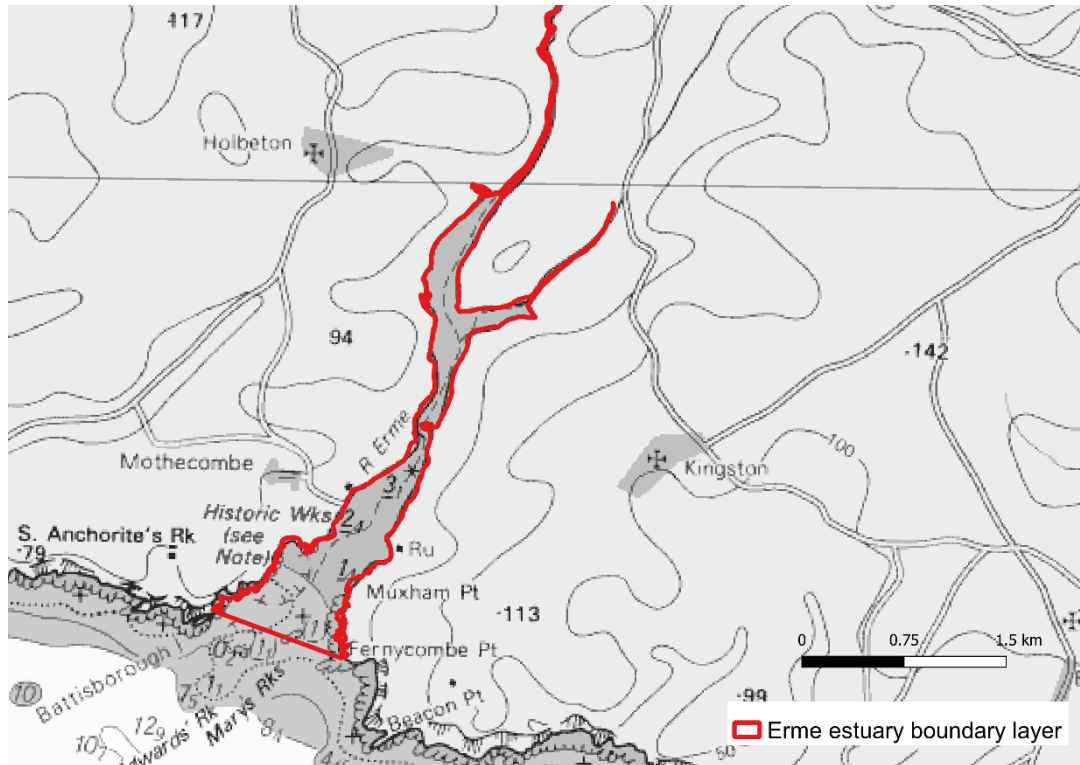


Fishing Activity Report- Erme Estuary MCZ



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Contents

1. Introduction	3
2. Methodology	3
3. Fishing Activities	4
3.1. Intertidal Handwork.....	4
3.1.1 Hand working (access from vessel), Hand working (access from land)	4
3.2. Static- Pots/Traps	4
3.2.1 Pots/Creels, Cuttle Pots, Fish Traps.....	4
3.3. Static- Fixed Nets and Passive Nets	4
3.3.1 Gill Nets, Trammels, Entangling, and Drift Nets (Demersal)	4
3.4 Lines.....	5
3.4.1 Longlines (Demersal)	5
3.5 Seine Nets & Others	5
3.5.1 Beach Seine/Ring	5
3.5.2 Shrimp Push-nets, Fyke & Stake nets	6
3.6 Miscellaneous.....	6
3.6.2 Crab Tiling.....	6
3.7 Bait Collection- Digging with Forks	6
3.8 Aquaculture	6
4. References.....	7
Appendix 1. Location of pots observed	8

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1. Introduction

Devon and Severn Inshore Fisheries and Conservation Authority (D&S IFCA) has a responsibility to establish 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.

In order to aid the decision-making process, D&S IFCA have gathered information relating to the occurrence of the fishing activities within each of the Marine Conservation Zones (MCZs) within the District. This report pools official and anecdotal information in order to define fishing activities occurring, and at what levels, in the Erme Estuary MCZ.

The Erme Estuary MCZ is an inshore site of approximately 1km² in size. The Erme is located in South Devon and opens into the Western Channel and Celtic Sea region. The MCZ designation covers the whole estuary from the mouth of the river to the limits of the tidal influence near the village of Ermington. The MCZ falls within the Erme Estuary Site of Special Scientific Interest as well as overlapping with the Prawle Point to Plymouth Sound and Eddystone Site of Community Importance at the mouth of the river.

The wide variety of habitats found within the Erme Estuary support a large number of important species including several that are rare, such as the tentacled lagoon worm, *Alkmaria romijni*. This tiny bristle worm grows up to 5mm in length and creates and lives in tubes within the mud habitats of the estuary. These worms have tentacles around their mouths used for gathering food from the surrounding muddy sediments. The tentacled lagoon worm is particularly vulnerable to activities that cause changes in its habitat (Defra, 2019).

This report should be seen as a working document and will be updated if and when fishing activities within or close to the Erme Estuary MCZ change or develop. It is not a definitive list and only covers activities which are defined within the generic fishing matrix provided by Marine Management Organisation (MMO, 2014)

2. Methodology

In the first instance, a thorough evidence review was carried out in order to identify the fishing methods used in the Erme Estuary MCZ. This included information from the harbour master, landowner and knowledge from IFCA officers and estuary forum members. This was used to identify fishing activities for which more information was required. In order to provide data regarding bait digging, hand gathering, potting and seine netting in the MCZ, a request for information was sent to permit holders who were deemed local to the estuary based on their permit address and home port (148 individuals), and other stakeholders including the landowner. This call for information included a map of the MCZ with an overlaying grid in order for respondents to indicate the location (grid cell) of any fishing activities. The request for information was also published on D&S IFCA's website.

3. Fishing Activities

3.1. Intertidal Handwork

3.1.1 Hand working (access from vessel), Hand working (access from land)

Other than crab tiling and digging for bait with forks (covered in later sections), there is limited evidence of other hand working or shore-based activities occurring within the Erme Estuary MCZ. There may be some minor hand gathering for cockles, but this activity appears to be occurring at a very low level (one respondent replied out of 148 from the request for information advising they carry out this activity on average twice a month).

D&S IFCA conducted bait digging surveys in summer and autumn of 2020, totalling 10.5 hours of survey time during daylight hours (weekend and weekday). During these surveys no evidence was found of intertidal hand working on the Erme Estuary.

3.2. Static- Pots/Traps

3.2.1 Pots/Creels, Cuttle Pots, Fish Traps

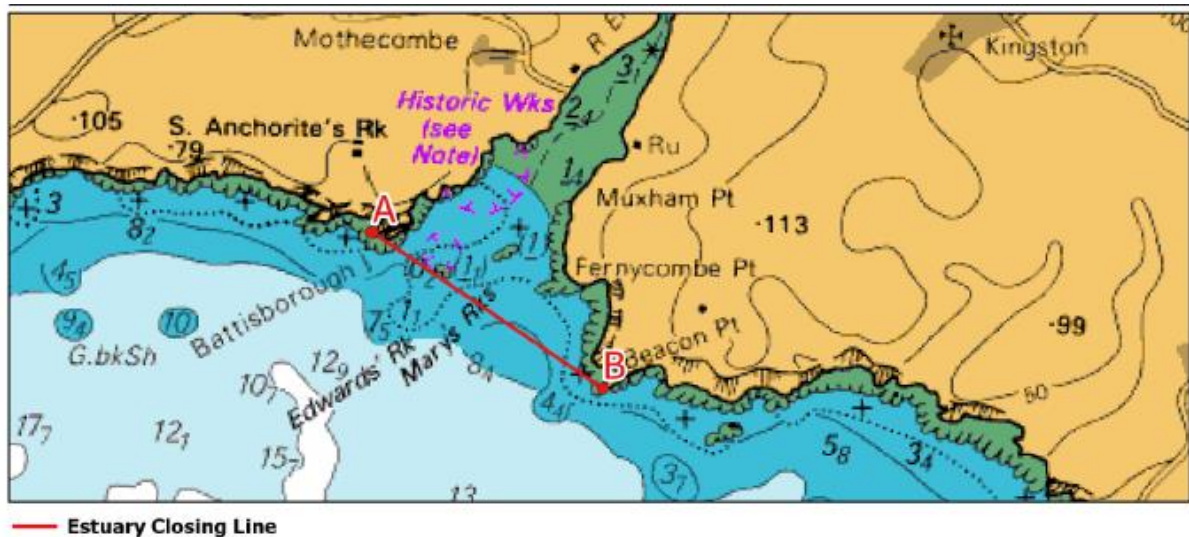
There are 46 vessels that have been issued with potting permits in the South of the District. The base ports include Hope Cove (3), Plymouth (21), River Yealm (1), Salcombe (20), and Saltash (1). The vessels have a total of 18,328 pots between them made up of 4,245 inkwells, 10,809 parlours/creels, 2,270 whelk pots, 394 cuttle pots, and 480 wrasse pots, 70 prawn pots and 60 soft eye pots. The target species are brown crab, lobster, spiny lobster, cuttle, whelk, wrasse and prawns. It should be noted that the live wrasse fishery is restricted to Plymouth Sound and therefore any targeting of wrasse in the Erme Estuary would not be for use as cleaner fish.

Responses from the request for information indicate that potting for lobster and crab does occur around the Erme Estuary. One respondent advised they fish 200 pots from March to November. Another respondent advised that they only fish 5 pots for fun to the west of the estuary. In addition, the landowner advised crab and lobster pots are intermittently used by two to three people at the west side of the estuary around Mary's Rocks running south from Mothecombe beach. This would suggest that a low level of potting does occur just within the boundary of the MCZ near the mouth of the estuary. The landowner advised that from Mothecombe beach landward the estuary completely dries out at low tide and is therefore not suitable for pots. From the information provided it would appear that the majority of this activity is occurring outside of the MCZ (Appendix 1, Figure 2)

3.3. Static- Fixed Nets and Passive Nets

3.3.1 Gill Nets, Trammels, Entangling, and Drift Nets (Demersal)

This activity falls under the D&S IFCA Netting Permit Byelaw and is currently not permitted to take place within the Erme Estuary MCZ. In the estuary landward of the coordinates set out in Figure , a permit holder or named representative is not authorised to use any net other than a seine net in accordance with paragraph 3.2 of the Netting Permit Conditions.



River Erme closing line latitude and longitude positions:

Point	Latitude	Longitude
A (Battisborough Island)	50° 18.243'N	003° 57.834'W
B (Beacon Point)	50° 17.750'N	003° 56.657'W

Figure 1: River Erme closing line latitude and longitude. No access landward of the line to the use of nets other than a seine net in accordance with paragraph 3.2 of the Netting Permit Conditions.

3.4 Lines

3.4.1 Longlines (Demersal)

There are no records of this activity taking place within the Erme Estuary MCZ. However, there is no evidence that it is not occurring at a low, undetected level and therefore cannot be completely ruled out.

3.5 Seine Nets & Others

3.5.1 Beach Seine/Ring

Seine netting in the Erme Estuary requires a netting permit under D&S IFCA's Netting Permit Byelaw. A permit holder or named representative may only use a seine net and providing that; a) the net measures no longer than 20 metres in length; b) all species caught other than sand eel are returned immediately to the water; and c) the size of mesh does not exceed 20mm. In addition, the permit holder or their named representative must a) remain in attendance with the net for the entire duration that the net is deployed in the water; and b) deploy and haul the net in one continuous action without pause or delay.

As at March 2022, there are 38 vessels that have been issued with a netting permit in the South of the District. The base ports include Plymouth (31) and Salcombe (7). Five vessels indicated on their permit application that they intend to use a seine net within an estuary. There are no records of this activity taking place within the Erme Estuary MCZ. However, there is no evidence that it is not occurring at a low, undetected level and therefore cannot be completely ruled out.

3.5.2 Shrimp Push-nets, Fyke & Stake nets

This activity is currently not permitted to take place within the Erme Estuary MCZ as this activity falls under the D&S IFCA Netting Permit Byelaw. In the estuary landward of the coordinates set out in Figure above, a permit holder or named representative is not authorised to use any net other than a seine net subject to the conditions outlined above in section 3.5.1.

It should be noted that the Netting Permit Byelaw does not include any net which when fully expanded does not exceed an area of more than four meters squared, where it is operated only manually and not in connection with any vessel or mechanical device

3.6 Miscellaneous

3.6.2 Crab Tiling

Every four years, D&S IFCA undertakes surveys to determine the number and location of crab tiles in the intertidal zone of estuaries in the D&S IFCA's District. These surveys enable D&S IFCA to assess the potential for impacts from crab tiling on sensitive estuary environments, and to inform the development of appropriate management. Surveys were not undertaken on the River Erme in 2020 due to no tiles being present in previous years.

D&S IFCA conducted bait digging surveys in summer and autumn of 2020, totalling 10.5 hours of survey time during daylight hours (weekend and weekday). During these surveys no evidence was found of crab tiling on the Erme Estuary.

3.7 Bait Collection- Digging with Forks

D&S IFCA conducted bait digging surveys in summer and autumn of 2020, totalling 10.5 hours of survey time during daylight hours (weekend and weekday). During these surveys no evidence was found of bait digging on the Erme Estuary. No evidence was found of other fishing activities considered here being undertaken.

D&S IFCA circulated a request for information on bait digging to the local community and the landowner of the Erme Estuary to gather evidence and better understand fishing activity within the site. The landowner of the Erme Foreshore and Estuary advised that low levels of bait digging (1-2 bait diggers three to four times a year) does occur on the western side of the estuary at low tide on the exposed sand flats in front of the coastguard cottages. In addition, one respondent from the request for information advised they dig for bait on average twice a month.

3.8 Aquaculture

3.8.1. Shellfish aquaculture: bottom culture, Shellfish aquaculture: suspended rope/net culture, Shellfish aquaculture: trestle culture

There are no records of this activity taking place within the Erme Estuary MCZ. Currently, there are no classified shellfish harvesting areas within the MCZ. No evidence of aquaculture infrastructure (e.g., trestles) was observed during D&S IFCA's surveys of bait digging or crab tiling. However, there is no evidence that bottom culture is not occurring at a low, undetected level and therefore cannot be completely ruled out.

4. References

- Defra. 2019. Erme Estuary Marine Conservation Zone factsheet.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/914618/mcz-erme-estuary-2019.pdf.
- Marine Management Organisation. (2014.). Fisheries in European marine sites: Matrix.
<https://www.gov.uk/government/publications/fisheries-in-european-marine-sites-matrix> (Accessed 24 January 2022).

Appendix 1. Location of pots observed

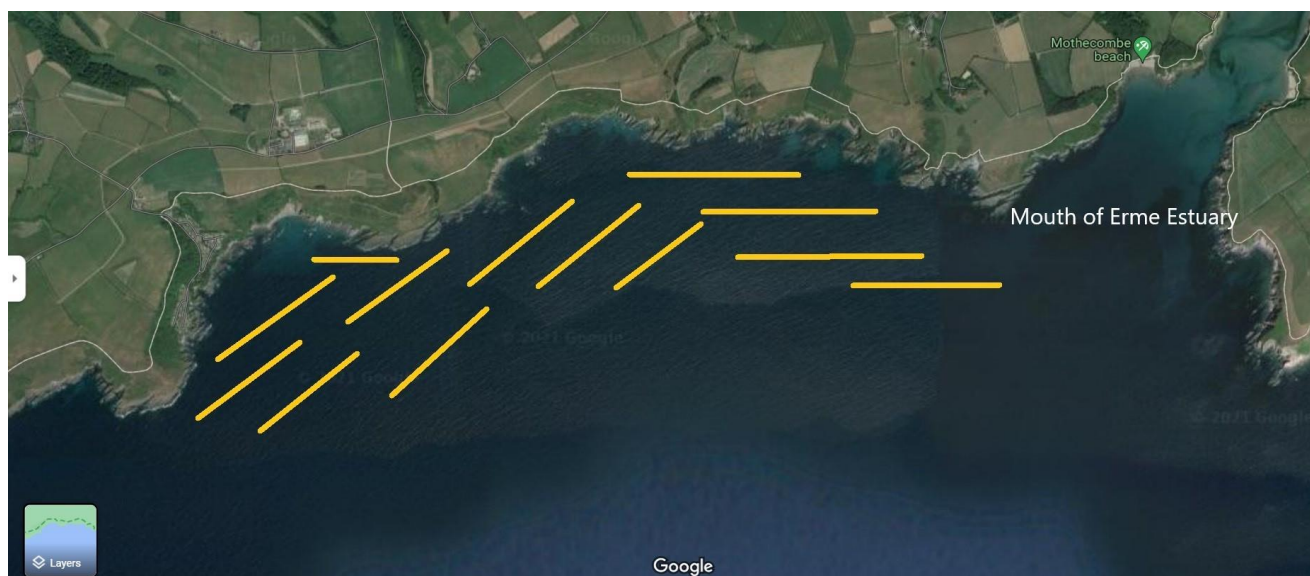


Figure 2: Location of pots seen near the Erme Estuary, outside of the MCZ boundary. Information provided by respondent to call for information