Agenda item B4

From:	Chief IFCO/Inshore Fisheries and Conservation IFCO
To:	Kent and Essex Inshore Fisheries and Conservation Authority– 6 August 2025
Subject:	Manila clam trial overview
Classification:	**Unrestricted**

Summary: In June 2025, all the 38 fishers that had expressed an interest in the manila clam fishery were invited to apply for a trial place on the 2-year manila clam trial. Six applications were received by KEIFCA and as all the applicants met the criteria, they all were accepted on to the trial. Trialists then gave their feedback on the trial proposals at an online meeting, and their input has been used to updated recommendations for the 2025 manila clam trial.

Recommendations

1 a) The Authority is asked to **AGREE** the updated 2-year trial outline including the proposed trial fishery areas and catch and trip limits (also including the riddle experiment and further recommendation that field studies should be conducted as part of the 2025 trial).

b) The Authority **AGREE** that the Chief IFCO be authorised, after consultation with the Chairman and Vice Chairman, to implement changes to fishing controls to ensure future sustainability including for the purposes of setting TAC. These will be communicated to Members following decisions being made.

2. The Authority is asked to **APPROVE** funding the cost of £3,000 for the REM systems for the trialist vessels for the length of the 2-year manila clam trial fishery period which will be drawn down from the DEFRA MPA fund.

3. The Authority is asked to **APPROVE** the Literature Review Handbook

Overview of the 2-year clam trial

As with the 2024 trial fishery, KEIFCA are still using the trial to gather information on the 11 key points (below), however, the key focus of this 2-year trial is to start to assess fleet-level effects on the biology, stocks, and economic considerations and enforcement of our management. It is particularly important to understand how the clam stocks will hold up to commercial levels of fishing, both within a fishing season and then the following season.

Biological
- Being able to reliably age the clams and so understand growth rates, size of maturity and age of maturity.
- Understand the annual cycle of growth rates and maturity.
- Develop a reliable stock assessment process.
- Develop a better understanding of the distribution of clams and clam beds outside normal survey areas.

Fishing
- How will the clam stock react to different levels of fishing?
- Can current Manila clam stocks sustain fishing over a 2-month fishing season?
- What will the Manila clam stocks look like after a year or two of sustained fishing?

Economic
- How large is the market for Manila clams, and how can we help ensure that good prices are sustained across the fishing season?
- How can we get the most local benefit, in the form of jobs, investment and infrastructure from this fishery?

Enforcement
- What is involved in the landing inspection process?
- What controls are in place to ensure spatial management measures have a high level of compliance?

Using vessel tracking technology (REM- remote electronic monitoring), the trial aims to assess the impact of different intensities of clam fishing on both the clam stocks, the cockle stocks and on the seabed. Running the trial over two years allows our KEIFCA science team to monitor these impacts over successive seasons. This will provide insight into what will happen if these trials move towards becoming a commercial fishery in future. Running the trial over a longer period will help answer biological, fishing, economic and enforcement questions, as well as provide an opportunity for trialists to invest in and commit to the trial with more confidence.

A 2-year trial also helps KEIFCA develop clam-specific management measures such as allocating TAC and trips over a 2-week window rather than per week (responding to the greater impact of weather on this autumn/winter fishery) and test inspection procedures for officers on land and at sea. As with last year we hope to work very closely with the clam trialists to collect the data we need to pass all the necessary MPA assessments.

The updated 2025 manila clam trial proposals

The trial for the first year will run over six weeks starting in November 2025 and ending in mid-December 2025, with the details of the 2026 trial to be decided next year. As in the 2024 trial, the trialists will be able to sell their catch. The successful applicants will be required to contribute to the trial, attend in-person

meetings in the district (up to four in the period), supply all relevant trial data and sign-up to a Code of Conduct. All trialists will be required to use a specified vessel tracking system, Remote Electronic Monitoring (REM), whist taking part in the trial and will be withdrawn from the trial if found to be breaking any of the management conditions as outlined in the Code of Conduct.

Number of trialists

All the fishers (38) who had previously registered interest in the clam fishery were emailed on the 10th of June, informing them of the previous Manila Clam Trial overview paper, the draft application form and scoring criteria, with the application deadline set at 3pm on the 7th of July. By the deadline, six vessel applications were received for participation in the 2-year trial, and all six were accepted as successful trialists.

After phoning and emailing the successful trialists, the lead officer on this project, Ellie Wyatt, set up an online meeting with the trialists to run through the outline of the trial and get feedback on the proposed trial details. All six trialists attended the meeting on Wednesday 23rd July, gave feedback and provided input on the trial outline. Our science officer, Katherine Stuart, gave a presentation on a bar spacing experiment and our Lead Compliance Officer, Hayden Hurst, gave an overview of the required REM system.

Outline of the trial

Trial Areas

The proposed trial areas are highlighted in blue in Fig. 1.

A proposal of splitting the Manila clam trial areas into high, medium and no intensity fishing areas was introduced and discussed with the trialists at the online meeting. Officers intend to introduce these areas to help assess how clam stocks respond to commercial levels of fishing. To inform this assessment, officers plan to conduct a survey of the grounds in September, prior to the trial fishery, followed by a post-trial survey in January. This will allow for an evaluation of how varying levels of fishing intensity may impact both stock levels across different areas and ground impact. This proposal received support from the trialists, and officers intend to have further discussions on how splitting the areas into intensity zones will look and refine how this approach will be implemented in practice.

In addition to the proposed trial areas outlined in Figure 1, it is proposed that two additional trips will be allocated for prospecting, in which vessels will be able to explore new clam grounds within the Thames Estuary as long as the grounds have a valid and appropriate shellfish classification. This was discussed with trialists at the online meeting on the 23rd July and options put forward as to how these trips might be carried out. Officers advised the fishers that they would

need to come back with areas for potential prospecting trips and that we would start conversation around getting classification on the areas they would want. Catch from prospecting trips would be permitted for landing, and REM tracking and data forms would be required. Prospecting will not be permitted in any areas within which bottom towed fishing gear is prohibited. Further, an area of the seabed will be closed to any dredging, as a reserve for the stock and to ensure that the fishery does not hinder the conservation objectives of any MPAs within the area (Fig. 1).

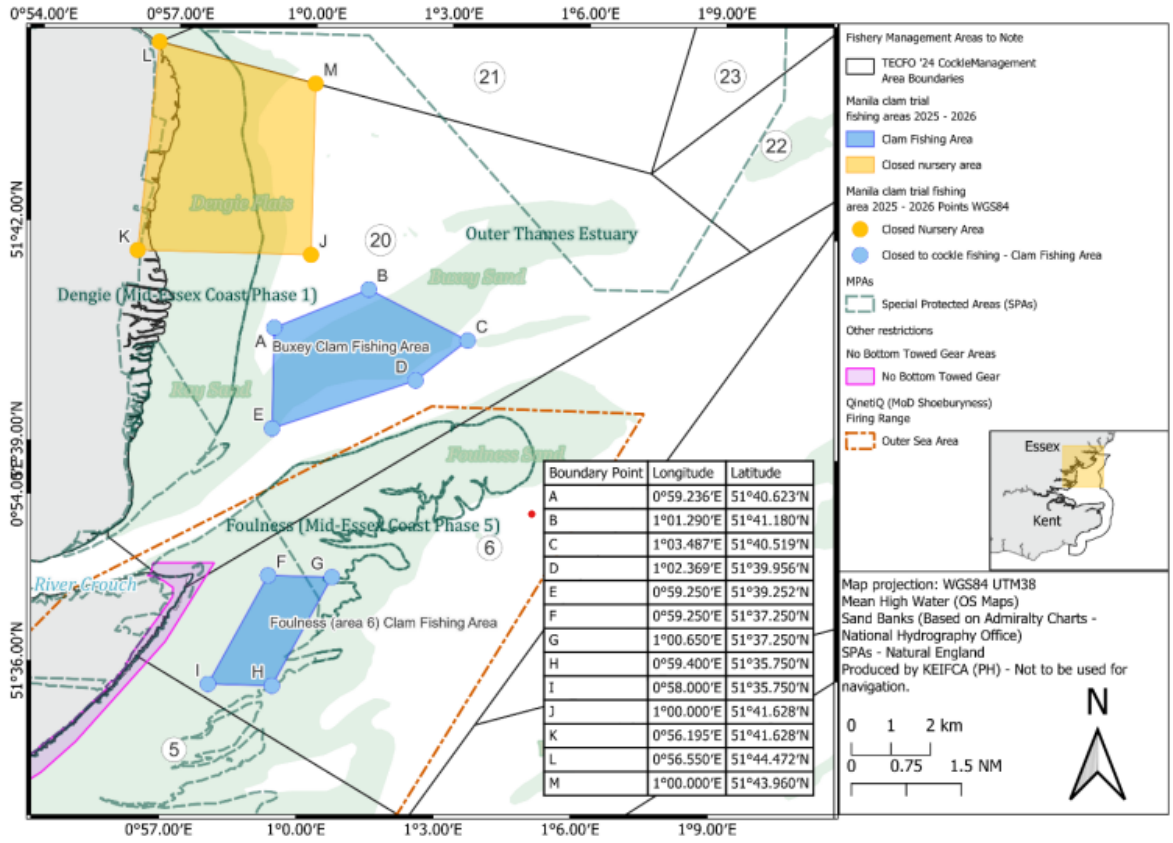

Fig.1 Plotted coordinates of proposed Manila clam trial areas

Catch and trip limits

Final catch and trip limits will be determined from September surveys, to ensure that the latest data on the abundance of clams is used, however officers have included potential detail of the catch and trip limits that were discussed with trialists. Officers propose that management measures will be structured as fortnightly limits, rather than weekly limits in order to increase flexibility and address fishing difficulties associated with weather. The 2025 trail fishery is scheduled to operate over a six-week period. The first five weeks will be designated for regular fishing activity, while the sixth week will be reserved as a contingency to accommodate any missed trips due to unforeseen adverse weather conditions.

Based on the current data and the reduced number of trial participants- from eight to six- for the 2025–2026 trial, there is some flexibility in how the TAC can be allocated. Officers propose setting a catch limit of 400 kg per trip for the first 3 weeks of the trial and increase this to 500 kg per trip during the final three weeks of the trial (including prospecting trips). However, this adjustment would be subject to review based on findings from the early weeks of the fishery. This proposal was put to the trialists at the online meeting on the 23rd of July and two trialists commented that they would benefit more from increased trip days, rather than an increase in permitted landing quantities per trip. Further discussions were held regarding catch limits for the prospecting trips, with a suggestion that, rather than two trips at 500 kg each, it would be more beneficial to divide the permitted catch across a greater number of trips. In response to this feedback, officers propose increasing the number of prospecting trips from two to three, with catch limits set as follows:

- Prospecting trip 1: 300kg
- Prospecting trip 2: 300kg
- Prospecting trip 3: 400kg

During the online meeting with trialists, there was also discussion around the timing of the proposed prospecting trips. In discussions with Natural England (NE) concerning the mandatory use of Remote Electronic Monitoring (REM) on vessels participating in the fishery, there is increased flexibility in how these trips can be conducted. Provided that vessels give prior notice of their prospecting activities, officers propose that the three allocated prospecting trips may be carried out at any point after the first week of the trial.

<table>
<tr><th></th><th>Start</th><th>Finish</th><th>No. trips</th><th>Landings permitted per trip</th></tr>
<tr><td>Week 1</td><td>4 Nov @ 08:00</td><td>8 Nov @ 18:00</td><td>2</td><td>400 kg</td></tr>
<tr><td>Week 2</td><td>10 Nov @ 08:00</td><td></td><td rowspan="2">4</td><td rowspan="2">400 kg</td></tr>
<tr><td>Week 3</td><td></td><td>21 Nov @ 12:00</td></tr>
<tr><td>Week 4</td><td>24 Nov @ 08:00</td><td></td><td rowspan="2">4</td><td rowspan="2">500 kg</td></tr>
<tr><td>Week 5</td><td></td><td>5 Dec @ 12:00</td></tr>
<tr><td>Week 6</td><td>8 Dec @ 08:00</td><td>12 Dec @ 12:00</td><td colspan="2">Contingency week for missed trips due to weather disruptions</td></tr>
<tr><td colspan="5">Prospecting trips</td></tr>
<tr><td rowspan="3">Weeks 2 - 6</td><td rowspan="3">4 Nov @ 08:00</td><td rowspan="3">12 Dec @ 12:00</td><td>1</td><td>300 kg</td></tr>
<tr><td>1</td><td>300 kg</td></tr>
<tr><td>1</td><td>400 kg</td></tr>
</table>

As there are still surveys to undertake in September it proposed that we employ the same process that we use in TECFO fishery whereby small changes of TAC can be made following consultation with the Chairman and Vice-Chairman, as below:

That the Chief IFCO be authorised, after consultation with the Chairman and Vice Chairman, to implement changes to fishing controls to ensure future sustainability including for the purposes of setting TAC. These will be communicated to Members following decisions being made.

Remote Electronic Monitoring (REM)

Discussions were held with trialists regarding the required REM systems for the 2-year trial fishery. Rewire Security are a specialist vehicle tracking company who also deliver a range of specialist electronic sensors. Rewire Security has REM projects with Marine Scotland, Jersey fisheries department, and other IFCAs including CIFCA and D&SIFCA. In 2024, two cockle suction dredgers trialled REM devices on a voluntary basis which KEIFCA funded, with extremely promising results.

The trialists have given a lot of time and made a lot of investment into the trial so far, so for the 2-year trial, the REM system will be at no cost to the trialists. KEIFCA are looking to fund the units, installation and airtime. The total cost is estimated to be just under £3,000 which includes the units, possible set-up costs and running costs and will be taken from our DEFRA MPA reserve.

The tracking systems will help:

- To better monitor ground impact and more accurately discern fishing from steaming in the fishing footprint data (REM provides objective, high-quality data on fishing effort, location, and gear use, which Natural England can use to assess the fishery's impact on protected habitats and species);
- They will save fisher and officer time and resources. KEIFCA ran the 2024 fishery with hand-held GPS systems which, while they worked, required vessels to manually start and stop the GPS systems each tow and fill out separate forms when their gear was in and out of the water. The use of the REM system will eliminate this.
- Trialist fishermen are volunteering to take part in an experimental or early-stage fishery, burdening them with extra costs disincentivises participation.

Only KEIFCA and the trialists will have access to their own data. Additionally, a data sharing agreement will be drafted and shared with trialists before the REM systems are installed on their clam dredges.

Ground truthing of the REM systems will be conducted prior to the opening of the trial fishery, with arrangements to be made with trialists at a later date.

We will keep the Authority informed on the progress and success of the REM systems and their use in the 2-year Manila clam trial fishery in future Authority papers.

Reviewing the trial after Year 1 (2025 trial)

As with the 2024 trial, officers will look to compile a report of the findings of the 2025 trial for the May 2026 quarterly meeting. After considering the findings and recommendations of the report, members will be asked whether they want to continue with the trial or not. Summary feedback will also be given on the engagement of trialists, and recommendations could be put forward regarding individuals' future involvement based on the Code of Conduct criteria.

Riddle experiment

Setting a standard bar spacing on fishing and sorting gear is a simple, but effective way to drastically reduce the risk of undersize fish being landed and sold. This improves the sustainability of the fishery by ensuring that individuals are able to reproduce at least once before becoming vulnerable to harvest.

As agreed by the Authority in the January 2025 meeting, KEIFCA has undertaken a study focussed on the effect of changing bar spacing on the size of retained/discarded Manila clams, with the aim of setting a standardised bar spacing for any future trials or fishery. A report has been written, detailing the methods and findings of this study (Appendix 1). Based on this study, a preliminary recommendation of either 21 or 22mm bar spacing has been put forward. It has been recommended that further field studies should be conducted as part of the 2025 trial, in order to complement the laboratory-based studies. This has been discussed with 2025 trialists, and no initial concerns have been raised.

Literature review handbook

Officers have reviewed literature on Manila clams and their harvest to inform management decisions. This has been collated into a handbook, which will be provided to you at the meeting. The handbook was created to summarise key findings from the literature review and present them in an accessible format, so that the science underpinning management decisions can be understood by all.

The handbook includes the following sections:

- The biology and ecology of the Manila clams

- The impact of dredging on the environment
- Manila clam fisheries across the globe
- The domestic and export markets for Manila clams

Recommendations

1 a) The Authority is asked to **AGREE** the updated 2-year trial outline including the proposed trial fishery areas and catch and trip limits (also including the riddle experiment and further recommendation that field studies should be conducted as part of the 2025 trial).

b) The Authority **AGREE** that the Chief IFCO be authorised, after consultation with the Chairman and Vice Chairman, to implement changes to fishing controls to ensure future sustainability including for the purposes of setting TAC. These will be communicated to Members following decisions being made.

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