes. This means that larger ships are calling at the Port and, as they can accommodate higher volumes, the number of calls required to maintain volumes is reducing. In 2019 the inaugural Sail GP event was held in Cowes. Whilst data on recreational mooring/anchoring activities has not been specifically collected, anecdotally this event is likely to have attracted increased recreational boaters to the area.

Mooring and anchoring				
<i>Activity includes the operational use of berths, moorings and anchorages including the presence of these structures and the vessels using them. Includes consideration of impacts from vessels when berthing/berthed, mooring/moored, anchoring/anchored. Also includes impacts from anchors and impacts of boat when at anchor or mooring. There is a particular risk of damage from anchoring in seagrass beds.</i>				
Change in Activity Level reported in 2020 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
0	2	12	1	15
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No		Total Responses
3		11		14
Source: SEMS Annual Survey Report, 2020				

4.10.2 Evaluation and Discussion

Potential Impact

Natural England's Advice on Operations identifies pressures arising from mooring and/or anchoring that may impact SPA supporting habitats and designated SAC features. These include abrasion/disturbance of the seabed, penetration/disturbance of the substratum below the seabed and the introduction or spread of invasive non-native species. A number of designated features within the SEMS are considered to be sensitive to these pressures.

In 2017, Defra published 'Recreational and commercial anchoring and mooring impacts in marine protected areas in Wales and England (ME6003)'. See: <http://sciencesearch.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=19777>.

Impacts on SEMS

Anchoring and mooring pressures are one of the reasons for the unfavourable status of seagrass beds within Solent Maritime SAC; therefore, Natural England consider this activity is having an impact on some features within SEMS.

Management Measures

Advanced Mooring Systems, or eco moorings, are mooring systems designed to have less impact on the seabed than conventional swing moorings. They aim to minimise interaction with the seabed to prevent abrasion and therefore the potential to damage sensitive habitats. The term Advanced Mooring System has been adopted to emphasise the improved measurability of mooring load potential offered by these systems. The RYA's website contains further information on these systems, see: <https://www.rya.org.uk/knowledge-advice/planning-environment/Pages/environmentally-friendly-moorings.aspx>.

In 2019, the EU LIFE awarded Natural England a grant of £1.5 million for a new project 'reducing and mitigating erosion and disturbance impacts affecting the seabed (ReMEDIES)' in England. This seeks to improve the condition of at-risk seagrass and maerl bed habitats in five project areas including Solent Maritime. It will also work to reduce the negative impact of recreational boating activities, such as mooring and anchoring and share its successes with similar projects in Europe. See: <https://www.gov.uk/government/publications/life-recreation-remedies-project>.

The Green Blue have an 'Anchoring with Care' campaign that advises boat users how to minimise their impacts on sensitive habitats, see: <https://thegreenblue.org.uk/you-your-boat/info-advice/wildlife-habitats/anchoring-with-care/>.

4.10.3 Actions

1. **Action (ongoing):** Promote and share information, best practice and research on Advanced Mooring Systems and any potential effects from mooring and anchoring.
Lead and partners: SEMS Management Group
Action Progress: Material has been/will be uploaded to http://www.solentems.org.uk/sems/SEMS_Activities/mooring/.
2. **Action (2020/21):** All to support, promote and share information from the LIFE ReMEDIES project.
Lead and partners: SEMS Management Group and NEG
Action Progress: New for 2020/21.

4.11 Operation of coastal flood and erosion risk management schemes

4.11.1 Survey Summary Response

The EA are concerned about the impact of coastal squeeze in places where policy is ‘Hold the Line’ in front of coastal defences; in the past this was through historic squeeze, in the future it will be due to sea level rise. ChHC raised the issue of the large-scale loss of saltmarsh which in part is attributed to hard coastal defences. NE are also concerned about the potential impacts of such schemes relating to rising sea levels and coastal squeeze. This is currently not considered in NE condition assessments; however, it may be in the future.

A number of respondents noted that the Eastern Solent Coastal Partnership (ESCP) delivers management of this activity on their behalf. This is an alliance, formed in 2012, to deliver a combined coastal management service across the coastlines of Fareham Borough Council, Gosport Borough Council, Havant Borough Council and Portsmouth City Council. The initiative was driven forward by a need for coastal management that recognises coastal flooding and erosion risk impacts are not exclusive to Local Authority boundaries. Their work includes environmental projects, see: <https://www.escp.org.uk/environment>.

Operation of coastal flood and erosion risk management schemes				
<i>Activity includes maintenance and operation of all port/harbour infrastructure including quay walls, jetties, slipways, navigation markers, coastal defence structures etc. Includes consideration of vessels/machinery/vehicles associated with activity. Also include the day-to-day operational use of these structures, lights, buoys, posts, towers, transit marks, supply of fuel/bunkering operations onshore /offshore, etc.</i>				
Change in Activity Level reported in 2020 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
1	0	12	4	17
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No		Total Responses
3		14		17
Source: SEMS Annual Survey Report, 2020				

4.11.2 Evaluation and Discussion

Potential Impact

Natural England’s Advice on Operations identifies a range of pressures arising from coastal flood and erosion risk management schemes that may impact breeding and non-breeding bird populations of SPAs. These include above water noise, visual disturbance and barriers to species movement. Designated bird species within the SEMS are sensitive to these pressures, which can result in displacement. Similarly, flood and erosion risk management schemes may impact SPA supporting habitats and designated SAC features via pressures such as abrasion, penetration and physical change or loss of habitat.

Impacts on SEMS

Based on current understanding of the extent/magnitude of this activity, and the existing regulatory framework, Natural England suggests that this activity is not having an adverse effect on SEMS. However, loss of intertidal habitat from rising sea levels and coastal squeeze was flagged as a condition threat in the condition assessment for Solent Maritime SAC. Natural England are in the process of reviewing whether or not this should be changed to show a current impact on coastal sites and therefore this position may change. Natural England will provide an update once this decision has been made.

Management Measures

The Environment Agency publish details of the current Flood and Coastal Erosion Risk Management Schemes (FCERM) for the Solent and the South Downs, see:

[https://www.gov.uk/government/collections/flood-risk-management-current-schemes-and-strategies#solent-and-south-downs-\(map-area-14\)](https://www.gov.uk/government/collections/flood-risk-management-current-schemes-and-strategies#solent-and-south-downs-(map-area-14)).

In accordance with the Habitats Regulations, all competent authorities must undertake a formal assessment of the implications of any new plans or projects that may be capable of affecting the designated interest features of European Sites before deciding whether to undertake, permit or authorise such a plan or project. The impacts from the operation of coastal flood and erosion risk management schemes will therefore be assessed at their time of construction or modification.

Each Shoreline Management Plan policy has a high-level Habitats Regulations Assessment (HRA), followed by an HRA for each specific defence works. Access SMP information at:

<https://southerncoastalgroup.org.uk/smps/>.

The Regional Habitat Compensation Programme (RHCP) is a strategic programme run by the Environment Agency. It is the Government's agreed mechanism for delivering strategic habitat compensation for Flood and Coastal Erosion Risk Management (FCERM) to ensure compliance with the Conservation of Habitats and Species Regulations 2017. The compensatory requirement passed on to the RHCP from Shoreline Management Plans (SMPs) is the amount of habitat required to address the adverse impacts on European sites from the SMP policies due to coastal squeeze and saline inundation impacts. At Manor Farm 69 Ha of compensatory habitat (grazing marsh) has been created. Other projects are currently being considered. Please see:

<https://southerncoastalgroup.org.uk/regional-habitat-creation-programme/> for more details.

4.11.3 Actions

1. **Action (ongoing):** Promote and share information on best practice on this activity including new methodologies and innovation.
Lead/partners: SEMS Management Group
Action progress: Ongoing.

4.12 Operation of ports and harbours (maintenance of infrastructure)

4.12.1 Survey Summary Response

Portsmouth Port undertook marine piling, dredging, and general construction works at its berths between Oct 2019 to Jun 2020. The works were fully consented with the appropriate environmental assessments. Beaulieu River Management are undertaking a reconfiguration of the Buckler's Hard Yacht Harbour.

Natural England flagged a concern that this activity could lead to an increased risk of the spread of invasive non-native species from this activity.

Operation of ports and harbours (maintenance of infrastructure)				
<i>Activity includes maintenance and operation of all port/harbour infrastructure including quay walls, jetties, slipways, navigation markers, coastal defence structures etc. Includes consideration of vessels/machinery/vehicles associated with activity. Also include the day-to-day operational use of these structures, lights, buoys, posts, towers, transit marks, supply of fuel/bunkering operations onshore /offshore, etc.</i>				
Change in Activity Level reported in 2020 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
3	0	10	2	15
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No	Total Responses	
2		13	15	
Source: SEMS Annual Survey Report, 2020				

4.12.2 Evaluation and Discussion

Port and Harbour Authorities in the Solent are very aware of their environmental responsibilities and much has been achieved over recent years to help designated sites in the Solent. For example, many of the harbours now provide pump out facilities to prevent boating black water discharges. In 2019, the Environment Agency and Natural England hosted a boating and water quality workshop that was very well attended with a receptive, supportive audience. A second workshop is planned.

Harbours are also beginning to look at ways to ecologically enhance their coastal infrastructure. For example, Wightlink Ferries installed an Artecology Vertipool array on a quay wall to improve its biodiversity value. This work will continue and grow over the coming years and the Solent Forum is establishing a Building Biodiversity in the Solent hub (BBS hub) to promote and share best practice. See: http://www.solentforum.org/services/Member_Services/Building_Bioversity_hub/.

Ports and harbours need to survey their assets to check for those requiring maintenance and repair. In recent times some ports have begun to use drones to undertake this task.

Potential Impacts

Natural England's Advice on Operations identifies a range of pressures arising from the maintenance and operation of ports and harbours that may impact breeding and non-breeding bird populations of SPAs. These include above water noise and visual disturbance. A number of designated bird species within the SEMS are sensitive to these pressures, which can result in displacement and/or mortality. Similarly, the maintenance and operation of ports and harbours may impact SPA supporting habitats and designated SAC features via pressures such as abrasion/disturbance of the seabed, penetration/disturbance of the substratum below the seabed, smothering and siltation.

Impacts on SEMS

Natural England do not consider these activities to currently be having an adverse impact on SEMS.

Management Measures

The UK Marine SAC project produced guidance on this topic including good management practice, see:

<https://webarchive.nationalarchives.gov.uk/+/http://www.dft.gov.uk/pgr/shippingports/ports/environment/advice/practiceguidelinesukmari4926.pdf>.

4.12.3 Actions

- 1. Action (ongoing):** Promote and share information on best practice on this activity including work on the ecological enhancement of port and harbour infrastructure.
Lead and partners: SEMS Management Group and Solent Forum BBS Hub (http://www.solentforum.org/services/Member_Services/Building_Bioversity_hub/).
Action Progress: Ongoing.

4.13 Recreation - light aircraft

4.13.1 Survey Summary Response

In the 2020 survey, four respondents noted an increase in this activity, three reported no change and a further four didn't know. Two respondents were concerned that this activity could impact on the SEMS sites.

ChHC are concerned that light aircraft and micro lights regularly disturb birdlife in the harbour, they have little information on impacts of drones. This takes place at various locations mainly in the summer months. NE noted an increase in activity from various forms of light aircraft causing disturbance to SPA features. Further study is likely required to assess the impacts of this increase.

Other relevant authorities noted an anecdotal increase in the use of drones, often with prior consent. This is a mix of recreational and commercial use such as surveying. In Gosport, there is significant helicopter movements in the Borough related to the Standard Aero helicopter maintenance plant. There are also helicopter movements associated with Ministry of Defence sites.

The RHHA reported receiving occasional third party requests for commercial drone flights for flights over its lease holding of the river bed and some foreshore areas, or in relation to navigational safety. It is using the NE guidance document and liaising with NE on individual cases regarding any specific conditions required in relation to flight height, duration, or distance from SPA bird areas.

Recreation – light aircraft				
<i>Activity includes all types of craft used for recreation in the air e.g. small planes and helicopters, microlights, paramotors, hang gliding, parascending (on beach), parasailing (by boat), drones and model aircraft.</i>				
Change in Activity Level reported in 2020 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
4	0	3	4	11
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No		Total Responses
2		8		10
Source: SEMS Annual Survey Report, 2020				

4.13.2 Evaluation and Discussion

Potential Impacts

Natural England's 'Marine recreation evidence briefing: drones (EIN035)' reports that the pressure arising from participants (operating drones) walking across the shore has been considered to be negligible, compared to the larger numbers of people undertaking general beach leisure activities. The disturbance response of birds to drones is dependent on a range of factors, particularly flying altitude, the type (model) of drone and level of habituation to existing disturbance pressure. Existing research has not distinguished between disturbance from noise and visual cues. Repetitive

disturbance events can result in possible long-term effects such as loss of weight, condition and a reduction in reproductive success, leading to population impacts.

Impacts on SEMS

Based on current levels of reported activity, it is unlikely that drone use is having an adverse effect upon SEMS. However, study is required to determine whether or not this is accurate, and this activity should continue to be monitored as usage has increased as drones become more affordable.

Management Measures

In 2018, Natural England produced a document for SEMS that explains the regulations surrounding the use of unmanned aerial vehicles (UAV) and when local authorities might like to contact it for advice. Please contact the Solent Forum office to access a copy.

Natural England's 'Marine recreation evidence briefing: drones (EIN035)' contains guidance on management options; including site management access, education and communication techniques and legal enforcement. See:
<http://publications.naturalengland.org.uk/publication/5340291749380096>.

Government agencies and local authorities have the power to ban the flying of drones and other light aircraft activities through the use of byelaws. Hampshire County Council asks that unmanned aircraft are not operated from its land holdings. People wishing to film have to make a formal request, see: <https://www.hants.gov.uk/business/filmhampshire/code-of-practice>.

The Crown Estate grants permission for UAD flights over Crown Estate foreshore (defined as the land between mean high water and mean low water). It seeks to encourage responsible use of the foreshore and estuaries that it owns. It has published guidelines at:
<https://www.thecrownestate.co.uk/en-gb/what-we-do/on-the-seabed/coastal/metal-detecting-and-drone-flying/>.

The Civil Aviation Authority provides detailed information about drone use, regulations and best practice see: <https://www.caa.co.uk/Consumers/Unmanned-aircraft-and-drones/>. It also supports Dronesafe.uk, a web resource designed to help ensure that drone users in the UK can easily access the information they need about how to fly their drones safely and legally, without endangering others.

At the request of NEG, from October 2019, Bird Aware Solent Rangers will use their SNAP survey tool to include whether drones are present at the various Solent sites that are monitored by the Bird Aware Rangers.

Please see: http://www.solentems.org.uk/sems/SEMS_Activities/Recreational_light_aircraft/ for further guidance and resources.

4.13.3 Actions

- 1. Action (ongoing):** NEG to request data annually from Bird Aware Solent on winter drone use and monitor trends.
Partners/lead: NEG and Bird Aware Solent

- 2. Action (2020/21):** NEG to discuss potential mechanisms for recording drone use in the summer months. Existing information on drones can be accessed at:

http://www.solentems.org.uk/sems/SEMS_Activities/Recreational_light_aircraft/.

Partners/lead: NEG

- 3. Action (ongoing):** SEMS MG members are asked to identify hotspot areas for drone/light aircraft use and report if management measures are introduced. This information should be included in the annual Survey return. This is an ongoing action and will be escalated to NEG if the annual Survey returns show that there are increasing concerns from Relevant Authorities.

Lead/partners: SEMS MG

Action progress: Ongoing

4.14 Recreation - non-motorised watercraft

4.14.1 Survey Summary Response

Four respondents thought that this activity was impacting on the SEMS sites. ChHC are concerned about the potential disturbance to wildlife from small craft in bird feeding areas, roosting sites, breeding sites and at seal haul outs around the harbour. Kite surfing impacts wader roosts and feeding areas on Thorney island.

Respondents noted that as recreational pressures increase it is likely that these activities are increasing too. However, data on the levels and frequency is not routinely collected. There are concerns that small craft can launch at and access more sensitive sites. Activity levels increase with better weather. Anecdotal evidence shows a rise in paddleboard, canoes and kayaks and a slight decrease in small sailing craft. One respondent noted the move from using an outboard engine to battery power on small motor craft.

There is also a need to consider racing events and regattas and how they are managed around sensitive sites. There is a role in the planning system for any new facilities to manage activity e.g. provision of slipways/jetties.

Due to COVID-19 pandemic, in spring/summer there were very low participation rates, principally confined to essential safeguarding inspection on moored vessels.

Recreation – non-motorised watercraft				
<i>Activity includes windsurfing, kite surfing, kayaks, canoes, row boats, punts, paddle boards, dinghies and sailing boats. Includes all related participation such as launching and recovery (shore access and trailers) and any land based practice. Please include information on events and competitions.</i>				
Change in Activity Level reported in 2019 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
2	1	8	8	19
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No		Total Responses
4		15		19
Source: SEMS Annual Survey Report, 2020				

4.14.2 Evaluation and Discussion

Non-motorised watercraft is a generic term which includes both small sailing boats (without a motor) and paddlesports. Small sailing boats include dinghies, day boats or other small keelboats which are usually taken out of water at end of use. Paddlesports is a term for a range of watersports which involve the use of a paddle for propulsion. This includes sea kayaking, surf kayaking, sit-on-top kayaking, Canadian canoeing and stand up paddle boarding (SUP).

Most small sail boat activity occurs in relatively sheltered areas. Vessels are launched from slipways or sheltered beaches using a trailer or trollies. Activity is centred around sailing clubs, activity centres, harbours and marinas. Paddlesports are generally undertaken close inshore (typically within 1-2 km of the coast). Watercraft that are used for paddling activities have a shallow draught. This allows access to shallow areas of the coast (which are often inaccessible to larger vessels or humans on foot). The focuses of these activities are generally centred around beaches and exploring coastal features such as rock formations (sea caves, arches, cliffs etc), inlets, estuaries and wildlife. Kayaks are also increasingly used as a platform for recreational fishing (source: Marine recreation evidence briefing: Non-motorised watercraft including paddlesports (EIN028)).

The Annual Watersports Participation Survey, 2018 showed that, of all boating activities, canoeing was the most popular. Approximately 2.1m people go paddling at least once a year, in canoes, kayaks or on stand up paddleboards. This is due to their accessibility, without the need for any training or expensive equipment. See:

<https://www.rya.org.uk/SiteCollectionDocuments/sportsdevelopment/2018-watersports-study-exec-summary-final.pdf>.

Potential Impacts

Natural England's 'Marine recreation evidence briefing: Non-motorised watercraft including paddlesports (EIN028)' (<http://publications.naturalengland.org.uk/publication/6087131801321472>) reports that the main impacts of this activity are through abrasion from trampling during launch/recovery of non-motorised watercraft, visual disturbance of birds, marina mammals and fish related to the presence of both people and watercraft and above water noise disturbance of hauled out seals and birds related to people noise during launch or activity.

Impacts on SEMS

Based on current levels of reported activity across SEMS, it is unlikely that use of non-motorised watercraft is having an adverse effect upon SEMS. However, this activity and the impacts from both disturbance and trampling should be monitored as usage has increased and is anticipated to continue to do so and some localised impacts have been noted.

Management Measures

In 2016, guidelines for paddlesports were produced by the Solent Forum's Natural Environment Group's working group on recreation. See:

http://www.solentems.org.uk/sems/SEMS_Activities/Recreation_Non_Motorised/Paddlesports_Guidelines_Avoid_Bird_Disturbance.pdf.

The EIN028 report noted above gives examples of management options, the three broad options are on-site access management, education and communication with the public and site users, and legal enforcement. The user groups for the activities in this category also provide advice to their members on how to minimise their environmental impact, for example, The Green Blue has the 'Green Wildlife Guide for Boaters'. A list of these resources and guidance is available at:

http://www.solentems.org.uk/sems/SEMS_Activities/Recreation_Non_Motorised/.

Guidance on best practice for paddlesports users is available from the British Canoe Union at:

<https://www.britishcanoeing.org.uk/go-canoeing/access-and-environment/environment-good-practice>.

From summer 2020, Bird Aware Solent will be looking to work with recreational watercraft users to address any impacts from their activities on the Solent's birds.

4.14.3 Actions

- 1. Action (ongoing):** SEMS MG members are reminded to use the paddlesports guidelines (2016) produced by NEG and to feed back to the SEMS Secretariat if and how they have been used. Other resources are also available on the SEMS website, see: http://www.solentems.org.uk/sems/SEMS_Activities/Recreation_Non_Motorised/
Lead/partners: SEMS MG
Action progress: Ongoing
- 2. Action (2020):** NEG to ask Bird Aware Solent to report back on their work on educating recreational watercraft users once information is available.
Lead and partners: NEG and Bird Aware Solent.
Action progress: Ongoing.
- 3. Action (2020/21):** NEG to research the evidence base for potential impacts from the increased use of paddle boarding.
Lead and partners: NEG.
Action progress: New for 2020/21.

4.15 Recreation - powerboating or sailing with an engine

4.15.1 Survey Summary Response

Of the 15 responses received in the 2020 survey, the most common response was no change. Four respondents were concerned about the impacts from this activity on SEMS sites. PiP noted a concern from the wash effects caused by vessels, but this activity is managed by speed limits and Marine Police presence in the harbour. BRM are also concerned about the effects of wash from speeding vessels. EBC flagged erosion at launch sites and the potential for noise disturbance. ChHC are also concerned about disturbance to feeding birds, seal haul outs, and the possibility of increasing erosion of saltmarsh through wave action. NFDC noted that when motorboats are recovered at low water, owners can be tempted to use the power of the engine to position the vessel on the trailer, creating seabed disturbance.

Recreation – powerboating or sailing with an engine				
<i>Activity includes any motorised boat activity, such as Personal Watercraft (PWC), hovercraft, powerboating and water-skiing. Includes launching and recovery of craft e.g. slipway or beach/shore launching and participation i.e. when activity is underway or making way. Please consider other novel uses of power boats such as flyboarding. The impacts of different craft will vary and should be considered on a case by case basis e.g. sailing boats with low power engines moving at slow speeds are less likely to have an impact.</i>				
Change in Activity Level reported in 2019 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
0	0	12	4	16
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No		Total Responses
4		12		16
Source: SEMS Annual Survey Report, 2020				

4.15.2 Evaluation and Discussion

The Watersports Participation Survey 2018 (Arkenford, 2018) estimated that nationally 370,000 people participated in yacht cruising, 92,000 in yacht racing, 583,000 in motorboat/cruising, 386,000 in powerboating, 297,000 in water skiing and 245,000 in personal watercraft use. The report also gives headline short and long term trends. Over the last ten years, the use of motorised craft has remained static and there has been a slight decrease in the use of personal watercraft. See: <https://www.rya.org.uk/SiteCollectionDocuments/sportsdevelopment/2018-watersports-study-exec-summary-final.pdf>.

The use of electric outboard motors to replace petrol motors is starting to become more common, although this is still in its infancy. These are quieter and produce no emissions. Bio diesel is another fuel source option.

Potential Impacts

Natural England's publication 'Motorised watercraft (powerboating and sailing with an engine) (EIN027)' (<http://publications.naturalengland.org.uk/publication/6327458038546432>) reports that the main impacts are through abrasion/disturbance of the surface and sub-surface sediment, underwater noise disturbance of marine mammals and birds, related to engine operation during the activity, above water noise and visual disturbance, of hauled out seals and visual disturbance of marine mammals and birds.

Impacts on SEMS

Based on current levels of reported activity, it is unlikely that use of motorised watercraft is having an adverse effect upon SEMS. However, this activity should be monitored as usage has increased and is anticipated to continue to do so, which has the potential to increase levels of bird disturbance.

Management Measures

Solent Relevant Authorities noted in their Survey returns that Harbour General Directions, including speed restrictions, effectively manage this activity. For activities like waterskiing and jetskiing, these commonly require permits and participants are encouraged to stay away from sensitive sites.

The EIN027 report noted above gives examples of management options, the three broad options are on-site access management, education and communication with the public and site users, and legal enforcement.

The user groups for the activities in this category provide advice to their members on how to minimise their environmental impact, for example, The Green Blue has advice on boating around wildlife, see: <https://thegreenblue.org.uk/you-your-boat/info-advice/wildlife-habitats/boating-around-wildlife/>. It also provides guidance on how to run sustainable events, see: <https://thegreenblue.org.uk/clubs-centres-associations/running-a-sustainable-event/>.

From summer 2020, Bird Aware Solent will be looking to work with recreational watercraft users to address any impacts from their activities on the Solent's birds. The RSPB have published a guidance notes on jetskis and birds, see: <https://www.rspb.org.uk/globalassets/downloads/documents/positions/marine/jet-skis-and-birds---the-rspb-position.pdf>.

in 2019, the EA and NE led a workshop focussing on black water discharge from recreational vessels. Actions are underway for partners (e.g. harbour authorities, Southern Water, marina groups, RYA, EA) to seek improvements to pump out facilities and ways to encourage behavioural change of recreational sailors.

The Litter Free Coasts and Seas campaign has a new work theme called 'Love your Harbour'. This has resources to download to educate people about the impacts of blackwater discharges from boats, see: <https://www.litterfreecoastandsea.co.uk/current-projects-and-campaigns/love-your-harbour/>.

4.15.3 Actions

1. **Action (ongoing):** Promote and share environmental studies, reports and good practice. Please visit http://www.solentems.org.uk/sems/SEMS_Activities/Recreation_Motorised/.
Lead and partners: SEMS MG members.
Action progress: Ongoing.

4.16 Slipway and jetty cleaning and maintenance

4.16.1 Survey Summary Response

One respondent reported an increase in this activity in the 2020 Survey, ten reported no change and five didn't know. One respondent was concerned that this activity could impact on the SEMS sites, this was NE who are concerned about the increased risk of the spread of invasive non-native species.

The IOWC reported that applications for new and improved jetties and slipways have been received, this also creates additional points of access to marine environment.

The harbours noted that they normally use water to undertake their cleaning; algal mats need to be removed to maintain access to slipways. They do try to keep this activity to a minimum.

Slipway and jetty cleaning and maintenance				
<i>Activity includes the ongoing maintenance, such as washing down, clearing of mud or sediment, algal growth or similar of a slipway or jetty.</i>				
Change in Activity Level reported in 2019 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
1	0	10	5	16
Do you think the Activity is having an impact on the SEMS Site?				
Yes		No		Total Responses
1		14		15
Source: SEMS Annual Survey Report, 2020				

4.16.2 Evaluation and Discussion

Potential Impacts

Maintenance wastes can enter harbours from the cleaning of jetties and slipways. Debris and wastes produced could contain a mixture of contaminants including oils, oil emulsifiers, paints, solvents, detergents, bleach and antifouling paint scrapings. The dilution of wastes in the harbour waters means that in most cases any possible adverse effects will be only localised and temporary. However, there may be a problem where wastes are washed into enclosed waters, such as docks, or areas with low tidal flushing. See: http://www.ukmarinesac.org.uk/activities/ports/ph4_3.htm for detailed information.

Impacts on SEMS

Whilst Natural England do not consider this activity to currently be impacting on SEMS it does have the potential to increase the presence and spread of invasive non-native species which has been listed as a condition threat for Solent Maritime SAC. In addition, poor water quality is considered one of the reasons for the current unfavourable status of Solent Maritime SAC. Therefore, Natural England advises that harbours/marinas should promote best practice.

Management Measures

Solent harbours reported that they try to avoid using harmful chemicals and use plain seawater or environmentally sound cleaning materials when undertaking cleaning operations. The Green Blue recommended not using chemicals to remove weed and algae from slipways but use a stiff brush or a high pressure hose instead.

The RYA provide guidance on cleaning of slipways at: <https://www.rya.org.uk/knowledge-advice/environmental-advice/Pages/cleaning-slipways.aspx>.

Guidance from the MMO is available at <https://www.gov.uk/government/publications/cleaning-of-slipways-and-harbour-infrastructure>.

The Green Blue provide guidance on best practice in cleaning of both boats and infrastructure, see: <https://thegreenblue.org.uk/clubs-centres-associations/facilities-operations/pollution-control/cleaning-maintenance/>.

4.16.3 Actions

- 1. Action (ongoing):** Follow the best practice guidance when undertaking slipway and jetty cleaning. See: http://www.solentems.org.uk/sems/SEMS_Activities/Slipways/.
Lead and partners: SEMS MG members.
Action progress: Ongoing.

4.17 Wildfowling

4.17.1 Survey Summary Response

Of the seven responses received that this activity takes place within a relevant authority's jurisdiction, three reported no change and four didn't know. One authority was concerned that this activity was impacting on SEMs sites.

ChHC are concerned about disturbance to feeding and roosting birds at various locations between September to February. It is difficult to quantify impact, but disturbance is evident when shooting is heard or seen. Other respondents noted landowner shoots close to designated sites.

Wildfowling				
<i>Activity includes the use of firearms to shoot wild fowl. This category does not take into account the use of dogs during these activities, please use 'Land recreation - dog walking' for any dog related activity.</i>				
Change in Activity Level reported in 2019 Survey				
Increase	Decrease	No Change	Don't Know	Total Responses
0	0	3	4	7
Do you think the Activity is having an impact on the SEMs Site?				
Yes		No		Total Responses
1		5		6
Source: SEMs Annual Survey Report, 2020				

4.17.2 Evaluation and Discussion

Wildfowling is a largely solitary activity which involves the hunting of specific species of ducks, geese and waders with a smooth bore shotgun. It is undertaken primarily on estuaries and coastal marshes. In England, the season runs from 1st September until 31st January above the high-water mark and extends until February 20th below the high-water mark. The majority of wildfowling is organised through a club structure, but it can also be undertaken independently, usually by landowners.

Potential Impacts

Natural England's Advice on Operations identifies pressures arising from wildfowling that may impact SPA supporting habitats and designated SAC features. These include above water noise, removal of target species and visual disturbance. A number of designated features within the SEMs are considered to be sensitive to these pressures.

Impacts on SEMs

Natural England do not consider wildfowling to be currently impacting on SEMs, however, in the long-term Natural England will seek to review all consents in place to ensure that these are fit for purpose.

Management Measures

The relevant authorities that responded that wildfowling took place in their survey return all stated that licences and consents were in place to manage this activity. Landowners/occupiers, such as wildfowling clubs, need to apply to Natural England for consent to undertake wildfowling, this provision does not exist for third parties undertaking activities on these sites.

The summary of responses to Natural England's consultation on the review of its guidance for assessing wildfowling consents on protected sites, can be viewed at:

https://consult.defra.gov.uk/natural-england/wildfowling-guidance-review/results/summaryofresponsestonaturalengland_final_namesupdated.pdf (March 2018).

For all wildfowling activity which takes place under a Crown Estate lease, annual returns are made, detailing the numbers of visits undertaken and number of birds shot. The Crown Estate provides guidance at: <https://www.thecrownestate.co.uk/en-gb/what-we-do/on-the-seabed/coastal/wildfowling/>. The Joint Group for Wildfowling on Tidal Land was set up to advise The Crown Estate on issues relating to wildfowling on designated inter-tidal land, see: https://www.thecrownestate.co.uk/media/1206/wildfowling_wildfowl-joint-tidal-group-procedure.pdf.

Information from the British Association for Shooting and Conservation is available at:

<https://basc.org.uk/wildfowling/>.

4.17.3 Actions

No action required by SEMS Management Group. But for more information see:
http://www.solentems.org.uk/sems/SEMS_Activities/Wildfowling/.

4.18 Covid-19 and Activities

The Covid-19 pandemic was an unprecedented event that initially led to many coastal activities being suspended. Anecdotal evidence showed that wildlife flourished when it was left undisturbed, however there is little empirical evidence due to the cancellation of regular monitoring. There was also evidence that people enjoyed being out in nature and this should hopefully help with adherence to education and information messages when activities commence in full.

Conversely, the prohibition of many aspects of life and the good weather meant that some sites were inundated once people were allowed back outside and travel restrictions were lifted. Overcrowding and littering were regularly seen at hotspots, exacerbated by the continued closure of visitor infrastructure. There was increased reporting of people gathering bait and shellfish on the foreshore, probably due to the good weather conditions, people not being work and the huge uptake in recreational angling.

Government published 'Coronavirus (COVID-19): advice on accessing green spaces safely' see: <https://www.gov.uk/guidance/coronavirus-covid-19-advice-on-accessing-green-spaces-safely>. This encourages the public to follow the Countryside Code (<https://www.gov.uk/government/publications/the-countryside-code/the-countryside-code>).

In September 2020, Government will publish interim experimental indicators from the 'People and Nature Survey', covering the period 1-31 July 2020, to understand the impact of coronavirus (COVID-19) on how people use the natural environment in England. See: <https://www.gov.uk/government/statistics/the-people-and-nature-survey-for-england-monthly-interim-indicators-for-july-2020-experimental-statistics>. The initial Defra data shows that 24% of adults reported a visit to the seaside in July with 19% visiting in June.

4.19 Weather

The levels of activities are weather dependent, particularly for more informal recreation like general beach recreation. It obviously follows that with better weather more people will access the coast and there will be more pressure on habitats and species. Long term trends of better weather could also see an increase in events at the coast like beach festivals. Relevant authorities reported the close link between the weather and activity levels in their Annual Survey returns. It is recommended to continue to pre-plan and test additional measures that may need to be taken if good weather leads to an influx of coastal visitors at sensitive sites.

The best reference point for general visitor management is the updated countryside code available from: <https://www.gov.uk/government/publications/the-countryside-code>. This also has Covid specific updates.

4.20 Generic Actions

In the 2020 Survey, the data and comments identified generic actions that are cross cutting for all activities.

1. SEMS MG members should use this AMR and the activity pages on the SEMS website as a reference resource to help shape relevant plans and policies or management measures. See: http://www.solentems.org.uk/sems/SEMS_Activities/.
2. SEMS MG members to feed information to the SEMS office throughout the year (sems@hants.gov.uk) to enable the promotion and sharing of good practice throughout the Solent.
3. NEG to discuss how we can develop the evidence base to focus more closely on activity impacts on the Solent's designated habitats and species.

5 Marine Conservation Zones (MCZ)

In 2020, the SEMS Annual Survey was adapted to include questions on the three MCZs that are designated in the Solent:

- The Needles
- Yarmouth to Cowes
- Bembridge

Relevant Authorities were asked whether they had an MCZ within their jurisdiction and whether they had any concerns about activities taking place within these sites.

NE reported concerns about mooring and anchoring. SoIFCA is currently reviewing fishing activities against the features of MCZs. This process is a phased risk based approach, starting with Bottom Towed Fishing Gear Assessments, then working through other gear types to determine whether management is required. When complete, these assessments will be available on the SoIFCA website.

To develop the general management approach for MCZs, a vulnerability assessment is undertaken. This is similar to the condition assessments undertaken for European Marine Sites, it ascribes targets to the features of the MCZ (i.e. maintain, restore, etc.).

6 Summary of Actions

Section 6 collates the actions from section 4 on activities, completed actions from past years are available to view on the SEMS website at:

http://www.solentems.org.uk/sems/AMR/Action_archive/.

Accidental vessel discharges/emissions including oil spill and clean-up

No current action required by SEMS MG.

Boat repair and maintenance

4. **Action (ongoing):** Promote and share best practice in addressing the potential environmental impacts of boat repair/maintenance. For resources see: http://www.solentems.org.uk/sems/SEMS_Activities/Boat_repair/.
Lead/Partners: Harbour authorities and all others who have this activity in their jurisdiction.
5. **Action (ongoing):** Promote and share material on invasive non-native species (INNS) relevant to SEMS features.
Lead/Partners: NEG and Natural England
Action progress: Material on this topic has been and will continue to be added to the SEMS website: http://www.solentems.org.uk/sems/SEMS_Activities/Boat_repair/. The RAPID Life Project is now complete and is available at: <http://www.nonnativespecies.org/index.cfm?sectionid=58>.
6. **Action (2020):** Natural England to send an update on their monitoring work on INNS to the SEMS office for distribution once all survey work is completed (September 2020).
Lead/Partners: Natural England
Action progress: Final Report will be shared with SEMS to publish on the SEMS website once produced in October 2020.

Fishing (including shellfisheries)

1. **Action:** Continue to report to the IFCA any illegal fishing activity around closed beds or illegal fish trapping.
Lead/Partners: SEMS MG Members
Action Progress: Ongoing
2. **Action:** Publicise and encourage recreational anglers to take part in the Sea Angling Diary project. See: <https://www.seaangling.org/>.
Action Progress: Ongoing. Cefas have published findings of the early years of this study at: <https://www.cefas.co.uk/news/sea-angling-contributes-over-1-5bn-to-uk-economy/>.
Lead/Partners: SEMS MG Members

Fishing (shore-based activities)

5. **Action (ongoing):** Continue to report and liaise with the local IFCA, and if necessary the Marine police, where it is considered that bait collection or shellfish collection is commercial or having a detrimental impact. Use the [Guidance for Solent Relevant Authorities for monitoring shore-based fishing](#) to record this activity.

Lead/Partners: SEMS MG

Action progress: Ongoing

6. **Action (ongoing):** Use the resources page on the SEMS website to access educational material and resources on bait digging, see: http://www.solentems.org.uk/sems/SEMS_Activities/Shore_based_fisheries/.

Lead/Partners: SEMS MG

Action progress: Ongoing action.

7. **Action (2020/21): Progress the Solent Mudflat Strategy**

Lead/Partners: NEG

Action progress: NEG established a working group which agreed the need for a Mudflat Strategy. Once the Temith project outputs (University of Portsmouth, late 2020) are available, its mapping will show mudflat areas sensitive to disturbance, this will help to formulate the Strategy.

8. **Action (ongoing):** Natural England continue to work with SolFCA on the bait digging issue, but the assessment and management of impacts within the Solent has been put on hold while clarity is sought regarding roles, responsibilities and timescales.

Lead/Partners: Natural England and IFCA's

Action progress: NE to report to NEG on outcomes once progress has been made.

General Beach Recreation

3. **Action (ongoing):** SEMS MG members to be aware of the Natural England recreational evidence notes and use this guidance to identify issues and management measures (<http://publications.naturalengland.org.uk/publication/5615944092614656>).

Lead/Partners: SEMS MG members

Action progress: Ongoing

4. **Action (ongoing):** SEMS MG members to consider including information on potential impacts on designated sites when updating local codes of conduct or signage. Resources to assist this are available at:

http://www.solentems.org.uk/sems/SEMS_Activities/General_Beach_Recreation/.

Lead/Partners: SEMS MG members

Action progress: Ongoing

Grazing and Foraging

1. **Action (ongoing):** SEMS MG members to report any increases in foraging to the SEMS office direct or via the annual survey. Information on this activity is available at: http://www.solentems.org.uk/sems/SEMS_Activities/Grazing_and_Foraging/.

Lead/Partners: SEMS MG members

Action progress: Ongoing

Land recreation - Dog walking

- 1. Action (ongoing):** In 2021, when the 5 year monitoring of the effectiveness of the SRMP is complete, an assessment should be made as to how successful the mitigation strategy has been in reducing the impact of new housing development in the Solent, and whether baseline disturbance from existing housing has sufficiently reduced harm to birds through the promotion of the Bird Aware messaging by third parties (SRMP monitoring 2021). Due to COVID-19, the Bird Aware monitoring for winter season 2020/21 will be different from normal, so this data set will not form part of the overall initial monitoring period. Therefore the 'complete' data set is now not expected to be available until 2022.

Lead and partners: NEG

Action Progress: NEG will keep track of Solent Recreation Mitigation Partnership (SRMP) monitoring and continue with their liaising and support.

Future Action: Post 2022, evaluate whether the SRMS has achieved its objectives and assess whether it has mitigated bird disturbance impacts arising prior to 2010.

- 2. Action (ongoing):** RAs to identify and communicate with their own rangers and coastal staff details of how they can support Bird Aware Solent in the delivery of their educational messages. Also, for coastal staff to report bird disturbance issues to Bird Aware Solent.

Lead and partners: SEMS MG

Action Progress: Please feed details into the SEMS Annual survey if this action is undertaken.

- 3. Action (ongoing):** Local authorities to consider the use of Public Spaces Protection Orders as a measure to control dogs disturbing birds at sensitive sites.

Lead and partners: Local authorities

Action Progress: Please feed details into the SEMS Annual survey if this action is undertaken.

Land recreation - Walking (other than dog walking)

Please also see actions in dog walking above as these equally apply.

- 2. Action (ongoing):** SEMS MG to read and be aware of the issues raised in the nature conservation assessments relating to the stretches of coastal path in their jurisdiction. To view please see: http://www.solentems.org.uk/sems/SEMS_Activities/Land_Recreation/. Look to include relevant information in any revised signage, publications or codes of conduct for walking.

Partners/lead: SEMS MG

Action progress: Ongoing.

Littering and removal of litter

- 1. Action (Ongoing):** NEG to continue to develop the Cleans Solent Shores and Seas (CSSS) resource hub with the CSSS working group. SEMS MG members to use the hub to find information to support or coordinate any appropriate existing campaigns, policy making, communications, events etc. See:

http://www.solentforum.org/services/Member_Services/css/.

Lead/partners: NEG (development) and SEMS MG (to use)

Action progress: Ongoing.

Mooring and anchoring

- 1. Action (ongoing):** Promote and share information, best practice and research on any potential effects from mooring and anchoring.
Lead and partners: SEMS Management Group
Action Progress: This is an ongoing action to share and disseminate impact studies, reports and good practice. Material is uploaded to http://www.solentems.org.uk/sems/SEMS_Activities/mooring/.
- 2. Action (2020/21):** All to support, promote and share information from the LIFE ReMEDIES project. See: <https://www.gov.uk/government/publications/life-recreation-remedies-project>.
Lead and partners: SEMS Management Group and NEG

Operation of coastal flood and erosion risk management schemes

- 1. Action (ongoing):** Promote and share information on best practice on this activity including new methodologies and innovation.
Lead/partners: SEMS Management Group
Action progress: Ongoing.

Operation of ports and harbours (maintenance of infrastructure)

- 1. Action (ongoing):** Promote and share information on best practice on this activity including work on the ecological enhancement of port and harbour infrastructure.
Lead and partners: SEMS Management Group and Solent Forum BBS Hub (http://www.solentforum.org/services/Member_Services/Building_Bioversity_hub/).
Action Progress: Ongoing.

Recreation - light aircraft

- 4. Action (ongoing):** NEG to request data annually from Bird Aware Solent on winter drone use and monitor trends.
Partners/lead: NEG and Bird Aware Solent
- 5. Action (2020/21):** NEG to discuss potential mechanisms for recording drone use in the summer months. Existing information on drones can be accessed at: http://www.solentems.org.uk/sems/SEMS_Activities/Recreational_light_aircraft/.
Partners/lead: NEG
- 6. Action (ongoing):** SEMS MG members are asked to identify hotspot areas for drone/light aircraft use and report if management measures are introduced. This information should be included in the annual Survey return. This is an ongoing action and will be escalated to NEG if the annual Survey returns show that there are increasing concerns from Relevant Authorities.
Lead/partners: SEMS MG
Action progress: Ongoing

Recreation - non-motorised watercraft

4. **Action (ongoing):** SEMS MG members are reminded to use the paddlesports guidelines (2016) produced by NEG and to feed back to the SEMS Secretariat if and how they have been used. Other resources are also available on the SEMS website, see: http://www.solentems.org.uk/sems/SEMS_Activities/Recreation_Non_Motorised/
Lead/partners: SEMS MG
Action progress: Ongoing
5. **Action (2020):** NEG to ask Bird Aware Solent to report back on their work on educating recreational watercraft users once information is available.
Lead and partners: NEG and Bird Aware Solent.
Action progress: Ongoing.
6. **Action (2020/21):** NEG to research the evidence base for potential impacts from increased use of paddle boarding.
Lead and partners: NEG.
Action progress: New for 2020/21.

Recreation - powerboating or sailing with an engine

1. **Action (ongoing):** Promote and share any environmental studies, reports and good practice. Please visit: http://www.solentems.org.uk/sems/SEMS_Activities/Recreation_Motorised/.
Lead and partners: SEMS MG members.
Action progress: Ongoing.

Slipway and jetty cleaning and maintenance

1. **Action (ongoing):** Follow the best practice guidance when undertaking slipway and jetty cleaning. See: http://www.solentems.org.uk/sems/SEMS_Activities/Slipways/.
Lead and partners: SEMS MG members.
Action progress: Ongoing.

Wildfowling

No action required by SEMS Management Group. But for more information see: http://www.solentems.org.uk/sems/SEMS_Activities/Wildfowling/.

Generic Actions

In the 2020 Survey, the data and comments identified generic actions that are cross cutting for all activities.

1. SEMS MG members should use this AMR and the activity pages on the SEMS website as a reference resource to help shape relevant plans and policies or management measures. See: http://www.solentems.org.uk/sems/SEMS_Activities/.
2. SEMS MG members to feed information to the SEMS office throughout the year (sems@hants.gov.uk) to enable the promotion and sharing of good practice throughout the Solent.

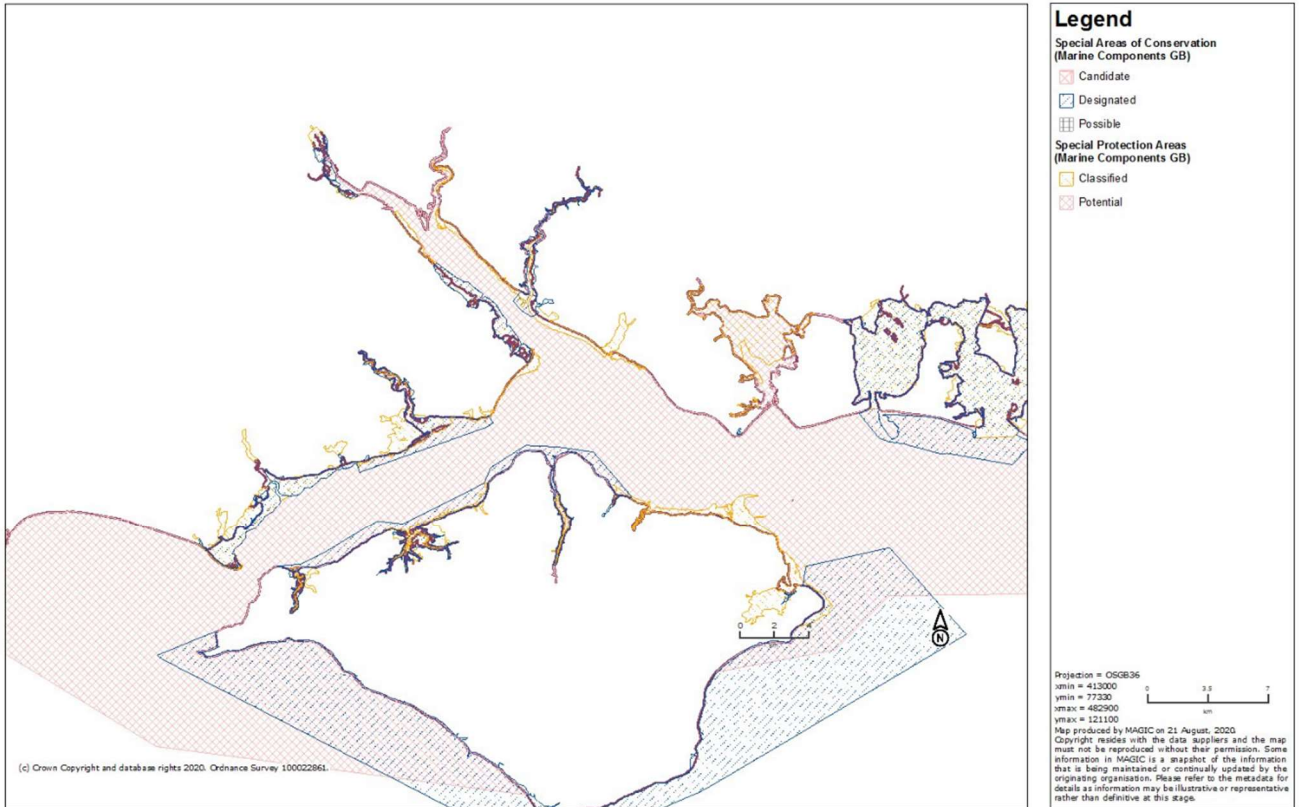
3. NEG to discuss how we can develop the evidence base to focus more closely on the impacts on the Solent's designated habitats and species from activities.

7 Appendices

7.1 Map of Solent Marine Sites

MAGiC

Solent European Marine Sites



Please visit <https://magic.defra.gov.uk/> to view the sites at a more local scale.

7.2 Bird Aware Solent Visitor Survey Winter 2019/20

A visitor survey was undertaken over the winter of 2019/20 on behalf of Bird Aware Solent by Footprint Ecology, forming part of their ongoing monitoring programme. Fieldwork included tally counts of visitors, and face-to-face interviews with a sample of visitors. Interview questions were similar to those used in previous surveys, covering a range of topics relating to visitor origins, access patterns and behaviour. Ten survey locations were used, with 16 hours of fieldwork at each, split between one weekday and one weekend day.

Key results and findings relevant to SEMS included:

- At most survey locations, the most common activity was either dog walking (61% of recorded activities overall) or walking (25% overall).
- Only 7% of interviewees said that they accessed the intertidal zone (below the strandline) as part of their route and only 3% accessed the water.
- Around half (48%) of interviewees were aware of the development of the England Coast Path, and 68% said that they expected its development would lead to them exploring new sections of the coast.
- 34% of interviewees were unaware of any habitats or species at the interview location which could be affected by recreation.
- 26% of interviewees had heard of Bird Aware Solent, with 19% having seen a ranger and 16% having spoken to one.
- Hayling Beach, Southsea, Portchester, Lepe Country Park and Royal Victoria Country Park (in Netley) were all popular alternative sites along the Solent coastline visited by interviewees.

The Survey concludes that, since 2017/18, there appear to be a slight decrease in the proportion of dog walkers, less frequent visitors, and visitors from further away. Furthermore, there appear to have been positive changes in the awareness of both sensitive habitats/species and of Bird Aware Solent. Please also see figures 2 and 3 below for more detailed information by site and habitat/species awareness.

The full report can be accessed at: https://solent.birdaware.org/media/33629/Coastal-Visitor-Survey-2019-20-report/pdf/Coastal_Visitor_Survey_2019-20_report.pdf.

Figure 3: Percentage of interviewees at each survey location who were not aware of any habitats or species that might be affected by recreation

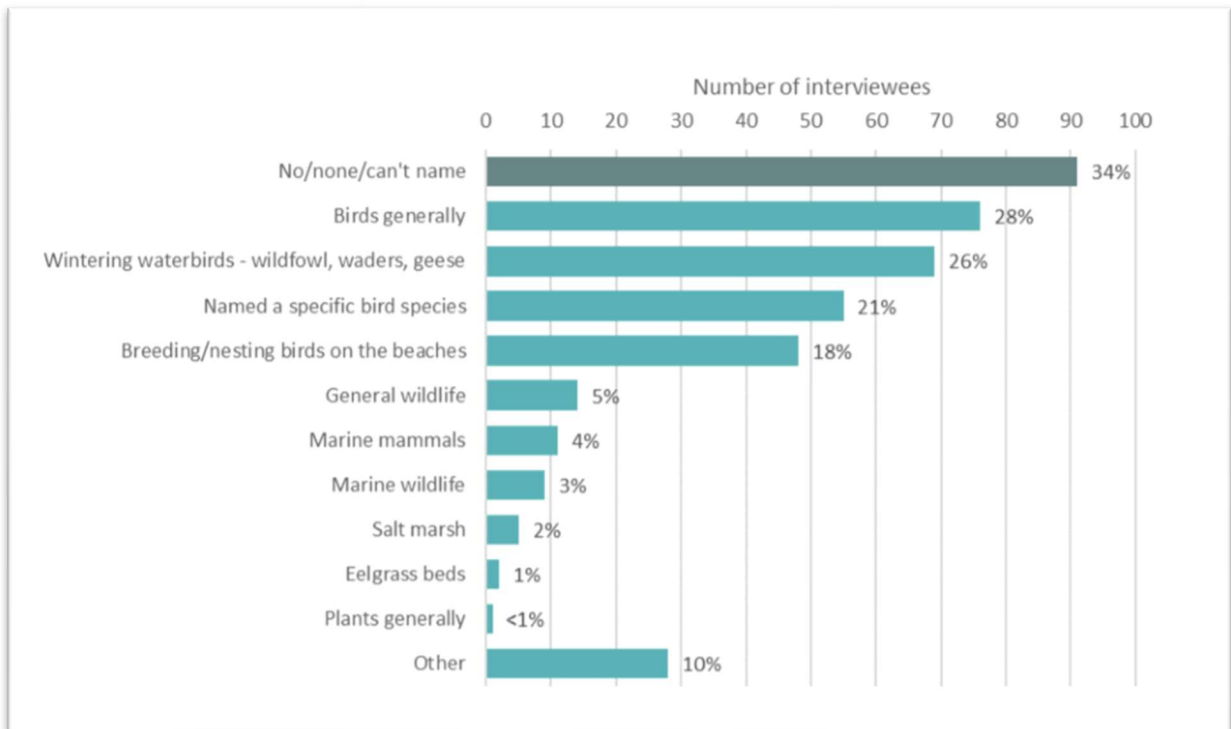
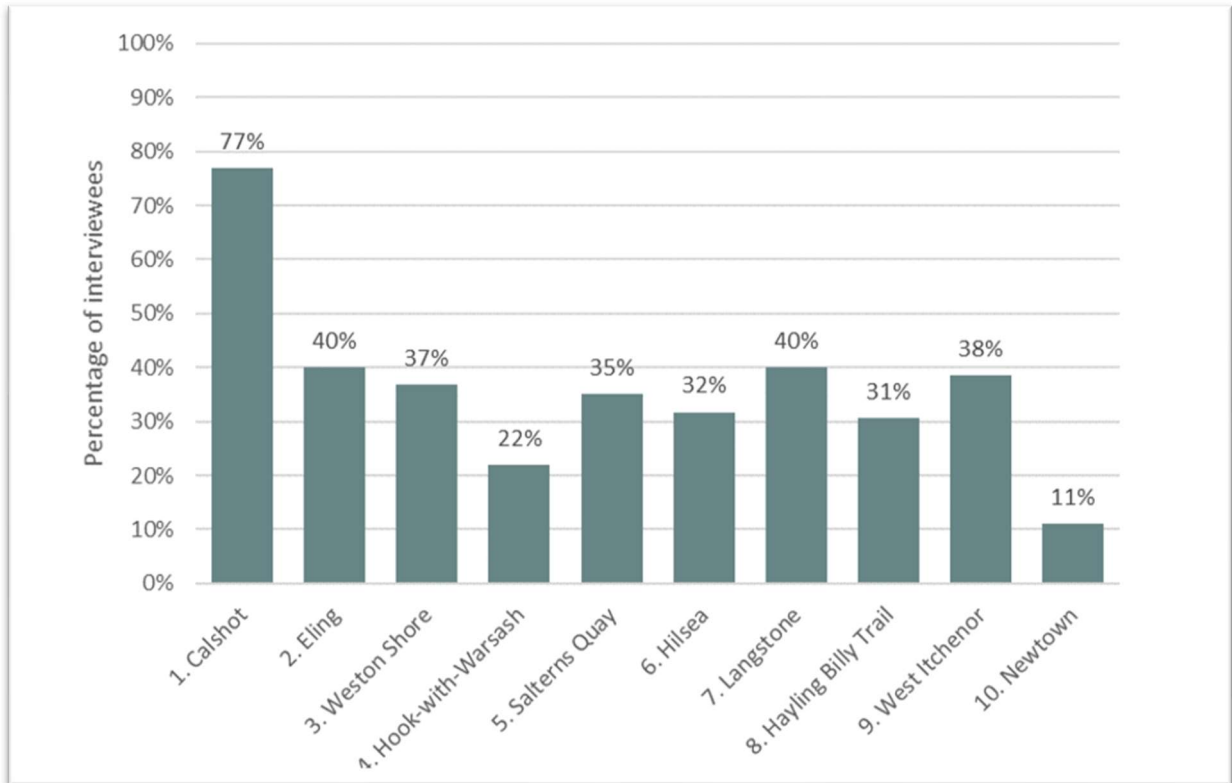


Figure 4. Habitats and species vulnerable to impacts from recreation identified by interviewees across all survey locations (number and %).

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