Marine Conservation Zone Assessment

Site name:	Torbay MCZ UKMO 20130025
Protected feature(s):	Seagrass beds Long-snouted seahorse (*Hippocampus guttulatus*)

Fishing activities assessed at this site:
Stage 1 Assessment
Static – pots/traps: Pots/ creels; Cuttle pots; Fish traps

Devon & Severn IFCA
Inshore Fisheries and Conservation Authority

D&S IFCA Reference
TOR-MCZ-005 Version 4

Contents

1. Introduction 3
2. MCZ site name(s), and location 3
3. Feature(s) / habitat(s) of conservation importance (FOCI/HOCI) and conservation objectives 3
4. Gear/feature interaction in the MCZ categorised as 'red' risk and overview of management measure 4
5. Activities under consideration 4
6. Is there a risk that activities are hindering the conservation objectives of the MCZ? 6
7. Can D&S IFCA exercise its functions to further the conservation objectives of the site? 7
8. Referenced supporting information to inform assessment 8
9. In-combination assessment 12
9.1 Other activities not included as plan or project: Recreational anchoring 13
10. NE consultation response 14
11. Conclusion 15
12. Summary table 16
13. References 17
Annex 1: Torbay MCZ Habitat Map 19
Annex 2: Fishing Activity Maps 20
Annex 3: Pressures audit trail 24
Annex 4a: NE formal advice 2019 25
Annex 4b: NE formal advice 2023 29

Version	Date	Author(s)	Comments	Reviewer(s)
1	November 2016	Stephanie Davis	First version sent to NE for informal advice	Sarah Clark
2	March 2019	Lauren Parkhouse	Updated from informal discussion with NE	Sarah Clark August 2019
3	July 2023	Lauren Parkhouse	Updated from NE formal advice. Mud removed from this version due to NE agreement with mud conclusion in V.2	Sarah Clark & James Stewart June 2023
4	April 2025	Lauren Parkhouse	Updated with results of M&C Plan. Updated conclusion.	J. Stewart April 2025

1. Introduction

This assessment has been undertaken by Devon & Severn Inshore Fisheries and Conservation Authority (D&S IFCA) in order to document and determine whether management measures are required to achieve the conservation objectives of marine conservation zones (MCZs). The IFCA's responsibilities in relation to management of MCZs are laid out in Sections 124 to 126, & 154 to 157 of the Marine and Coastal Access Act 2009.

Version 2 of this assessment should be used when reviewing the interaction of potting on mud. Version 2 not superseded by later versions in relation to that activity.

2. MCZ site name(s), and location

Torbay MCZ (0 - 6nm) is an inshore site located in the south west of the UK. The site covers an area of coastline in South Devon between Oddicombe Beach and Sharkham Point, protecting a total area of 19.8 km^2. Beginning at the coastline, the boundary extends between 1 – 2.5 km out to sea, to a depth of 30m encompassing Hope's Nose near Torquay and Berry Head near Brixham. Features of the site can be found in Annex 1, Figure 1.

Further information regarding the MCZ and its protected features can be found in the Torbay MCZ Factsheet[1].

3. Feature(s) / habitat(s) of conservation importance (FOCI/HOCI) and conservation objectives

Table 1 - Protected features relevant to this assessment

Feature	General management approach
Seagrass beds	Recover in favourable condition
Long-snouted seahorse (*Hippocampus guttulatus*)	Recover in favourable condition

From the Conservation Advice for the site the following information has been highlighted "*Vulnerability assessment work prior to site designation indicated that bottom trawling (specifically from cuttlefish fishing and scalloping) and recreational anchoring occurred within the site and could damage the seagrass beds (Natural England, 2013b). Consequently, the General Management Approach (GMA) for this feature was set as 'recover'. On 1st January 2014, Devon and Severn IFCA introduced a byelaw stopping the use of mobile gear within or close to the seagrass beds. However, recreational anchoring may still be occurring and resulting in damage. This could cause fragmentation of the habitat. As damage may have occurred and continues to occur, a recover target is deemed appropriate.*"

The conservation objectives for these features are that they are brought into, and remain, in favourable condition.

For each protected feature, favourable condition means that, within a zone:

1. its extent is stable or increasing
2. its structure and functions, its quality, and the composition of its characteristic biological communities (including diversity and abundance of species forming part or inhabiting the habitat) are sufficient to ensure that its condition remains healthy and does not deteriorate.

[1] MCZ Factsheet http://publications.naturalengland.org.uk/category/1721481

4. Gear/feature interaction in the MCZ categorised as 'red' risk and overview of management measure

- Seagrass beds were categorised as "red" risk against towed demersal gear. In January 2014, D&S IFCA introduced the Mobile Fishing Permit Byelaw and Permit Conditions, which prohibit the use of towed gear in certain areas of Torbay MCZ.

5. Activities under consideration

Potting occurs at a medium level within Torbay MCZ. In September 2021 there were 46 vessels in the ports of Torbay with a potting permit under the Devon and Severn IFCA Potting Permit Byelaw. Brixham has 35, Paignton 6 and Torquay 5, with pot numbers ranging from 5 to 1000. Pot types include inkwells & parlours (4,372), whelk pots (8,863) cuttle pots (3,040) and prawn pots (360). In April 2023 there were 39 vessels in the ports of Torbay (Brixham: 25, Paignton: 8, Torquay: 6) with a potting permit, showing a decrease since 2021. Not all these vessels deploy their pots within Torbay MCZ, with many working their gear further afield. For those vessels from the Torbay ports in 2023 (many of which are operating outside the MCZ) the main target species are the European lobster (*Homarus gammarus*) and brown crab (*Cancer pagurus*), using a total of 3,615 inkwell and parlour pots, and whelks (*Buccinum undatum*), using a total of 7,161 pots. There is also a total of 635 prawn pots in use. Potting for these species happens on or near the edge of rock features and on the mud feature. These types of pots and the interaction with the sub-feature Subtidal Mud were assessed in Version 2 of the MCZ assessment with agreement from NE in their advice of the conclusion that they are unlikely to have an impact on the mud feature and therefore will not be discussed further in this assessment.

There is an active cuttle fishery within the Torbay MCZ. The season for cuttlefish tends to be from March/April to June/July, when they come inshore to breed, with pots being set near and possibly on the seagrass feature. There are 21 vessels in 2023 which have indicated they have cuttle pots in the ports of Brixham, Paignton and Torquay; not all of these will set pots within Torbay or the MCZ. The number of pots per vessel ranges from 1-600, with a total of 2566 pots between the 21 vessels.

Data on the number of cuttle pots per vessel were collected in 2009 from seven vessels, which worked in Torbay and the total number of pots was 272. Figure 2 demonstrates where these vessels set their pots between April and June 2009.

Responses from the D&S IFCA's Potting and Netting Survey 2014 (unpublished data) indicated there were seven vessels that used pots/creels within the vicinity of the MCZ, three of which use cuttle pots with 700 cuttle pots in total. Figure 3 demonstrates where these three vessels set pots. However, this includes other pots they might fish such as parlour pots for crab and lobster, and in one case is represented as a polygon which shows the broad area where potting may take place. The pots are moved around and the whole area is not fished at once.
It is worth noting that the response rate for the 2014 survey was approximately 22% (for potting and netting combined) within the entire D&S IFCA District, so this may not represent all the activity in Torbay MCZ.

A further survey was carried out in 2020. Of the 72 permit holders contacted, 23 responded (32%), 9 of which do not set pots or nets within the Torbay area. Of the fourteen that do fish within the larger Torbay area, thirteen fish with pots or a mixture of pots and nets. Of the 38 vessels registered to Torbay ports (Brixham, Paignton & Torquay), 15 responded (39.5%), four of which do not fish within Torbay with pots or nets.Ten of the respondents from Torbay ports stated that they used pots in the wider Torbay area.

Four of the potters indicated on the provided maps that they set pots near the seagrass beds (Figure 4), all these vessels are based in Torbay ports. Three of these, Vessel 1, Vessel 4, and Vessel 6, use cuttle pots. Vessel 1 state they set pots on seagrass and sand and have 150 pots, whereas Vessels 4 and 6 state that they fish on rock, sand and mud. Vessel 2 uses whelk pots which are not set in the seagrass beds. The three vessels which use cuttle pots have a total of 370 cuttle pots between them. They set them as a range of single pots and up to 10 pots on a string. The cuttle pots are set between March and July, with some vessels stating they target cuttle from April to July and others from March to June. Soak times ranging from two to seven days. The other three potters that responded fish away from the seagrass beds.

There are no records of fish traps being used within this site. However, there is no evidence to show it is not occurring at a low, undetected level, so it cannot be completely ruled out. Natural England agreed through their formal advice to Version 3 of this assessment that current levels of activity for fish traps pose no significant risk of the activity hindering the conservation objectives of the features assessed.

Fishing activity 2024 – Monitoring and Control Plan

As part of the Monitoring and Control Plan (M&C Plan), which was developed from the conclusion of V.3 of this assessment, further fishing activity data was sought.

In-person meetings were held in Brixham and Torquay on the 20th and 22nd May 2024. All commercial potting permit holders in the ports of Torbay were invited to attend, as well as permit holders from ports outside the area.

There were four attendees at the Brixham meeting with just one using a total of 12 cuttle pots in Torbay. There was only one attendee at the Torquay meeting, and they set cuttle pots on a part time basis in areas potentially overlapping with seagrass.

Due to the low turn out to the in-person meetings, questionnaires and charts were sent to the relevant permit holders by post with stamped addressed return envelopes included. A total of 17 questionnaire packs were sent out to those permit holders in the ports of Brixham, Paignton and Torquay who indicated on their permit applications that they used cuttle pots. These questionnaires included the option for fishers to map their cuttle potting activity within Torbay.

Including the two relevant responses from the in-person meetings, there were seven responses to the cuttle potting questionnaires. Of these seven responses, three explicitly stated that they target seagrass while using cuttle pots in Torbay; the fishing areas mapped by some other fishers also indicated overlap between fishing activity and seagrass beds. Figure 5 shows the areas where the fishermen indicated they set cuttle pots, six of these overlap with seagrass to varying extents. Vessel 3 stated in their response that there was no seagrass found in the area they set cuttle pots however there is some overlap on the chart near Thatcher's Rock and Hope Nose. These seagrass beds are small, and the area of fishing drawn is broad and therefore there might be no overlap for this vessel.

Table 2 shows the responses from each vessel on number of pots, pots per string, pot spacing and the seabed type targeted. Between the seven vessels there are a total of 852 cuttle pots. These are set in different configurations: from single pots up to strings of 15. When fished in strings, all strings have at least three pots.

Table 2 Reponses to D&SIFCA activity survey 2024

Vessel number	Number of pots	Pots per string	Pot spacing	Seabed type
1	85 x round 45 x square	5	15m	All
2	12	1-3	10 fathoms	mixed
3	100	5-15	10-20 fathoms	Sand, mud, rock, tidal
4	70	35 x singles Strings of 3	15 fathoms	Sand
5	120 x round 100 x square	3	12 fathoms	Sand, seagrass
6	120 x round	3	12 fathoms	Sand, seagrass
7	200	-	-	Sand, hard ground, seagrass

6. Is there a risk that activities are hindering the conservation objectives of the MCZ?

Yes,
Evidence:
To determine whether each pressure is capable of affecting (other than insignificantly) the site's feature(s), the sensitivity assessments and risk profiling of pressures from the advice on operations section of the Natural England conservation advice package were used (Natural England, 2019). Table 3 shows the fishing activities and pressures included for assessment. The justifications for the pressures chosen for inclusion in this assessment can be seen in Annex 3: Pressures audit trail.

Table 3 - Fishing activities and pressures included in this assessment.

Activity	**Pressures**
Traps (Pots/ creels, Cuttle pots and Fish traps)	Abrasion/disturbance of the substrate on the surface of the seabed
	Removal of non-target species
	Removal of target species

The relevant targets for favourable condition were identified within Natural England's conservation advice supplementary advice tables (Natural England, 2019). Table 4 shows which targets were identified as relevant to the activity assessed. The impacts of pressures on features were assessed against these targets to determine whether the activities causing the pressures are compatible with the site's conservation objectives.

Table 4 - Relevant favourable condition targets for identified pressures.

Feature	Attribute	Target
Seagrass beds	Extent and distribution	Recover the total extent and spatial distribution of seagrass beds
	Extent of supporting habitat	Maintain the area of habitat that is likely to support the sub-feature
	Distribution: presence and spatial distribution of seagrass bed communities	Recover the presence and spatial distribution of seagrass bed communities
	Structure: biomass	Recover the leaf/ shoot density, length, percentage cover, and rhizome mat across the feature at natural levels to ensure a healthy, resilient habitat
	Structure: rhizome structure and reproduction	Recover the extent and structure of the rhizome mats across the site, and conditions to allow for regeneration of seagrass beds
	Structure: sediment composition and distribution	Maintain the distribution of sediment composition types across the feature
	Structure: species composition of component communities	Recover the species composition of component communities
	Supporting processes: light levels	Maintain the natural light availability to the seagrass bed
Long-snouted seahorse	Presence and spatial distribution of the species	Maintain the presence and spatial distribution of the species and their ability to undertake key life cycle stages and behaviours.
	Population: population size	Maintain the population size within the site.
	Population: recruitment and reproductive capability	Maintain the reproductive and recruitment capability of the species.
	Structure and function: biological connectivity	Maintain the connectivity of the habitat within sites and the wider environment to ensure larval dispersal and recruitments, and/ or to allow movement of migratory species.
	Supporting habitats: extent and distribution	Recover the extent and spatial distribution of the following supporting habitats: seagrass.

Section 8 provides detail on the activity and a literature review to support this assessment.

7. Can D&S IFCA exercise its functions to further the conservation objectives of the site?

Yes,
Evidence: Monitoring and Control Arrangements

- Monitoring of activity levels through regular patrols
- The IFCA can gauge through its Potting Permit Byelaw where any future changes or developments in effort or fishery type may occur.
- Changes can be made to the permit conditions, via consultation with permit holders and stakeholders, if the members of the Authority decide it to be necessary. This could include limitations or spatial/temporal restrictions. The permitting system allows for adaptive management.
- Potential use of voluntary measures
- Engagement with the community seagrass project at the Wild Planet Trust for sightings or potential impacts of pots/traps near and on seagrass beds.

8. Referenced supporting information to inform assessment

Potting activities are considered to be generally low impact when compared to demersal towed gear. However, there is potential for impact through gear dropping onto organisms on deployment; the movement of gear on the benthos due to tide, current, and storm activity; and as the gear is retrieved if dragged laterally when hauled (Coleman et al. 2013). Benthic communities are thought to be relatively unaffected by static gear due to the footprint of the gear and the small area of the seabed in direct contact (Eno et al. 2001). However, potential exists for epifauna to be damaged and/or detached and resistance to this pressure varies between species (Roberts et al, 2010).

Seagrass beds

The type of pots likely to be used near or on seagrass beds are cuttle pots, which are lighter than conventional crustacean inkwells and parlour pots. Cuttle pots are generally lightweight rigid structures, either square or round. Cuttle pots are used between March/April and June/July in Torbay MCZ when the cuttle come inshore to breed and subsequently die. Cuttle pots have been recorded close to the edge of the seagrass bed in Hope's Cove (Wood, 2012). The Community Seagrass Initiative and its successor projects regularly dived areas of seagrass within Torbay MCZ and they were not aware of seeing any pots/traps on or within the seagrass beds during dives (Pers. Comms. 2016), though many of the dives were conducted after the cuttle potting season. They did report finding lost parlour pots at Millstones Bay, which were no longer in use (Pers. Comms. 2016).

Walmsley et al. (2015) reviewed literature of potting impacts and found that at the time there was no primary literature on the impact of potting on seagrass beds; this remains the case. Sensitivity assessments indicate that based on observations and the general physical characteristics of lobster pots, it is considered that pots consistently set and hauled on seagrass can cause damage by leaf shearing, damaging meristems, uprooting plants and, if left long enough on the bottom, can cause damage by smothering and light attenuation (Roberts et al. 2010).

Seagrass has been estimated to have high sensitivity to heavy levels of potting activity (lifted daily, more than 5 pots per hectare), medium sensitivity to moderate and low levels of potting (lifted daily, 2-4 pots per hectare), and low sensitivity to single potting usage (Hall *et al.* 2008). There is no direct evidence to confirm these estimates, which are for Inkwells, Parlours, whelk and prawn pots. Cuttle pots, which are lighter in construction, were not considered. Based on the 852 cuttle pots identified to be in use in Torbay based on the most recent (2024) D&S IFCA activity survey, there would be 0.42 pots per hectare across the 1980 ha MCZ. The fishers who responded to the survey drew polygons on a chart to indicate their potting activity; when accounting for overlap between these areas, the fished area totalled 1122 ha, giving a pot density of 0.76 pots per ha. However, some of the areas drawn by fishers are understood to be indicative and are relatively large. In addition, it is important for D&S IFCA to consider a range of fishing activity patterns: though fishers may theoretically distribute their pots evenly over the whole fished area, there are plausible scenarios in which density is higher in certain areas, and these high density areas may change over time. Therefore, theoretically the pot density on seagrass may be much lower than 0.76 pots per ha, but could also be higher. The 2017 seagrass survey carries out by D&S IFCA (Davis, 2017) indicated that there was 116 ha of seagrass within the MCZ. If all 852 pots were set in the seagrass this would equate to 7.3 pots per ha of seagrass. These estimates are higher than those calculated in previous years; based on data from the 2020 D&S IFCA activity survey, which identified 370 cuttle pots identified to be in use in Torbay, there would be 0.19 pot per ha in the 1980 ha of the MCZ, or 3.2 pot per ha of seagrass if all pots were set within the seagrass beds. A similar survey was carried out in 2014 by D&S IFCA (unpublished data), and of the seven vessels that reported using pots within the MCZ, three used cuttle pots with a total of 700 pots between them. Based on these 700 pots there would be 0.35 pots per ha within the MCZ and 6 pots per ha

on the seagrass. The mapping from this project indicates that not all pots are set on the seagrass (Figure 2). Another unpublished D&S IFCA survey from 2009 indicated seven vessels fished 252 cuttle pots between them within Torbay, again not all of these were set within the seagrass beds (Figure 3).
The cuttle pots are typically hauled every 3-7 days during the cuttle season. These scenarios are at the low to moderate levels of potting as indicated by Hall et al (2008) and would therefore pose a low to medium sensitivity risk.

There is a total of 3203 cuttle pots registered to vessels with D&S IFCA Commercial Potting Permits based in Torbay ports April 2025, with 22 vessels indicating that they fish with cuttle pots (an increase from 17 vessels in May 2024). If all of these pots were set there would be 1.6 pots per ha for the whole MCZ and 27.6 pot per ha for seagrass. This is a worst-case scenario and is considered highly unlikely to happen due to vessels fishing in other locations and carrying out other fishing methods, and the space available would not allow for this many pots to be fished at the same time. Past fishers' surveys, IFCA patrol sightings and Officer's expert knowledge indicate that this would not occur.

Cornwall IFCA (CIFCA) investigated the impacts of parlour pots on seagrass beds (Jenkin et al, 2017). Cameras were attached to a string of six parlour pots using wooden poles. The angle of the cameras gave a frame of view over the potential impact zones of the pot when hauling. These included the front and back of the pot. Once landed, pots were on the seabed for approximately 5 minutes and during this time, there was limited to no movement seen on the seabed until hauling. Although they did not quantify the level of impact, there was an impact observed. The underwater video data showed leaves being removed from the seabed and floating free after the pot had been dragged across the seabed as well as loose leaves caught on the pot being recovered to the surface (Jenkin et al, 2017). The survey was carried out as a worst-case scenario, with lobster pots on seagrass (up to 70cm long) near Falmouth. As the survey was conducted in November when the seagrass is dying back, the seagrass might have been more easily removed as the plants naturally lose their leaves at this time of year, possibly making them more susceptible to damage and so the study might show that potting has more of an impact during the Autumn/Winter than during Spring/Summer months. It was noted that the majority of seagrass brought to the surface on the pots was brown or black, indicating it was already dead. The hauler used on the study vessel operates at a fairly slow speed compared to haulers on fishing boats. CIFCA is unsure if the slower haul speed causes more seagrass to be removed as it is possible that the pots were being dragged for longer period of time. The study used parlour pots which are heavier than the cuttle pots which are used to target cuttlefish and set on or near the seagrass (Jenkin et al, 2017).

In 2018 D&S IFCA carried out a small-scale study in the Torbay MCZ to investigate possible impacts cuttle pots may have on the seagrass during shooting, hauling, and while on the seabed. Two pots were used, one with four GoPro cameras attached and one without. The pot with the cameras was deployed a total of 6 times for varying lengths of time, from 30 minutes to 6 hours. The pot was checked over for any seagrass which may have been attached and the video was reviewed in the office. The second pot was shot and hauled as part of an egg-laying media trial, again the pot was checked over for any seagrass when recovered. The footage demonstrated that there was very little movement of the pots once they were on the seabed. The hauling of the pot had mixed results due to different people hand-hauling the pot. If the pot wasn't hauled smoothly, it appeared to drag through the seagrass and created a plume of sediment. When hauled directly upwards there was little disturbance to the sediment or the seagrass. The fishers would be using a pot hauler to retrieve the pots, not hand-hauling, and therefore the motion would be smoother. There were two occasions, out of the six hauls, where seagrass was attached to the pot. One leaf was observed on the deck after one haul and multiple bits of leaves on another haul, the leaves were green/brown in colour. There were no rhizome or roots observed to be attached to

the pots. The results indicate that the cuttle pots have some impact on the seagrass beds however, the degree of this impact is unclear from this small-scale study (Parkhouse, 2019).

A further study was carried out by D&S IFCA in 2020 to investigate the impact of a single pot in more detail, along with a string of four pots. GoPro cameras were attached to each pot to record the setting, how the pot behaved on the seabed and then hauling after approximately 30 minutes. The single pot and the string of pots were all deployed four times within known seagrass beds in the Torbay MCZ (Parkhouse, 2021).

The results showed that the single pot remained static throughout the 30-minute soak time, settling quickly on the seabed with little disturbance. There were two deployments in which a small plume of sediment was visible, but this did not extend any higher than the skirt of the pot and settled within 10 seconds. On each deployment the pot was static throughout the short time on the seabed. During the hauling process the pot was lifted straight up from the seabed without any lateral dragging motion. On two occasions the pot bounced once before lifting straight up. A small plume of sediment was visible due to the bounce but there was no obvious disturbance to the seagrass. On one haul, three seagrass leaves were seen on the single pot. There was no other visible disturbance to the seagrass (Parkhouse, 2021).

The 2020 D&S IFCA study did not investigate any potential impacts of the pot on the seagrass during the soak time. Uhrin & Fonseca (2005) investigated the impacts of different soak times for the spiny lobster trap fishery on the seagrass beds in the Florida Keys. These beds are predominantly made up of two species, *Thalassia testudinum* and *Syringodium filiforme*. Soak times for this fishery, on average, increase from seven to 25 days as the season progresses. In contrast, the Torbay fishery has a maximum soak time of seven days as indicated from the 2020 questionnaires. Uhrin & Fonseca (2005) aimed to establish the threshold soak time beyond which seagrasses exhibit significant levels of sustained injury and perform preliminary calculations of the recovery trajectory for said injuries. The results show that lobster traps resting on top of seagrass for extended periods cause blades to become broken or abraded, which may disrupt normal blade function. A significant decline in short shoot densities of *S. filiforme* was observed after 1 week, however this injury was not sustained and *S. filiforme* was able to recover quickly after this disturbance. After a 4-week soak time, there appeared to be a more substantial decline (~20%) in short shoot densities in both species, although this was not statistically significant. If the pots were left for 6 weeks or longer there was a significant decrease in shoot density in both species. They concluded that, within the limits of their testing parameters, it appears that standard fishing practices with a typical soak time of less than five weeks, there will be a reduction in shoot densities but should not result in statistically significant or long-term injuries to the seagrass beds of the Florida Keys (Uhrin & Fonseca, 2005). The soak times of pots in Torbay are substantially shorter than those for which significant impact was observed in Florida and therefore the presence of pots on the seagrass may not have a lasting impact on the seagrass beds in Torbay. However, the deployments are repeated throughout the season and the Uhrin & Fonseca (2005) paper did not investigate repeated deployments.

Although the single pot deployments appeared to have limited impact on the seagrass during deployment and hauling, the strings of four pots caused visible impacts during both stages. This impact differed in severity depending on the location of the pot within the string. The last pot to be hauled on the string had the most visible impact. The pot was dragged across the seabed rather than lifting straight up as the single pot did. During this dragging of the last pot there were large plumes of sediment created and seagrass leaves could be seen both on the pot and in the water column, and in one case what appeared to be a rhizome could be seen in front of the camera. The third pot to be hauled also had a visible impact, however less severe than the last pot. The first and second pot in the four-pot strings behaved in a similar manner to the single pot deployment and typically lifted straight up off the seabed. These results would suggest that pots further along

the string are dragged each time a pot is hauled, with the severity increasing the further along the string the pot is placed (Parkhouse, 2021). Presumably the same would be true of any anchors used pots or strings of pots, though this fishery appears to operate without anchors on the pots.

Although the present study demonstrates there can be an impact on the seagrass beds from cuttle potting, there has been no clear evidence of impacts during biennial surveys of the beds. D&S IFCA has previously carried out biennial surveys of the seagrass beds in Torbay. A decrease was observed between 2012 and 2014 however, the 2016/2017 survey saw an increase of 10% in extent of the seagrass beds compared to 2014 (Davis, 2017). There was no obvious evidence observed of damage caused by cuttle pots during this survey. However, the aim of the survey is to look at the density and extent of the beds, not for impacts and therefore low levels of damage could have been missed. In addition, without a dedicated assessment of impact it is not possible to state with certainty whether positive changes in the beds may have been precluded by fishing impacts. A Drop-Down Video (DDV) and dive survey were carried out by the Environment Agency (EA) and Natural England (NE) on the seagrass beds of Torbay in 2019. It was noted in the report that that neither fishing nor anchoring are a substantial pressure on the beds. However, it was noted that the method used for the DDV survey was not well suited in detecting these impacts, and local SCUBA divers from a community seagrass monitoring programme have noted high levels of local impact from leisure craft anchors in seagrass beds. The impacts of the anchors from these recreational craft are such that eco-moorings are being installed in order to reduce the pressure. However the eco-moorings are not used by all recreational boats, which tend to prefer to use their own anchor. The cuttle pots do not have anchors and therefore this type of impact caused by anchors is removed. The Environment Agency's data suggested that one of the main factors that might influence the extent and density of the seagrass beds is the degree of exposure of the bed and weather experienced (Field, 2019).

Long-snouted seahorse (*Hippocampus guttulatus*)

The distribution of seahorses is closely associated with the distribution of seagrasses. Although seagrass beds are the preferred habitat of *H. guttulatus*, they are known to be found on a mix of substrates and at a range of depths, with the deepest found in the UK recorded at 46 metres. The main threat to the seahorse in the UK is habitat loss and disturbance, particularly the loss of seagrass beds. In the UK seagrass beds have not fully recovered from a wasting disease which devasted the Northern European populations in the 1930s (Parry-Wilson et al. 2019). This lack of recovery is thought to be in part due to natural events such as storms and grazing; however, it is largely attributed to human disturbances such as coastal development, dredging, agricultural runoff and recreational boating activities (Parry-Wilson et al., 2019) Potting appears to have limited impact on seagrass compared to these pressures.
There is currently no available evidence of pots themselves impacting the seahorses, however they are known to be caught on pots (Garrick-Maidment, 2004). The Seahorse Trust have received sightings of *H. hippocampus and H. guttulatus* from crab fishers during winter months in deep water. They have not received reports of seahorses on pots in shallower waters or in the summer months. They reported that the specimens were in good health when they came up on the pots and there are no reports of mortality (Garrick-Maidment, 2004).

Removal of non-target species

Bycatch is negligible due to the design of the pots: most other species cannot enter or can escape easily before the gear is hauled. Any unwanted bycatch can be returned to sea alive. Bycatch species identified in whelk pots used near South Wales included netted dog whelks, starfish e.g. *Asteria rubens*, crabs e.g. *Necora puber,* and brittlestars e.g. *Ophiura ophiura* (Robson, 2014). There was bycatch of spider crab in the D&S IFCA cuttle pot study, this was returned alive (Parkhouse, 2019).

9. In-combination assessment

Table 5 - Relevant activities occurring in or close to the site

Plans and Projects		
Activity	**Description**	**Potential Pressure(s)**
Brixham Sea Farm	Existing mussel farm in Torbay. The farm site is to the west of Brixham Harbour between Fishcombe Cove and Elberry Cove, measuring 300m by 100m. The long lines are set 2m below the surface supported by 200 litre plastic floats. Ropes to encourage seed mussel to settle are attached to the long lines, and hang down clear of the seabed.	Siltation rate changes, including smothering
Scallop ranching	Scallop nursery area for growing on spat up to 40 mm in pearl nets and lantern nets before seeding them on the seabed. The longlines will be suspended in the water column approximately 3-5m under the water and supported with floats. The lantern nets are tied to the longline and hang beneath it with the scallops in them.	NE advised that the site was to be located 200m south from the MCZ boundary to avoid the operation causing damage or disturbance to the designated features of the site.
Seaweed farm	Aqua Botanika 2 hectare seaweed farm. Reef Cubes mooring blocks to be used. Minimum distance between lines 2.5m. Site located away from seagrass beds.	Abrasion/Disturbance of the substrate on the surface of the seabed Genetic modification and translocation of indigenous species Introduction or spread of invasive non-indigenous species
Other activities being considered		
Fishing Activities	**Description**	**Potential Pressure(s)**
Towed demersal trawls and dredges	These activities have been prohibited from the seagrass feature of the site under D&S IFCA Mobile Gear Permit Byelaw. Due to management brought in for towed gears, there is no in-combination effect.	Abrasion/disturbance of the substrate on the surface of the seabed. Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion. Removal of target species. Removal of non-target species.
Digging with forks	Activity not occurring commercially, and recreational activity only occurs in the intertidal therefore no in-combination effect thought to be possible.	
Hand working	Activity not occurring commercially, and recreational activity only occurs in the intertidal therefore no in-combination effect thought to be possible.	
Static and passive nets	Although potting occurs on similar habitats to static nets, at the current level of netting activity it is thought that no in-combination	

	effects will lead to the conservation objectives not being met for the features assessed.	
Commercial diving	Due to the low level of commercial diving activity, no in-combination effect thought to be possible.	

D&S IFCA concludes there is no likelihood of significant adverse effect on the interest features from in-combination effects addressed within Table 5.

9.1 Other activities not included as plan or project: Recreational anchoring

There is evidence that anchoring of recreational vessels has an impact on seagrass beds. An anchor landing on a patch of seagrass can bend, damage and break shoots (Montefalcone *et al.* 2004). Collins *et al.* (2010) studied the impacts of anchoring on *Zostera marina* in Studland Bay, Dorset. Sediment in bare patches caused by anchoring and mooring chain damage was less cohesive and more mobile. It contained less organic material and had a lower silt fraction. Collins *et al.* (2010) stated that when an anchor and chain is pulled up and dragged over the bottom following the movement of the boat it cuts leaves and pulls the rhizomes from the seabed. It cuts into the seagrass rhizome mat, tearing a hole in its fabric. This forms an anchor scar and damage is elevated by wave action. Chains attached to anchors from moored boats leave bare patches, which are typically 1-4m² (Collins *et al* 2010). In Studland Bay where the edge of the rhizome was exposed, burrowing crabs undermined the edge of the surviving seagrass bed (Collins *et al*., 2010). The results from this study suggested that recovery of seagrass beds is not straightforward and can take several years if damaged (Collins *et al*., 2010).

Collins *et al.* (2010) found sediment cores taken from seagrass showed a higher abundance of species compared to the anchor and mooring scars (total fauna count of seagrass to scar ratio was 1134:339). The diversity of taxa was also higher in seagrass compared to scar areas, with 50 and 38 families/species, respectively, found in their samples (Collins *et al.* 2010).

Unsworth *et al.,* (2017) assessed the scale of loss of eelgrass from swing moorings and found that the average area affected was 122 m^2 per mooring, concluding that loss of this sub-feature is small but significant at a local scale.

Anchoring by recreational crafts, which has been shown to be a damaging activity, has not been assessed in the site by the relevant Authority, in this case the Marine Management Organisation (MMO), and to D&S IFCA's knowledge this is not being monitored, assessed or managed by MMO at the time of writing.

There is a voluntary code of conduct for anchoring in Torbay established by the Community Seagrass Initiative and its partners and successors. Seagrass beds have been declared voluntary 'no anchoring zones'. Marker buoys are located near seagrass beds from May to September to make water users aware of the location of the seagrass beds. The voluntary code includes the slow speed of jet skis within the areas as well as voluntary no anchoring. Advanced mooring system buoys have also been placed in Fishcombe Cove and off Broadsands Beach to encourage recreational boat users to use them instead of anchoring on the seagrass (Torbay Harbour, 2025). However high levels of anchoring still appear to take place in Fishcombe and Broadsands on the seagrass (D&S IFCA visual observations).

10. NE consultation response

This section outlines Natural England's (NE's) advice on recent versions of this assessment including version 2, which also considered impacts of whelk pots on mud. Version 2 was not superseded by later versions in relation to that whelk pots on mud, but has been superseded for other activity/feature interactions.
Formal advice was provided by NE on assessment TOR-MCZ-005 version 2 (Annex 4a). NE agreed with the conclusions of the assessment that current levels of activity for fish traps and crab and lobster pots/creels offer no significant risk of the activity hindering the conservation objectives of the features assessed. The assessment also showed that whelk pots are thought to occur at low levels on the feature subtidal mud. NE agreed that at current levels there is no significant risk of the activity hindering the conservation objectives of the feature subtidal mud (Annex 4).

However, NE did not agree with the conclusion that there is no risk of cuttle pot activity hindering the conservation objectives of the seagrass beds, or the long-snouted seahorse (*Hippocampus guttulatus*) (Annex 4a).
Therefore, D&S IFCA carried out further research into potential impacts for cuttle potting on seagrass to inform V.3 of the MCZ assessment.

Formal advice was subsequently provided on assessment TOR-MCZ-005 V.3 (Annex 4b). NE did not agree with the conclusion that there is no risk of the cuttle pot activity hindering the conservation objectives of the long-snouted seahorse and that any impact on the seahorses would likely be indirect and related to the loss of seagrass habitat within the MCZ.

NE agreed with the proposed points of action to gather more evidence to understand the fishing behaviour in the site regarding number of pots, the exact location potting is taking place, and the makeup of strings being used currently. They supported the proposal of meetings with the industry in order to establish the level of activity.

11. Conclusion

There is a lack of literature on the impacts of cuttle pots on seagrass. However, the research carried out by D&S IFCA indicated that strings of more than two pots did cause visible damage to seagrass. The level of damage could not be quantified but seagrass was removed by the pots dragging when being hauled. The damage was only seen during the hauling of the third and fourth pots on each string and not the first and second pots. There appears to be no to minimal damage caused by single pots, or strings of two pots, which get hauled directly upwards. This assumes the use of no anchors on single pots or strings of pots; anchor usage would likely increase damage to seagrass during hauling. It should also be noted that the study was not able to quantify an impact to seagrass that may occur while the pots are left to fish, for example due to lateral movements on the seabed.
The activity survey carried out with the industry in 2024 demonstrates that pots are set within the seagrass beds of the Torbay MCZ and that these are often set in at least strings of three which could be having an impact on the seagrass beds.

Based on the work undertaken by D&S IFCA, it cannot be concluded that at current levels the cuttle potting activity is not having an adverse effect on the seagrass bed of the Torbay MCZ and has the potential to hinder the achievement of the conservation objectives. Therefore, management measures need to be implemented to ensure the conservation objections of the site are furthered.

There is a lack of evidence on the direct impact of cuttle potting on the long-snouted seahorse, however there are no reports of harm, and they were seen to be in good health when observed on crab pots (Garrick-Maidment, 2004). Any impact to seahorses would likely be indirect with the loss of seagrass habitat within the MCZ, which could be caused by potting, and other activities such as anchoring and mooring. D&S IFCA cannot conclude the activity is not having an indirect adverse effect on the long-snouted seahorse (*Hippocampus guttulatus*) via potential impact on the seagrass feature. Any management measures implemented to ensure the conservation objectives of the seagrass feature are furthered will also contribute to ensuring the conservation objectives of the long-snouted seahorse are furthered.

It should be noted that D&S IFCA has concerns about the level of recreational anchoring which is occurring within Torbay seagrass beds and is documented in studies and peer reviewed papers to have an impact on seagrass beds. It is felt that the Marine Management Organisation as regulators of this activity should be managing this, so that the conservation objectives are not hindered by this activity.

12. Summary table

Feature or habitat of Conservation interest	**Conservation objectives/ Target attributes** (Natural England, 2015)	**Activity**	**Potential pressures from activity and sensitivity of habitats to pressures.** (Natural England, 2015)	**Potential exposure to pressures and mechanism of impact significance**	**Is there a risk that the activity could hinder the achievement of conservation objectives of the site?**	**Can D&S IFCA exercise its functions to further the conservation objectives of the site?** **If Yes, list management options**
Subtidal mud Seagrass beds	Extent and distribution Presence and spatial distribution of communities Presence and abundance of typical species Species composition of component communities	Commercial fishing: Pots/ creels; Cuttle pots; Fish traps	• Abrasion/disturbance of the substrate on the surface of the seabed • Removal of target species • Removal of non-target species	Pots for lobster and crab are not thought to occur on these features. Whelk pots are fished on subtidal mud. Cuttle pots are believed to be occurring on and near seagrass beds and subtidal mud.	Abrasion could occur during deployment, hauling and storms. Pots/ traps are selective and by-catch is very low. Pots/ traps occupy a small area of the seabed.	Yes, Management measures could include: 1. Monitor activity levels 2. Potential voluntary measures 3. Changes to permit conditions 4. Enforcement of byelaws and permit conditions 5. Monitoring and review of current byelaws
Long-snouted seahorse (*Hippocampus guttulatus*)	Presence & spatial distribution of the species (maintain) Population size (maintain) Recruitment & reproductive capability (maintain) Supporting habitats: extent & distribution (maintain)	Commercial fishing: Pots/ creels; Cuttle pots; Fish traps	• Abrasion/disturbance of the substrate on the surface of the seabed (supporting habitat) • Removal of target species • Removal of non-target species	Cuttle pots are believed to be occurring on and near seagrass beds.	See above	Yes, Management measures could include: 1. Monitor activity levels 2. Potential voluntary measures 3. Changes to permit conditions 4. Enforcement of byelaws and permit conditions 5. Monitoring and review of current byelaws

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Annex 1: Torbay MCZ Habitat Map

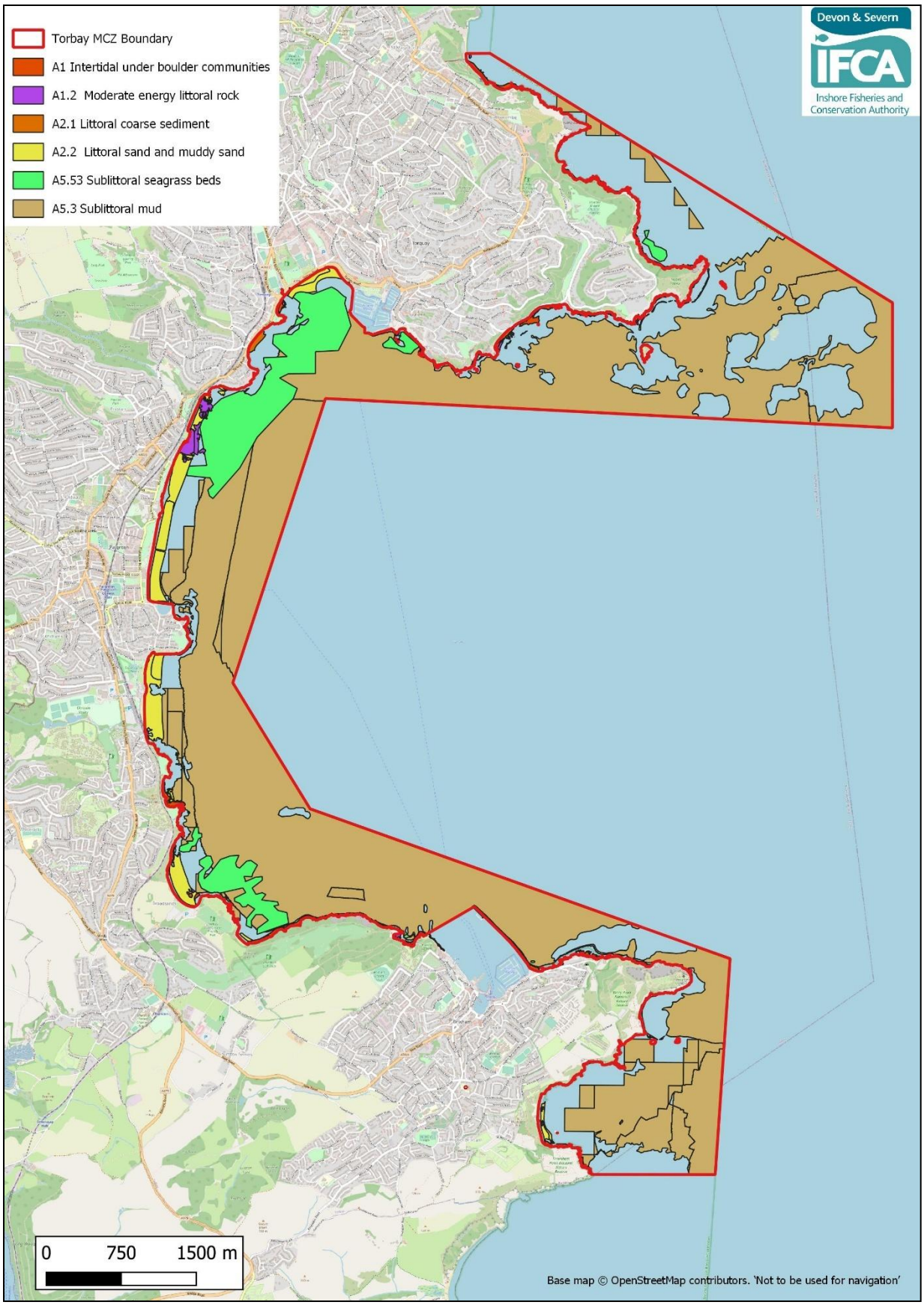

Figure 1 Torbay MCZ and associated features

Annex 2: Fishing Activity Maps

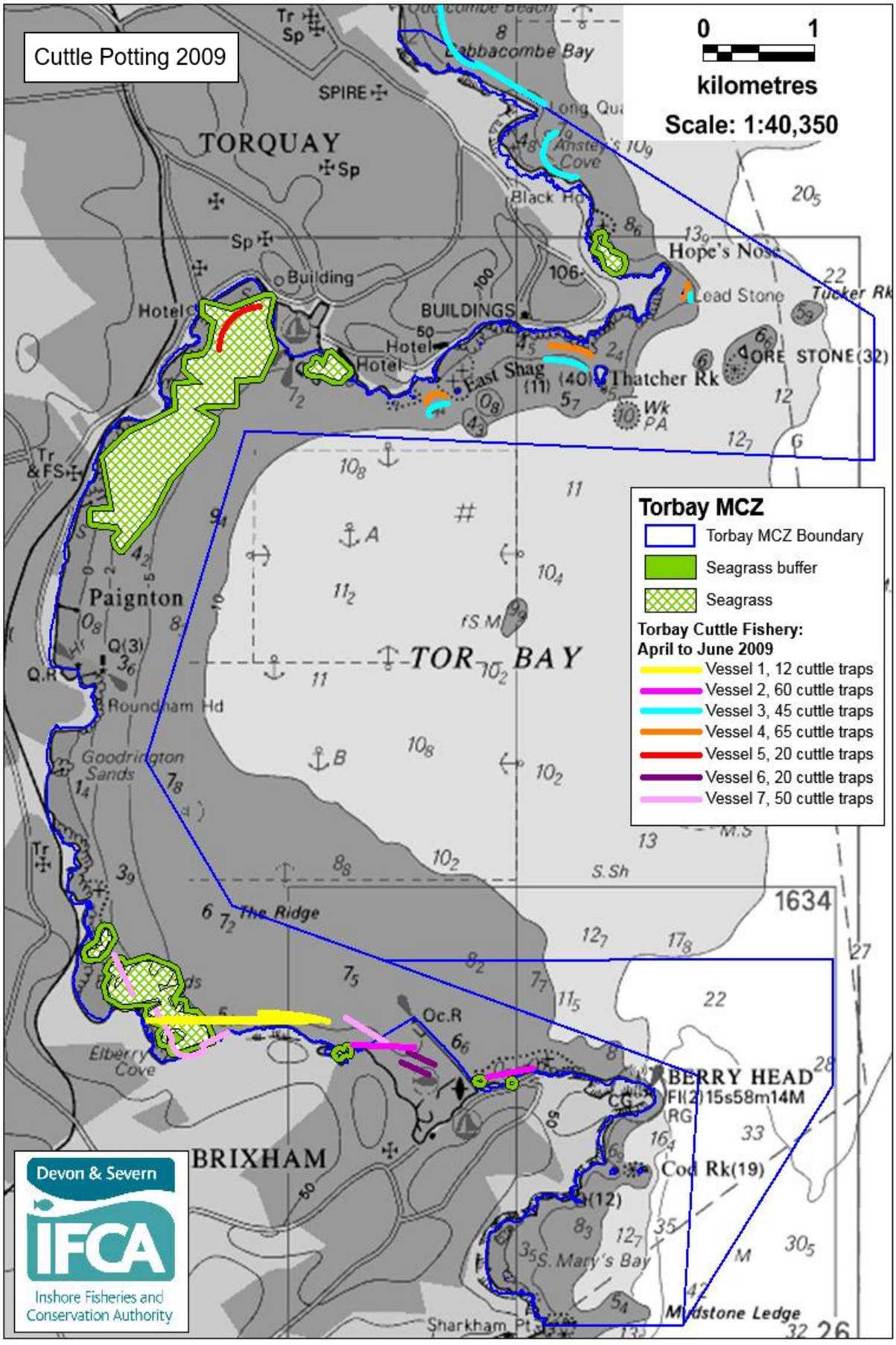

Figure 2 D&S IFCA cuttle potting survey results 2009

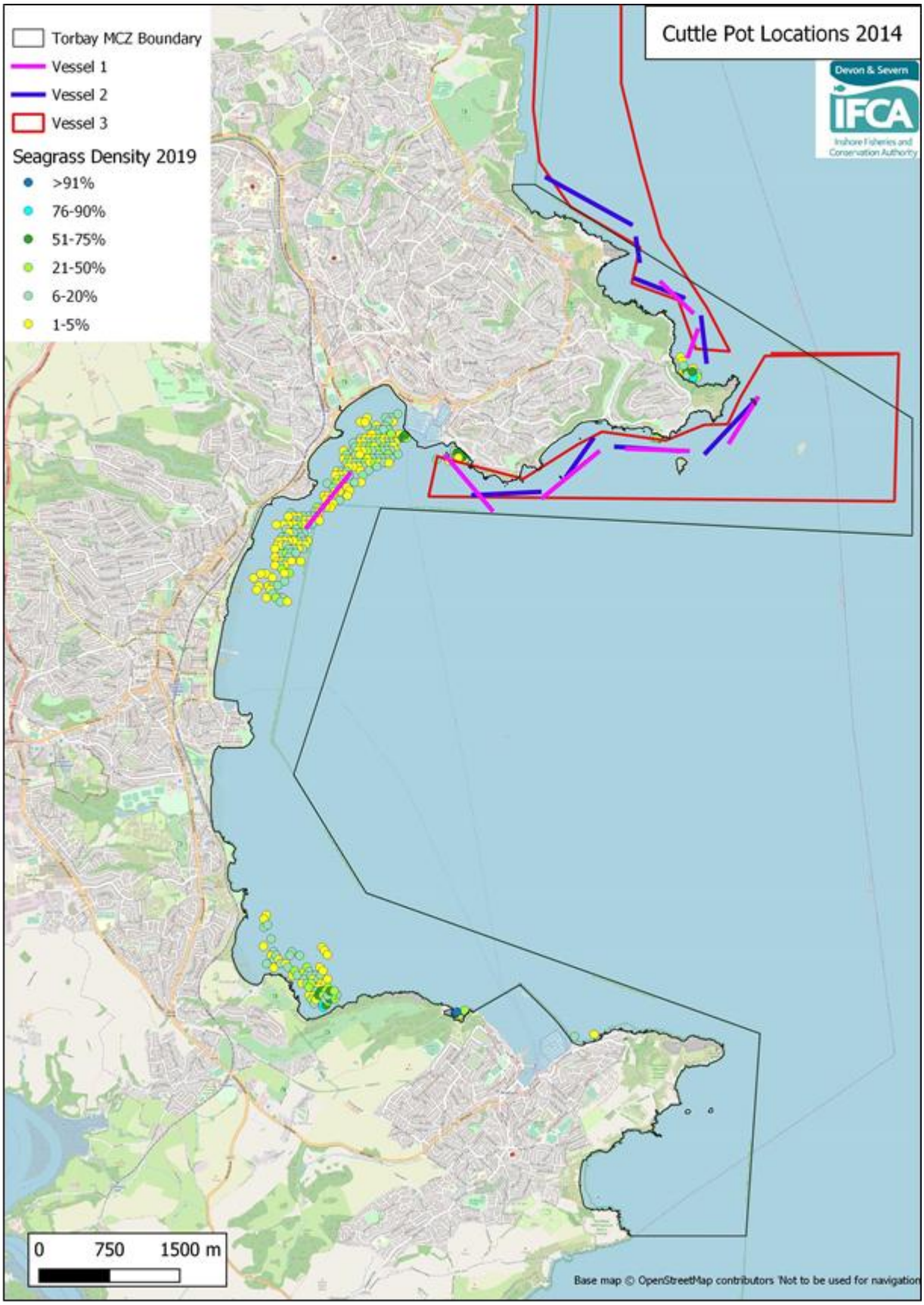

Figure 3 D&S IFCA cuttle potting survey results 2014

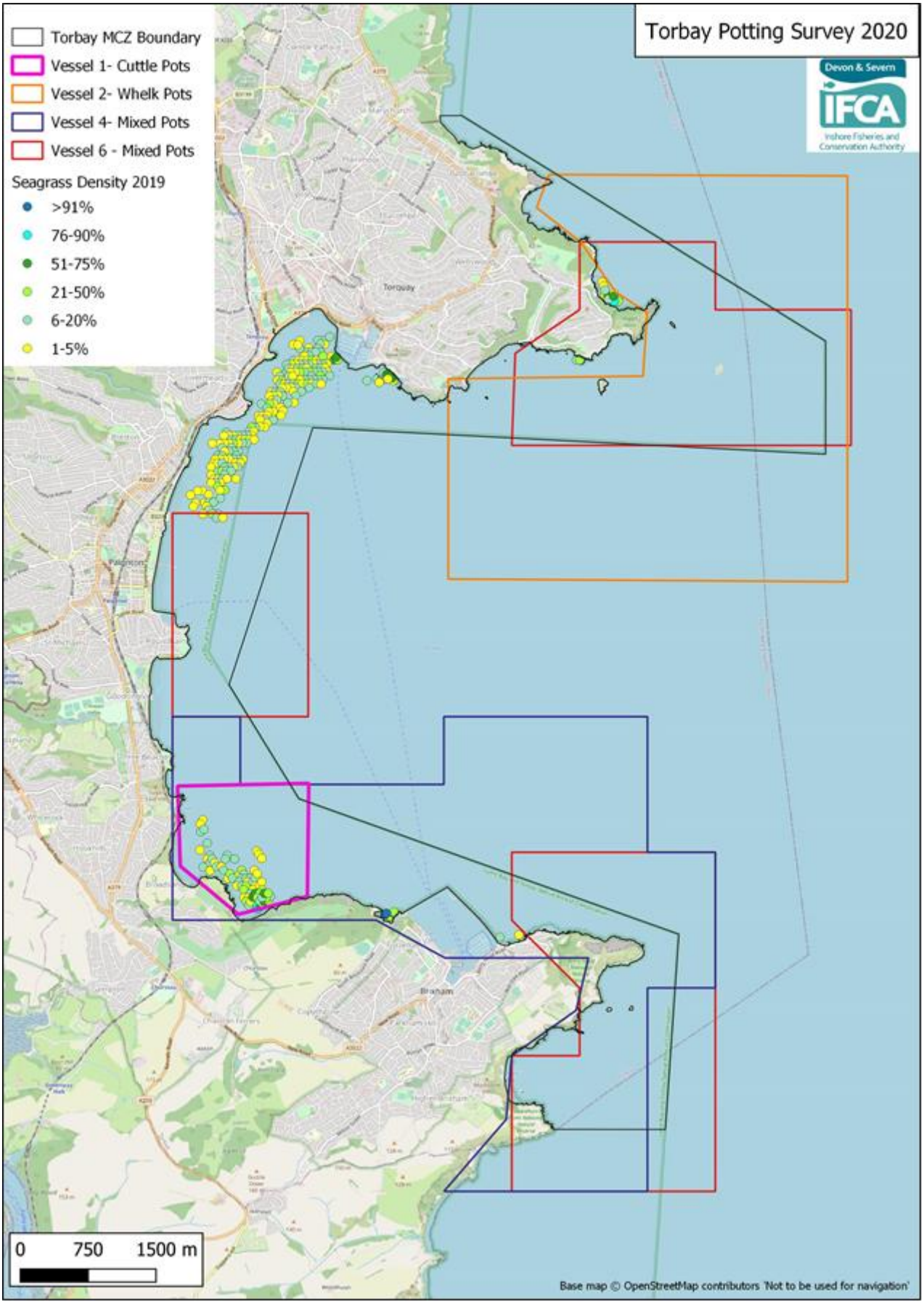

Figure 4 D&S IFCA cuttle potting survey results 2020

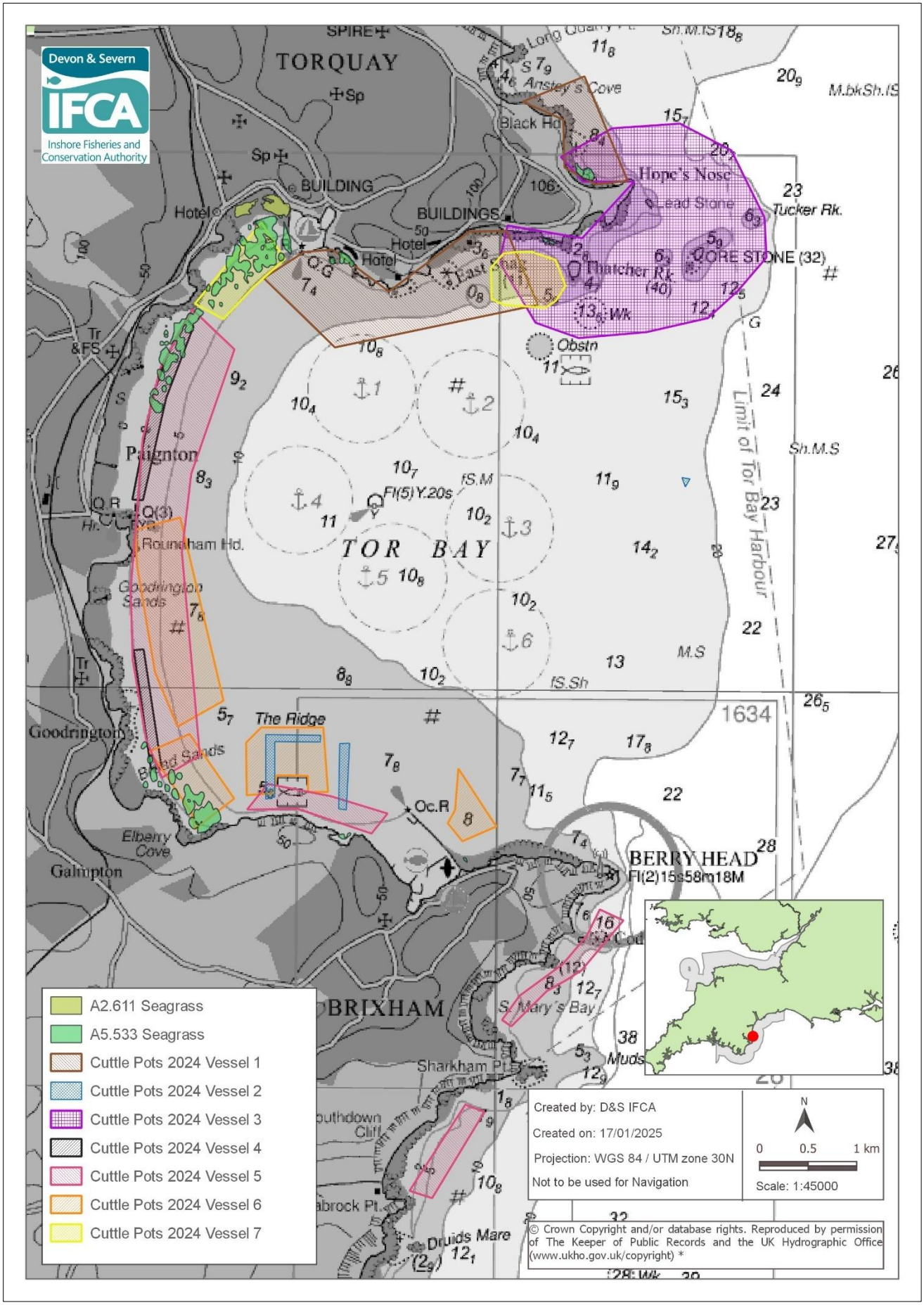

Figure 5 Cuttle pot locations from D&S IFCA activity survey 2024 overlaid on seagrass feature

*www.ukho.gov.uk/copyright

Annex 3: Pressures audit trail

Fishing Activity Pressures: Traps	**Subtidal mud**	**Seagrass beds**	**Long-snouted seahorse (*Hippocampus guttulatus*)**	**Screening Justification**
Abrasion/disturbance of the substrate on the surface of the seabed	S	S	IE	**IN** – Need to consider spatial scale/intensity of activity to determine likely magnitude of pressure
Collision BELOW water with static or moving objects not naturally found in the marine environment (e.g. boats, machinery and structures)			IE	**OUT** – Activity not believed to pose significant risk of collision with seahorse.
Deoxygenation	NS	NS	S	**OUT** – Insufficient activity levels to pose risk at level of concern
Hydrocarbon & PAH contamination. Includes those priority substances listed in Annex II of Directive 2008/105/EC.	IE	NS	IE	**OUT** - Insufficient activity levels to pose risk of large scale pollution event
Introduction or spread of non-indigenous species	S	S	IE	**OUT** - Activity operates in local area only so risk considered extremely low
Litter	IE	IE	IE	**OUT** – Insufficient activity levels to pose risk at level of concern
Organic enrichment	S	S		**OUT** - Insufficient activity levels to pose risk of large scale pollution event
Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion	S	S		**OUT** – Penetration of the substrate from anchoring when potting, occurs on such an infrequent basis that the impact would be minimal.
Removal of non-target species	S	S	S	**IN** – Need to consider spatial scale/intensity of activity to determine likely magnitude of pressure
Removal of target species	NA			**IN** – Need to consider spatial scale/intensity of activity to determine likely magnitude of pressure
Synthetic compound contamination (incl. pesticides, antifoulants, pharmaceuticals). Includes those priority substances listed in Annex II of Directive 2008/105/EC.	IE	NS	IE	**OUT** - Insufficient activity levels to pose risk of large scale pollution event
Transition elements & organo-metal (e.g. TBT) contamination. Includes those priority substances listed in Annex II of Directive 2008/105/EC.	IE	NS	IE	**OUT** - Insufficient activity levels to pose risk of large scale pollution event

Annex 4a: NE formal advice 2019

Date: 12/12/2019
Our ref: 292528
Your ref: TOR-MCZ-005 Version 2

Natural England
Polwhele
Truro
TR4 9AD
Tel. 02080 268222

Sarah Clark
Devon and Severn Inshore Fisheries and Conservation Authority
Brixham Laboratory
Freshwater Quarry
Brixham
Devon, TQ5 8BA

BY EMAIL ONLY

Dear Sarah,

Re: Formal Advice to D&S IFCA on the assessment of fishing activity for Torbay Marine Conservation Zone (MCZ)

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

In 2012, the Department for Environment, Food and Rural Affairs (Defra) announced a revised approach to the management of commercial fisheries in European Marine Sites (EMS) [1]. The revised approach was subsequently extended to ensure fishing activities in Marine Conservation Zones (MCZ) are managed in accordance with the provisions of the Marine and Coastal Access Act 2009.

Thank you for the assessment and accompanying appendices for the fishing activities and feature interactions listed in **Appendix 2** of this letter.

Natural England has considered the assessment prepared by D&S IFCA for the purposes of making an assessment consistent with the provisions of the Marine and Coastal Access Act 2009. Please accept this letter as Natural England's formal advice on the assessment and the conclusions it makes. **Our key points are set out in Appendix I that accompanies this letter.**

It is Natural England's view that, on the basis of the information presented in the assessment, adverse effects from interactions that might hinder the conservation objectives of the MCZ features (seagrass beds, and long-snouted seahorse) cannot be excluded for the cuttle pots activity.

Seagrass beds are a fragile priority habitat. In the absence of adequate information about the nature of cuttle pot impacts on seagrass beds, or the scale and intensity of the activity coincident with the features, to rule out negative impacts to the features we would advise that a more precautionary management approach for this activity be considered.

1 Defra revised approach: https://www.gov.uk/government/publications/revised-approach-to-the-management-of-commercial-fisheries-in- european-marine-sites-overarching- policy-and-delive

Kate Sugar
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Devon, Cornwall & Isles of Scilly Area Team

Appendix 1 – Further comments on the MCZ Assessment

1. We do not agree that a Stage 1 (MCZ Screening) assessment only is appropriate for consideration of the cuttle pots activity, and this would more appropriately have been taken to Stage 2 (Significant risk assessment). Inclusion of mitigation measures cannot be considered at Stage 1 as justification for not progressing to a Stage 2.

2. We agree with the conclusions of the assessment that current levels of activity for fish traps and crab and lobster pots/creels offer no significant risk of the activity hindering the conservation objectives of the features assessed.

3. The assessment also shows that whelk pots are thought to occur at low levels on the feature subtidal mud. We agree that at current levels there is no significant risk of the activity hindering the conservation objectives of the feature subtidal mud.

4. We **do not agree** with the conclusion that there is no risk of the cuttle pot activity hindering the conservation objectives of the seagrass beds, or the long-snouted seahorse (*Hippocampus guttulatus*). Reasons are given below:

4.1 Gear impacts and feature sensitivity

4.1.1 The dominant arguments within the assessment appear to be that the specific gear type used by the cuttle fishery has limited impact on the surface of the seabed (lightweight) and that exposure of the seagrass feature to the activity is estimated to be “low” (0.35 – 1.47 pots per hectare).

4.1.2 There is no scientific literature or site-specific evidence presented to support the argument that cuttlepots have limited or negligible impacts on seagrass beds. Information for the interaction between pots and reef is given as supporting evidence in the assessment, however the likely interaction between pots and reef will be very different to that of seagrass as reef topography and/or presence of macroalgae will tend to constrain pot movement over reef habitat as opposed to seagrass habitat which presents fewer barriers to movement. Water depth is also a factor in terms of tidal movement of pots and no reference has been made to this in the assessment – seagrass beds occur in shallower waters where water movements are likely to be greater.

4.1.3 Moreover the D&S IFCA study quoted (Parkhouse, 2019) does indicate the potential for some damage even during a study of very limited scale and duration. Scaled up to consider the large number of pots that the assessment calculates may be operating on or near the seagrass beds, suggests potential for large scale damage in the form of damage to or removal of seagrass leaves.

4.1.4 Seagrass beds are regarded (by Hall *et al.* 2008, as quoted in the assessment) as having a moderate to high sensitivity to potting activity, mainly through the pressure ‘shallow abrasion/penetration: damage to seabed surface and penetration’. In Natural England’s Advice on Operations for potting on seagrass beds in Torbay MCZ the conclusion is that potting activity presents medium to high risk, coupled with low to moderate sensitivity of the feature to the activity. Under either analysis, given the potential for moderate sensitivity coupled with a medium to high risk from the activity, NE would advise that a more precautionary management approach would be advisable in this instance.

4.1.5 Negative impacts may be caused without penetration of the seabed surface and removal of rhizomes. Placing pots on seagrass beds will lead to damage and bruising to leaves even if the plant remains rooted. Recovery can be slow, and there is evidence that it can take several months to a couple of years for a plant to recover from leaf damage (Boese *et al,* 2009).

4.1.6 The two seagrass bed extent surveys referred to in this assessment have not provided any evidence of a trend (one record of decline, and one of increase) and therefore cannot be used to support a statement that damage (or impacts) are at low levels.

4.2 Activity levels and feature exposure

4.2.1 There is still significant uncertainty around cuttle pot activity levels within the MCZ and coincident with the seagrass feature. The assessment states that 700 pots are known to be deployed within the MCZ (data from a 2014 survey), but it is acknowledged that this could be an underestimate as the total number of pots between the 21 vessels that fish within Torbay as a whole is quoted as 2925. The figure of 700 cuttle pots is not appropriate for estimating impacts as it is stated that the 2014 survey had only a 22% response rate, and therefore will reasonably be an underestimate of activity. It might also be reasonably assumed that a majority of cuttle pots will be targeted on or around the seagrass beds, as cuttlefish are associated with seagrass habitat. To be precautionary, NE advise that D&S IFCA consider impacts from all 21 vessels and not just the “minimum” of 10.

4.2.2 While the assessment gives a broad estimation of the numbers of pots that may be fished,
there is no indication of how often they are deployed, or of any seasonality to the fishery, and therefore an understanding of effort intensity is not possible. In addition, there is no information given about soak times for cuttle pots which is important information for quantifying likely impact on substrate. There is no calculation of the area of seabed impacted by cuttle pots on seagrass (because there is no information about frequency and location of deployment) and therefore the overall footprint of the fishery over the seagrass feature within the Torbay MCZ is currently unknown.

4.2.3 The assessment calculates that the level of occurrence of cuttle pots over seagrass beds in Torbay MCZ is below the threshold for ‘low’ intensity used in Hall *et al* 2008 (lifted daily, 2-4 pots per hectare). However NE advise that D&S IFCA use the hectares of seagrass rather than the total area of the MCZ for this calculation so as to relate the scale of the feature being assessed directly to the scale of the pressure (i.e. pots / area of seagrass). Seagrass is estimated to have a moderate sensitivity to even ‘low’ intensity activity (Hall *et al* 2008).

4.2.4 The assessment would need to have an evidenced estimate of number of pots used over seagrass, alongside information about deployment frequency and soak times, in order to quantify and assess overall fishing pressure and, therefore, the likely impacts on the feature.

4.3 Impacts on Long-snouted seahorse

4.3.1 The assessment does not explicitly consider impacts on seahorses. It is possible that the intention is to cover this by consideration of possible impacts to the associated supporting seagrass habitat, but the assessment should present evidence and information for seahorses.

5. **References**

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Appendix 2: List of features and fishing activities for which an assessment has been undertaken

1) Features assessed:

Feature	General management approach
Subtidal mud	Recover to favourable condition[2]
Seagrass beds	Recover to favourable condition
Long-snouted seahorse (*Hippocampus guttulatus*)	Recover to favourable condition

2) Fishing activities assessed for interaction with the features:

Static – pots/traps (pots/ creels; cuttlepots; fish traps)

[2] NB that the Assessment presented, Section 3 (page 3) quotes the General Management Approach for site features as “Recover in favourable condition” but the correct wording is “Recover to favourable condition”

Annex 4b: NE formal advice 2023

Date: 31 October 2023
Our ref: 448365
Your ref: TOR-MCZ-005 Version 3

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Natural England
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9AD

BY EMAIL ONLY

Dear Sarah,

Formal advice to D&S IFCA: Torbay MCZ:

- **Static Pots and Traps: Seagrass**
- **Monitoring and Control Plan - potting on seagrass**

Thank you for the above assessment, received by email on 29 August 2023.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

In 2012, the Department for Environment, Food and Rural Affairs (Defra) announced a revised approach to the management of commercial fisheries in European Marine Sites (EMS)[3]. The revised approach was subsequently extended to ensure fishing activities in Marine Conservation Zones (MCZs) are managed in accordance with the provisions of the Marine and Coastal Access Act 2009.

Assessments have been made of the effects of the following fisheries activities in Torbay MCZ:

- **Fisheries activities (Static Pots and Traps): Seagrass beds, ref. TOR-MCZ-005 Version 3**
- **Monitoring and Control Plan for TOR-MCZ-005 V.3**

[3] Defra revised approach: https://www.gov.uk/government/publications/revised-approach-to-the-management-of-commercial-fisheries-in- european-marine- sitesoverarching-policy-and-delivery

Natural England has considered the assessment prepared by D&S IFCA for the purposes of making an assessment consistent with the provisions of the Marine and Coastal Access Act 2009, and the accompanying Monitoring and Control Plan. Please accept this letter as Natural England's formal advice on the assessment and the conclusions it makes.

It is Natural England's view that, through this assessment, D&S IFCA has appropriately identified that current levels of activity for **fish traps and crab and lobster pots/creels** offer no significant risk of the activity hindering the conservation objectives of the features assessed.

The assessment also shows that **whelk pots** are thought to occur at low levels on the feature subtidal mud. We agree that at current levels there is no significant risk of the activity hindering the conservation objectives of the feature subtidal mud.

We **do not agree** with the conclusion that there is no risk of the **cuttle pot** activity hindering the conservation objectives of the long-snouted seahorse (*Hippocampus guttulatus*). There is a lack of evidence regarding the direct impact of cuttle potting on the long-snouted seahorse. Any impact on seahorses would likely be indirect and related to the loss of seagrass habitat within the MCZ. **It is Natural England's view that, on the basis of the information presented in the assessment, adverse effects from interactions that might hinder the conservation objectives of the MCZ features (seagrass beds, and therefore long-snouted seahorse) cannot yet be excluded for the cuttle pots activity. No final conclusion can be drawn for the effect on the long-snouted seahorse until impacts on the seagrass feature have been more firmly quantified.**

We agree with the proposed points of action to gather more evidence to understand the fishing behaviour in the site regarding number of pots, the exact location potting is taking place, and the makeup of strings being used currently. We support the proposal of meeting with the industry in order to establish the level of activity, and in particular its location, as well as the use of iVMS to monitor the fishing activities. We look forward to further consultation once this work is done.

Further points are set out in Appendix I that accompanies this letter.

Please do not hesitate to contact me if you have any questions or require further information.

Yours sincerely,

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And

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Appendix 1 – Further comments on the MCZ Assessment

1. We agree with the assessment that more information needs to be gathered to understand the fishing behaviour in the site, and the degree to which the seagrass beds there are exposed to the cuttle potting activity.
2. We note that the Hall, 2008 reference, for potting sensitivity in Welsh seagrass beds, may not fully account for the potentially sparser seagrass beds in Torbay MCZ, potentially therefore leading to underestimation of potting impacts in this site. It may be necessary to consider different seagrass bed densities during any final consideration of potting impacts on the seagrass feature.
3. During the small-scale study of potting impacts on seagrass, it was observed that one of the last pots caused uprooting of seagrass rhizomes, as seen in the camera footage. While the study was limited in scope, when extrapolated, the cumulative impact on the seagrass bed may be more significant than initially expected. Additionally, the seagrass that surfaced or attached to the pots in the video footage may not accurately represent the true extent of the cuttle pots' impacts on the seabed. Seagrass recovery can be slow, with evidence suggesting that it can take several months to a couple of years for a plant to recover even from leaf damage (Boese et al, 2009).
4. We agree that, although there is a lack of evidence on the direct impact of cuttle potting on long-snouted seahorse, any impact would most likely be indirect and linked to the loss of their seagrass habitat. We therefore feel that a final conclusion on the impact of cuttle potting on this species cannot be drawn until there is greater certainty about the scale of the impact of cuttle potting on the seagrass habitat.

References

BOESE, B. L., J. E. KALDY, P. J. CLINTON, P. M. ELDRIDGE, and C. L. FOLGER. 2009. Recolonization of intertidal Zostera marina L.(eelgrass) following experimental shoot removal. Journal of Experimental Marine Biology and Ecology 374:69-77.