

Menai Strait Fishery Order Management Association

Agenda & Papers- 27th April 2023 Association Meeting

**Zoom Conference: [Link](#) |
Meeting ID 851 3390 3186| Password 252245| Phone in 0203 481 5237**

1. Chair's announcements
2. Apologies
3. Declarations of interest
4. Minutes of last meeting ([attached](#))
5. Matters Arising
6. Register & declarations of interests (verbal)
7. Financial update ([report](#))
8. Shellfish Hygiene Classifications in the Menai Strait ([report](#))
9. Public Profile of the Association (verbal)
10. Welsh Government Activity ([report](#))
11. North West IFCA Activity ([report](#))
12. All Party Parliamentary Group: Shellfish Aquaculture (verbal)
13. Menai Strait East ([report](#))
14. Menai Strait West Fishery Order (verbal)
15. Menai Strait Partnership Forum ([report](#))
16. Fishery management issues
 - a. Coastal / marine developments
 - i. Bangor Pier
 - ii. Sand in the dock
 - b. Environmental / health issues
 - i. Shellfish hygiene classifications
 - ii. *Bonamia* in the western Strait
 - iii. Non-native species
17. Any Other Business (verbal)
 - a. Correspondence
18. Proposed dates for next meetings:-
 - a. 14th September 2023 (2 weeks after the end of Summer holidays)
 - b. 14th December 2023 [AGM]

Menai Strait Fishery Order Management Association

**Meeting, 14th December 2022
Zoom Video Conference Call**

Minutes

Attendance

Members

Alan Winstone*
Ioan Thomas
James Wilson*
Kim Mould*
Lewis le Vay

Chair
Cyngor Gwynedd
Bangor Mussel Producers Ltd
Myti Mussels Ltd
Bangor University

Observers

Alex Scorey
Howard Mattocks
Nia Jones
Trevor Jones

Natural Resources Wales
Beaumaris Town Council
North Wales Wildlife Trust
Menai Strait (West) Applicants

Advisors

Jim Andrews*

MSFOMA Secretariat

Notes

** These individuals are also Directors of the Association*

1. Chair's announcements

The Chair welcomed everyone to the meeting, and in particular Nia Jones from North Wales Wildlife Trust, who had taken up the Association's invitation to participate as an observer at MSFOMA meetings.

The Chair reported that prior to the meeting he had received correspondence from Mr Iwan Huws of Ynys Môn County Council indicating that he would be replaced on MSFOMA by his colleague, Mr David Salisbury, the new Harbour Master for Beaumaris.

It was agreed that letter of thanks should be sent to Iwan Huws for his many years of service and support to MSFOMA.

Action: Chair & Secretariat

2. Apologies

Iwan Huws
José Constantino†
Julian Bray
Michelle Billing
Rob Floyd
Rowland Sharp
Ruth Iliffe

Isle of Anglesey County Council
Welsh Government
Welsh Government
Welsh Government
Welsh Government
Natural Resources Wales
Royal Yachting Association Cymru

3. Declarations of Interest

The Chair asked participants in the meeting to declare any interest in each agenda item before speaking.

4. Minutes of last meeting

The minutes of the meeting that took place on the 15th of September 2022 were accepted.

5. Matters Arising

It was considered that most of the matters arising from the last meeting were addressed on the agenda for the current meeting.

Some items raised at the September meeting that were not formally addressed on the agenda were discussed:-

Sand in Penrhyn Dock

James Wilson reported that there had been no further progress with removal of the sand that had accumulated in the dock and was restricting access.

It was agreed that this issue should be kept under review.

Action: JW, Secretariat

Bonamia

There had been no change to the Bonamia designated area, nor did this seem likely.

Water quality

This matter was due to be discussed under item 8 on the agenda.

Autumn conference

The Chair reported that the Shellfish Centre held a conference in Llandudno on the 9th & 10th November. This had been well attended and very constructive.

6. Register of Interests

The Chair reminded all participants to check their Statement of Interests on the MSFOMA website (https://www.msfoma.org/?page_id=478) to confirm whether it is accurate.

The Secretariat reported that this page has been updated with new photographs following the last meeting of the Association.

7. Financial Update

The meeting accepted the report that had been submitted about the Association's finances. It was noted that the same report had been presented to the AGM immediately prior to this meeting.

The Secretariat and Chair explained that in response to a discussion at the September meeting of the Association it had been agreed that a revised five year financial plan should be proposed. This would replace the financial plan agreed at the AGM in 2021. A revised plan was endorsed by a meeting of Members and Directors on 21st October 2022.

The key features of the revised financial plan were that overall expenditure could be reduced by trimming some areas of work (specifically the Menai Strait (West) Fishery Order; the number of MSFOMA meetings held per year; and the budgets for research and the community fund). These cost-cutting measures coupled with a reduction in the target reserve from £20,000 to £10,000 would reduce the annual budget by an average of £3,300 pa over the next 5 years. This would result in a corresponding fall in lease fees by 21% from the current FY onwards.

The AGM had resolved to adopt this revised plan for the next five years. The Association meeting supported this resolution.

The Chair also reported that annual accounts were submitted on schedule in February 2022. The Association received the corresponding financial statement.

The Secretariat reported that new proposals for better financial management and control had been prepared, taking account of advice from the Association's accountants. These had been accepted at the AGM and would now be implemented.

8. Water quality

The Chair introduced the report on shellfish hygiene classifications in the Menai Strait, which are critical to the financial viability of mussel farming here.

On the 2nd December the Association had been notified by the Local Action Group (LAG) for the Menai Strait that a shellfish sample taken from the Cegin Channel had exceeded the limit value for a Class A shellfish bed (the sample was 780 *E.coli* / 100g, the limit is 700). This had triggered an "Action State" and the LAG was due to prepare an "Action State Report". The Chair had collated information to produce a report which showed that the high result was almost certainly due to high rainfall over the previous 24 hours.

The Association welcomed and endorsed the Chair's response to the Action State. It was agreed that follow-up action should be taken to include information from Combined Sewage Overflow discharges into the report once this was made available by Dŵr Cymru. It was further agreed that the Chair and Secretariat should liaise with the LAG to request that this high result is removed from the register.

Action: Chair & Secretariat

It was confirmed that the actions of Gwynedd County Council and Ynyn Môn County Council Environmental Health Officers were not being challenged or called into question. The EHOs appear to have followed the correct procedures in gathering samples, getting them analysed and alerting the LAG expediently to the high result.

These comments notwithstanding, it was noted that two shellfish samples had been gathered on the 22nd November: one at low water, which triggered the action state; and one earlier in the day from a dredger at high water, which recorded just 490 *E.coli* / 100g). It was agreed that the LAG should be asked to consider opportunities to take shellfish samples in a more representative manner (i.e. from dredge samples at high water rather than by hand at low water).

Action: Chair & Secretariat

It was further agreed that the Chair and Secretariat should use this case as an example to present to the Minister and also to the Chair of the APPG on shellfish

aquaculture to show how UK administrative arrangements could be revised and improved to the benefit of the UK shellfish industry.

Action: Chair & Secretariat

9. Public Profile of the Association

The Chair and Secretariat reported that Dr Andy Olivier was continuing to use Twitter to raise the profile of the Association. Andy was constantly looking for fresh news to Tweet, anyone with suitable items could e-mail them to him (avdsolivier@gmail.com).

Action: All

It was also reported that an independent journalist (Sam Andrews) had been in touch with MSFOMA Members to research an article for publication on The Fish Site website. This would focus on the impact the Brexit has had on the Menai Strait fishery. The Chair and Secretariat would circulate a link to the article once it is published.

Action: Chair & Secretariat

10. Welsh Government Activity

The Secretariat's report was noted and received.

The Chair informed the meeting that he had attended the second meeting of the new Ministerial Advisory Group for Welsh Fisheries on 24th November. The meeting had focussed on sorting out its own administration (Terms of Reference, priorities etc), and then considering a new funding scheme to replace the old European Maritime and Fisheries Fund (EMFF). This new fund will be called the Welsh Marine and Fisheries Scheme (WMFS).

The WMFS will be available for funding applications to facilitate activities that benefit Wales and/or the Welsh marine zone. The scheme is for individuals and organisations in the private, public and third sectors to access financial assistance. The scheme is due to be delivered by funding rounds that will be available through online applications and will be administered by Rural Payments Wales (RPW). Welsh Government are currently seeking expressions of interest in funding for "Marketing Measures", and for "Energy efficiency and the mitigation of climate change".

Another WG fund was also publicised at the meeting - the Coastal Communities Capacity Building Fund. This fund has been established to build upon a report produced in November 2022 that identified two broad areas (Sustainable Growth and Nature Recovery) as priorities for "capacity building" (i.e. providing funding to local groups so that they can build organisational capacity so that they can tackle local issues). The Fund is being administered by Local Nature Partnerships and by local authority area. The deadline for submitting applications for the current round of funding is 13th January 2023.

The Chair proposed that a bid for funding of a partnership project focussed on improving water quality and involving MSFOMA and The Rivers Trust could meet the funding requirements and bring benefits for shellfish farming, recreation and wildlife in the Strait. If supported, this could be submitted to the Gwynedd and Ynys Môn LNPs. After some discussion it was agreed that the Chair and Secretariat should work with partners to put together a funding proposal and to submit it to one of the LNPs.

Action: Chair & Secretariat

11. NW IFCA Activity

The report on recent activities of the NW IFCA was received and accepted by the meeting. It was noted that there had been a small seed mussel fishery in Morecambe Bay and that it would be appropriate to thank NWIFCA staff for their work to progress this.

Action: Secretariat

It was agreed that MSFOMA should continue to encourage NWIFCA to resume work on the Morecambe Bay Mussel Management Plan.

Action: Secretariat

12. All Party Parliamentary Group: Shellfish Aquaculture

There was no further news from this Group.

13. Menai Strait East Fishery Order

The report was accepted. It was noted that the only outstanding area of work for this Order was to review the "Managed Areas" around reef features. It was considered that in view of the low level of cultivation activity and the desire to minimise expenditure, this was not presently a priority and should be held in abeyance.

14. Menai Strait West

The report was accepted. The meeting acknowledged that the sticking point with the proposed new Fishery Order was the absence of a policy for managing Pacific oysters.

The Association noted that MSFOMA had commissioned and participated in research about Pacific oysters in the Strait. The report on this research concluded that Pacific oysters represent a very low environmental risk, and that there are easily accessible mitigation measures to eliminate risk.

The Minister has been sent a copy of this report and invited to progress the application for renewing the Fishery Order in the western Menai Strait. A holding response was sent to the Association in August, but no further communication had been received.

The Chair reported that he is trying to get this matter on the agenda for an upcoming meeting of the new Ministerial Advisory Group, but noted that this is a strategy group so might not be prepared to consider as site-specific issue.

Action: Chair

It was agreed that in the light of the decisions of funding of the Association, the Chair and Secretariat should provide a progress update to the potential tenants of the Menai West area, and also inform them that unless and until a policy for managing Pacific Oysters is in place, MSFOMA will not be carrying out further work on the proposal.

Action: Chair & Secretariat

15. Funding proposals & Research Update

Lewis Le Vay indicated that the funding for the Shellfish Centre was due to expire at the end of December, and ongoing projects were due to be completed by then. It was hoped that some of the ongoing projects can be sustained using funds from other sources.

A brief update on projects relevant to MSFOMA was provided:-

- **Pacific Oysters** - this report has been produced (see Item 14 above).
- **Spat collectors / MOSSS** - a report for this work is being finalised. It is hoped that this project can be sustained until summer 2023.
- **Water quality** - a report on the work progressed through a partnership between the Shellfish Centre, Dŵr Cymru, the Rivers Trust, Deepdock and MSFOMA is due to be completed by the end of December.
- **Bonamia** - the report on research into the distribution of *Bonamia* using DNA markers from shellfish samples has been completed. This showed that there is persistent *Bonamia* in the western Strait (in Chilean oysters) but very little evidence at the NE end of the Strait.
- **Conference** - this took place in November. It was well attended, with presentations from Shellfish Centre staff as well as from visiting experts from elsewhere in the UK and also from Denmark and Sweden.

16. Fishery Management Issues

1. Coastal / marine developments

i. **Bangor Pier**

No additional update.

ii. **Sand in the dock**

This was discussed at the start of the meeting (see Matters Arising).

2. Environmental / health issues

i. **Shellfish hygiene classification**

This was discussed earlier in the meeting (see item 9).

ii. ***Bonamia***

This was discussed at the start of the meeting (see Matters Arising).

iii. **Invasive Alien Species (IAS) / Invasive Non-Native Species (INNS)**

Nia Jones reported that North Wales Wildlife Trust has been providing species ID training as part of the Shoresearch Intertidal surveys project. She asked if there were areas in the Strait or on the Anglesey and Gwynedd coasts which it could be useful to target for IAS. All were asked to advise Nia of any suitable locations that they knew of.

Action: All

As a standing item, all were asked to be alert to the presence of slipper limpets (*Crepidula fornicata*) and to report any observations to NRW.

Action: All

iv. Norovirus

No further update.

17. Any Other Business

a) Correspondence

No additional correspondence had been received.

b) Website

It was suggested that the MSFOMA website could benefit from providing more information about the research work (PhDs & MSCs) that have been funded by the shellfish farmers. It was also suggested that better linkage with the Shellfish Centre website and reports would also be helpful.

Action: Secretariat

18. Dates for next meetings

Meeting dates were agreed for 2023:-

- a. 27th April 2023 (virtual)
- b. 14th September 2023 (virtual)
- c. 14th December 2023 [AGM] (in person)

Summary of Actions

Item	Action	Responsibility
1.	Thanks Iwan Huws for participation in MSFOMA	Chair & Secretariat
2.	Sand in Dock - keep under review.	James Wilson & Secretariat
3.	Contact LAG to request removal of the high shellfish sampling result of 22 nd November from register.	Chair & Secretariat
4.	Contact LAG to propose that dredge samples are used in preference to hand gathered samples for classification of shellfish beds.	Chair & Secretariat
5.	Use the 22 nd November 2022 result as an example of how the shellfish sampling regime could be improved in correspondence with the Welsh Minister and with the APPG on shellfish aquaculture.	Chair & Secretariat
6.	Social media - all to send any items suitable for the MSFOMA Twitter feed to Andy Olivier (avdsolivier@gmail.com).	All
7.	Coastal Communities Capacity Building Fund - submit bid for funding proposal for water quality project by 13 th January.	Chair & Secretariat
8.	NWIFCA - thank IFCA staff for progressing the seed mussel dredge fishery in 2022.	Chair & Secretariat
9.	NWIFCA - encourage adoption of Morecambe Bay Mussel Management Plan.	Chair & Secretariat
10.	Menai West - raise the need for a national Pacific Oyster strategy at Ministerial Advisory Group.	Chair & Secretariat
11.	Menai West - advise potential tenants that work on proposal will be halted until the Pacific Oyster stalemate is resolved.	Chair & Secretariat
12.	<i>Crepidula fornicata</i> - look out for slipper limpets and report sightings of any shells / individuals.	All
13.	Date for next meeting - 27 th April 2023	All

Financial Update

Background

As a company limited by guarantee, the Association is required to submit a record of its accounts at the end of each Financial Year. This report provides a brief financial update for the current and past Financial Year and sets out proposals for amending the Association's financial procedures.

Recommendations

1. That the Association considers performance within the current FY against the current financial plan (Annex D)
2. That the Association receives the financial statement for the year ended 28th February 2022 (Annex E).

1. Financial Plan and Lease fees: Revisions for current and future years

- 1.1 At its September meeting the Association discussed the difficult economic conditions facing the mussel farming industry at present. It was agreed at the meeting that opportunities to reduce costs should be explored, and that invoicing should be delayed for a month (from the scheduled date of 1st October) to allow time for a review of the financial plan and for new lease fees to be calculated. It was further agreed that these proposals should be discussed and approved by the Members and Directors of the Association so that they could be implemented in advance of the December Association meeting.
- 1.2 The Financial Plan that was agreed by the Association at its Annual General Meeting is included at Annex A of this report. Proposals for a revised Financial Plan and new lease fees were sent to Members and Directors (excluding those who are lessees and would have a prejudicial interest) by the Secretariat on October 13th (see Annex B). These proposals were discussed and endorsed at a meeting of these Members and Directors on the 21st October. Invoices for layings that reflect the reduced fees agreed by the Members and Directors were issued on 2nd November 2022 and on the 1st April 2023.

2. Budgetary performance in current Financial Year

- 2.1 An income and expenditure report for the Association for the MSFOMA 2022-23 Financial Year (starting on 1st March 2022) against the revised Financial Plan is presented in Annex C. This shows both the actual and budgeted values for each item of income and expenditure.
- 2.2 Key points to note are:-
 - a) Income:-
 - i. Invoices have been issued for a total fee of £14,248.52. This figure is lower than the figure for future years as a result of the discount granted in the first half of the year.

- ii. There are no overdue invoices.
 - b) Expenditure this year has been significantly over budget (£8,963.11). This was due to:
 - i. Payment of invoices during the early part of the financial year that had been received by the Association during earlier accounting periods (both Q1 of this FY and the previous FY) for work on the administration of the fishery and the renewal of the Menai East Fishery Order;
 - ii. Accountancy fees for both the 2020-21 and 2021-22 FY being paid during this FY.
 - c) For the current FY to date, the Association has an operating deficit of £5,903.62 against the revised financial plan.
- 2.3 The Association's bank balance at the end of February 2023 stood at £10,471.26. This is lower than the target reserve of £10,000.
- 2.4 The bank balance at the end of March 2023 (before any receipts for invoices issued on 1st April 2023) was £15,335.92. The increase in the balance was due to the grant payment received for the Menai Strait Partnership Forum project (item 15), prior to meeting any costs associated with that project.

MSFOMA Secretariat
April 2023

Annex A: Revised MSFOMA Financial Plan for the period 2022-23 to 2026-2027, adopted in December 2022.

Item	Financial Year					
	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
1. Revised Expenditure - inflated at 3%.						
Administration of the Order*	£12,000.00	£12,360.00	£12,730.80	£13,112.72	£13,506.11	£13,911.29
Enforcement activity*	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00
Corporate core*	£1,200.00	£1,236.00	£1,273.08	£1,311.27	£1,350.61	£1,391.13
Renewal of Fishery Orders						
Menai East	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00
Menai West	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00
Research & monitoring*	£500.00	£515.00	£530.45	£546.36	£562.75	£579.64
Community fund	£500.00	£515.00	£530.45	£546.36	£562.75	£579.64
Total Expenditure	£14,200.00	£14,626.00	£15,064.78	£15,516.72	£15,982.23	£16,461.69
2. Recurring Income - inflated at 0% to maintain value of a £10000 reserve with 3% inflation rate applying to expenditure.						
Leases for lays	£15,100.00	£15,100.00	£15,100.00	£15,100.00	£15,100.00	£15,100.00
Licences	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00
Total	£15,100.00	£15,100.00	£15,100.00	£15,100.00	£15,100.00	£15,100.00
Operating surplus / deficit	£900.00	£474.00	£35.22	-£416.72	-£882.23	-£1,361.69
3. Reserve						
Predicted Reserve	£ 10,687.17	£11,161.17	£11,196.39	£10,779.67	£9,897.44	£8,535.75
Target Reserve	£10,000.00	£10,000.00	£10,000.00	£10,000.00	£10,000.00	£10,000.00

Annex B: MSFOMA Financial performance for the 2022-23 FY against the updated (December 2022) Financial Plan.

Item	Updated Year Budget	Quarter 1 (1st March - 31st May)		Quarter 2** (1st June - 31st August)		Quarter 3 (1st Sept. - 30th Nov.)		Quarter 4 (1st Dec. - 28th Feb.)		Year to Date (Cumulative)			
	2022-23	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Performance			
										Q1	Q2	Q3	Q4
1. Expenditure													
Administration of the Order*	£12,000.00	£5,831.06	£3,000.00	£7,762.71	£3,000.00	£3,583.85	£3,000.00	£3,785.49	£3,000.00	£2,831.06	£7,593.77	£8,177.62	£8,963.11
Enforcement activity	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£-	£-	£-	£-
Corporate core*													
Accountancy fees	£1,200.00	£0.00	£300.00	£1,366.00	£300.00	£1,440.00	£300.00	£0.00	£300.00	£-300.00	£766.00	£1,906.00	£1,606.00
Bank charges		£42.00		£42.00		£36.00		£24.00		£42.00	£84.00	£120.00	£144.00
Renewal of Fishery Orders*													
Menai East	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£-	£-	£-	£-
Menai West	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£-	£-	£-	£-
Research & monitoring	£500.00	£0.00	£125.00	£0.00	£125.00	£0.00	£125.00	£0.00	£125.00	£-125.00	£-250.00	£-375.00	£-500.00
Community fund	£500.00	£0.00	£125.00	£0.00	£125.00	£0.00	£125.00	£0.00	£125.00	£-125.00	£-250.00	£-375.00	£-500.00
Total Expenditure	£14,200.00	£5,873.06	£3,550.00	£9,170.71	£3,550.00	£5,059.85	£3,550.00	£0.00	£3,550.00	£2,323.06	£7,943.77	£9,453.62	£5,903.62
2. Income													
Leases for lays***	£15,100.00	£0.00	£6,197.53	£3,521.94	£0.00	£4,247.13	£8,050.99	£6,479.45	£0.00	£-6,197.53	£-2,675.59	£-6,479.45	£0.00
Licences	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00
Total	£15,100.00	£0.00	£6,197.53	£3,521.94	£0.00	£4,247.13	£8,050.99	£6,479.45	£0.00	£-6,197.53	£-2,675.59	£-6,479.45	£0.00
Operating surplus / deficit	£900.00	£-5,873.06	£2,647.53	£-5,648.77	£-3,550.00	£-812.72	£4,500.99	£6,479.45	£-3,550.00	£-3,874.47	£-10,619.36	£-15,933.07	£-5,903.62
Reserve	£10,000.00	£19,244.26	£10,000.00	£9,974.58	£10,000.00	£7,801.31	£10,000.00	£10,471.27	£10,000.00	£9,244.26	£-25.42	£-2,198.69	£471.27

Shellfish Hygiene Classifications in The Menai Strait

Background

Water quality, and in particular the abundance of bacteria from effluent inputs, is an important factor determining the viability of shellfish harvesting and cultivation. Shellfish beds in the UK and EU are classified according to the abundance of bacteria in shellfish samples that are collected and analysed by environmental health officers from local authorities. There are six shellfish sample sites for mussels in the eastern Menai Strait.

This report considers shellfish hygiene classification in the Menai Strait, the importance of classification results for the future of the shellfish industry, and how MSFOMA may take action to encourage improvements in this area. Much of this report reproduces information from the last Association meeting, which is provided for reference, as well as some updates to guide and inform a decision.

Recommendations

1. That the report is received, along with any verbal updates from participants at this meeting.
2. That the Association should determine its strategy for encouraging improvements to the shellfish hygiene classification regime and its application in the Menai Strait.

1. Introduction

- 1.1 There are 393 shellfish “production areas” in England and Wales, which are each classified in response to the abundance of a bacterium (*Escherichia coli*) in samples of shellfish taken within or near to the production areas. These production areas are designated for cockles, mussels, oysters and clams. *E. coli* is found in animal faeces and is used as an indicator of the likely level of sewage effluent that the shellfish have been exposed to, and hence as a measure of the public health risk of consuming shellfish.
- 1.2 Shellfish production areas may be designated Class A, B or C, according to the abundance of *E. coli* in shellfish flesh. The requirements and limits for each classification are set out in Annex III of EU Regulation (EC) 853/2004 and Articles 53, 54 and 55 of Retained EU Law Regulation (EU) 2019/627. They are summarised in Table 1.

Table 1: Summary of shellfish classification requirements.¹

Classification	Minimum Number of samples per year	<i>E. coli</i> per 100g of flesh	
		Requirement	Limit
A	10	80% of samples \leq 230	700
B	8	90% of samples \leq 4600	46,000
C	8	All \leq 46,000	-
Unclassified	-	\geq 46,000	-

- 1.3 Class A shellfish can be harvested for direct human consumption without any further treatment. Class B shellfish must be either purified, relayed for a month in a Class A water, or heat treated prior to human consumption. Class C shellfish must

¹ <https://www.food.gov.uk/business-guidance/shellfish-classification>

be either relayed for 2 months in Class B waters and then purified; or relayed for 2 months in Class A waters; or heat treated prior to human consumption.

- 1.4 For most shellfish beds a single classification (A,B, C or unclassified) applies for 12 months of the year. It is also possible to grant a “seasonal” classification. Seasonal grant a high classification for part of the year when historic results have been good, and a lower classification for the rest of the year (for instance a Seasonal A/B or a Seasonal B/C). The criteria for allocating these seasonal classifications are set out in the current FSA “*Protocol for Classification of Shellfish Production Areas, England and Wales*”² as follows:-

Seasonal Classification

4.6. May be awarded when at least 3 full years’ worth of routine monitoring data shows a clear seasonal trend of results. The area may be classified as an A or B for part of the year and B or C for the rest of the year. The season must be at least 3 months in length and of benefit to industry.

[...]

6.12. At least 3 years’ worth of data (and a minimum 24 sample results within the ‘better’ season) showing a clear seasonal trend is necessary for a seasonal classification to be awarded. Seasonal classifications should comprise at least 3 consecutive months and be of benefit to industry (at a time they would usually harvest). Routine monthly monitoring is required throughout the full calendar year to provide sufficient compliance data.

6.13. A buffer period before the start of the season is required. This is one month for Class C to B areas and for Class B to A areas (two months for C to A). During the buffer period the monthly monitoring sample must show compliance with the higher or ‘better’ classification prior to the ‘better’ season commencing. Harvested products may only be processed at the ‘better’ classification at the start of the season and not during the buffer period. This is to allow for clearance of contamination during the buffer month/s.

- 1.5 There are 88 shellfish production areas for mussels in England and Wales. Eleven of these are “Class A”; six have a “Seasonal A/B” classification; 57 sites are “Class B”; and just three sites are “Class C”.
- 1.6 There are 6 shellfish production areas and sample sites in the eastern Menai Strait. Five of the six production areas have a “long term B” classification. One area (Areas 2 / B, sampled at Cegin Channel) has a “Seasonal A/B” classification, which means that it is a “Class A” from 1st October to 30th April, and a “Class B” at other times.
- 1.7 The location of sample sites and the current classification of their corresponding production areas are shown in Figure 1.

² Food Standards Agency (2022) *Protocol for Classification of Shellfish Production Areas, England and Wales*, p. 24. Available at: <https://www.food.gov.uk/sites/default/files/media/document/Classification%20protocol%20-%20September%202022.pdf>.

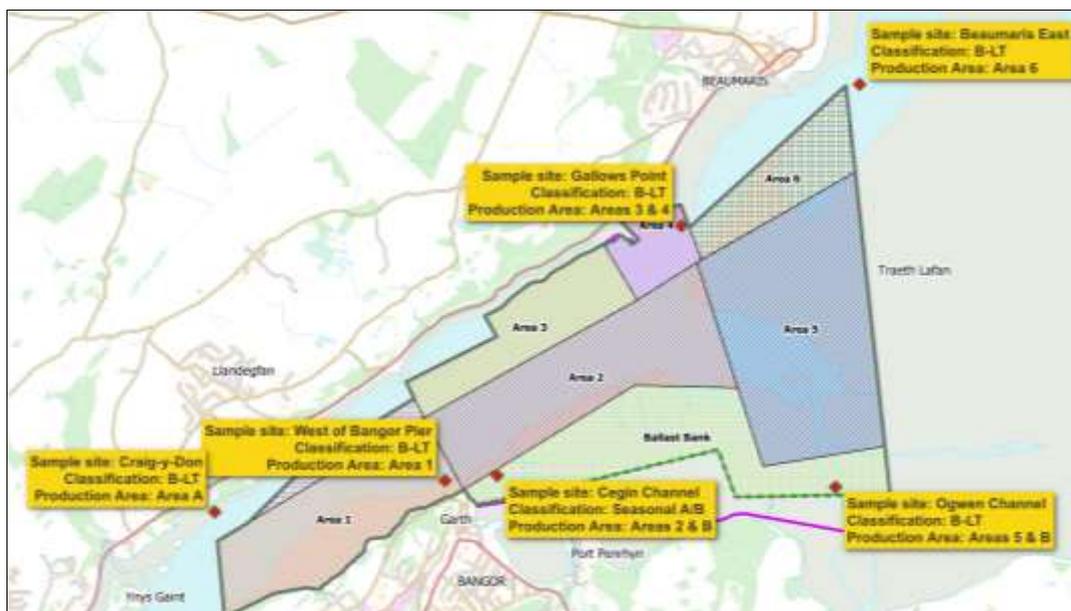


Figure 1: Map of the Eastern Menai Strait showing shellfish sampling locations, classification results, and production areas.

- 1.8 Prior to the UK's departure from the EU the main market for shellfish from the Menai Strait was in Europe. Mussels from the Class B shellfish beds were exported directly from the Strait for relaying or purification in Europe.
- 1.9 Since the UK left the EU it has no longer been permissible to export Class B shellfish directly into Europe; they must be purified, relayed or heat treated prior to export. Only Class A shellfish can be exported direct to EU markets.
- 1.10 This change has essentially prevented shellfish exports from the Strait to the EU, since the UK has very limited capacity for mussel purification (which also causes high in-transit mortality); and only 11 of the 88 mussel production areas in England and Wales have a "Class A" designation.
- 1.11 From this brief introduction it should be clear that an improvement to shellfish hygiene classifications in the eastern Menai Strait could re-open EU markets to the local industry; and any decline (in particular the loss of the Seasonal A/B classification) would have a devastating effect.

2. Managing and monitoring shellfish hygiene results

- 2.1 Shellfish samples are taken each month from the sample sites shown in Figure 1 by environmental health officers from Gwynedd and Ynys Môn County Councils. These results are collated by Cefas (the Centre for Environment Fisheries and Aquaculture Science) prior to classification of the shellfish beds, which is administered by the Food Standards Agency.
- 2.2 A time series of shellfish sample results over the past five years for the Cegin Channel is shown in Figure 2. Most results are below the "A" requirement of 230 *E. coli* / 100g. A few results exceed this value.

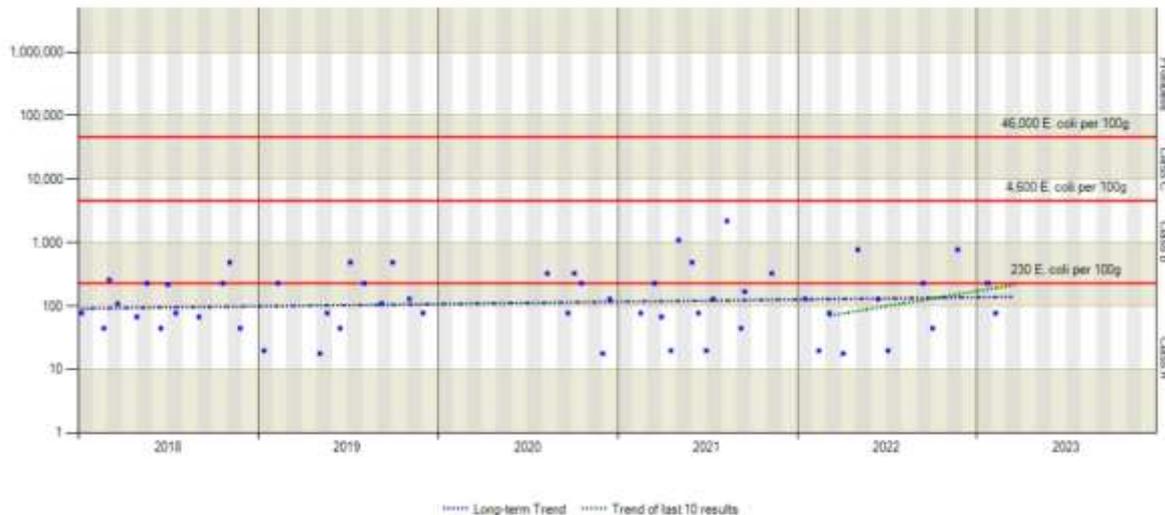


Figure 2: Shellfish hygiene results, 2018-2023, for the Cegin Channel sample site. Horizontal red lines show the boundaries for "A", "B" and "C" classification. Note that the vertical axis is logarithmic.³

2.3 If any results are recorded that exceed the limit value for the current classification (i.e. 700 *E.coli* / 100g for a Class A bed or 46,000 for a Class B bed), then an "Action State" is put in place, which triggers an investigation and that may result in the temporary downgrading of the classification. "Local Action Groups" that are led by local authorities are responsible for coordinating this response and producing an "Action State Report".

3. Recent classification results

3.1 On the 2nd of December the Association received notification from the Local Action Group for the Menai Strait that a shellfish sample taken from the Cegin Channel on the 22nd November 2022 had returned a result of 780 *E. coli* / 100g. This exceeds the limit value for a Class A shellfish bed (which is 700). The Cegin Channel sample site determines the classification of the only seasonal A/B production area in the eastern Strait.

3.2 The Local Action Group determined that it was appropriate to activate an "Investigation State" for this area, and asked for information to assist with this investigation. The shellfish bed was not been closed or downgraded at this stage.

3.3 In response to this request, the Chair of the Association put together a report (attached at Annex A) which considered the factors that are relevant to this high result. The key conclusions were:-

- a) The high *E.coli* result of 780/100mg was highly unusual for the Cegin RMP with only 4 samples in the past 3 years above the 700/100mg threshold and none at this time of year.
- b) There was a rainfall event on the day before sampling which resulted in an increased river discharge on 22nd November in the Afon Seiont and Afon

³ <https://www.cefas.co.uk/data-and-publications/shellfish-classification-and-microbiological-monitoring/england-and-wales/shellfish-monitoring-results/details/?species=MUS&connection=SHS&PointID=B055T>

Ogwen. This was probably replicated in other rivers flowing into the Strait. High levels of *E. coli* were recorded on the Ogwen 24 hours prior to the sample that had the high result (mean 10,533/100ml).

- c) Storm overflows at both sewage treatment works and CSOs were operating in the area spilling untreated sewage directly into the strait and the rivers flowing into the Strait.
 - d) These discharges are highly likely to have caused this anomalous result which should be discounted.
- 3.4 The Chair also noted in his report that there was a difference between the result for the mussel sample taken from the Cegin Channel RMP at 0819 on the 22nd November (490 *E. coli* / 100ml) and the sample taken at 1400 on the same day (780 *E. coli* / 100ml). The former was taken when the tide was in, and is thus representative of the catch taken by mussel dredgers; the latter was taken when the tide was out, and does not represent the typical catch from this area.
- 3.5 The Chair, Secretariat, and mussel farmers from the Strait all attended a meeting of the Local Action Group on the 22nd March 2022. This meeting provided an opportunity to make many of the points set out in the Chair's reports verbally and discuss them with local authority Environmental Health Officers (EHOs). The meeting was very constructive. At that point the FSA had not determined its response to the high value reported from Cegin Channel in November.

4. Contextual information

- 4.1 The high result for the Cegin Channel in November 2022 has highlighted an issue that was discussed at the September Association meeting during a presentation from NRW about water quality in the Strait. The issue is that investigations are only triggered when a limit value (see Table 1) is exceeded. For a Class B bed, this means that no action would be triggered unless a value of 46,000 *E. coli* / 100g was recorded.
- 4.2 The shellfish sample results for the past 5 years in the eastern Menai Strait are shown in Annex B. One of these sites approach or exceed a "Class A" result for 80% of samples in this period (Beaumaris East); the other sites exceed 70%. The highest value recorded from a total of 353 samples in the eastern Strait over this 5-year period was 7,900 *E. coli* / 100g, which is roughly 1/6th of the value that would trigger an investigation on a Class B bed. As a result, there have been no investigations.
- 4.3 The data at Annex B show that all of the shellfish production areas in the eastern Menai Strait are close to meeting the "Class A" standard. If this standard was attained, or if a Seasonal A/B classification could be achieved for more sites, then it would enable exports to the EU from the Strait to increase.
- 4.4 Month-by-month results over the past 8 years for all of the shellfish sampling sites in the Strait and for all of the Seasonal A/B sites outside the Strait are appended at Annex C of this report for reference.
- 4.5 The Shellfish Centre has been working in collaboration with NRW and Dŵr Cymru to try to understand the sources and characteristics of effluent inputs to the Menai Strait, and how these may affect shellfish hygiene classification. Progress reports on this work have been given to previous Association meetings, and a further update may be available for this meeting.

5. Future Action

- 5.1 At the Association meeting in December 2022 it was resolved that the Chair and Secretariat should write to the Welsh Minister and to the Chair of the All Party Parliamentary Group on shellfish aquaculture to encourage improvements to the shellfish sampling regime. Following that meeting the Chair and Secretariat had further discussions with Association members and with the Shellfish Association of Great Britain about the approach that MSFOMA should take. It is clear from these discussions that several proposals for rationalising and improving the shellfish hygiene sampling regime underway. These include:-
- a) **Locally - a review of the “Sanitary Survey”** is underway, which will determine the future location of sample points and how they are sampled. It is hoped that this will result in sample points being located in areas where mussels are actually harvested, and also samples being taken in a more representative manner.
 - b) **Nationally - the Shellfish Stakeholder Working Group** is a forum that evaluates regulatory issues and exchange expert advice with government agencies. It commissioned a Review of the Official Control Regulations (OCR) for shellfish production in 2019. Recommendations included:-
 - i. **Anomalous results** - encouraging a review of what is “anomalous” (i.e. a result that is off-trend rather than a result that can be attributed to anomalous circumstances);
 - ii. **Industry sampling** - which would enable sampling by representative methods and with greater reliability; and
 - iii. **Analytical method** - the favoured method used in the UK at present is less consistent than other methods, and a change could be beneficial.
- 5.2 It is important that whatever action the Association takes with regard to this issue is complementary to these existing initiatives. The Association is invited to consider the appropriate approach for it to adopt to encourage improvements that will support shellfish farming in the Strait - whether these are changes to the sampling regime, the analytical method, the administration of the UK & EU legal requirements, improvements to water quality, or a combination of these approaches.

MSFOMA Secretariat
April 2023

Menai Strait Areas 2 and B West - Investigation into a High E. coli Result in Mussels – 22nd November 2022

1. Background

The Menai Strait (East) Mussel and Oyster Fishery Order (“MSEMOFO”) area, in the eastern end of the Menai Strait, is administered by the Menai Strait Fishery Order Management Association (“MSFOMA” <https://www.msfoma.org/>) and contains one of the largest mussel fisheries in the UK.

The classified shellfish beds within the MSEMOFO have good quality mussels which are mostly consistent with regulatory Class A. However, due to occasionally high *E. coli* counts, only one of six areas has a seasonal “A” classification, with the remaining areas classified as “B”. Bangor Mussel Producers (the cooperative of companies that operate the mussel production leases within the Several Order) depend on export to the EU. Since EU-exit, this requires that live shellfish exported from the UK to the EU must originate from class “A” waters.

2. Issue

On 2nd December 2022 MSFOMA was notified that a high *E. coli* result was recorded which was above the trigger level of 700 *E. coli*/100mg in a classification sample:

Classification zone (including sample co-ordinates)	Sample Date	Result <i>E. coli</i> 100g	Species sampled	Existing classification
Areas 2 and B West	22.11.2022 at 14.00	780	<i>Mytilus spp.</i>	SEASONAL-A (seasonal) 1 Oct to 30 Apr

Areas 2 and B West are represented by Cegin Channel Representative Monitoring Point (RMP):

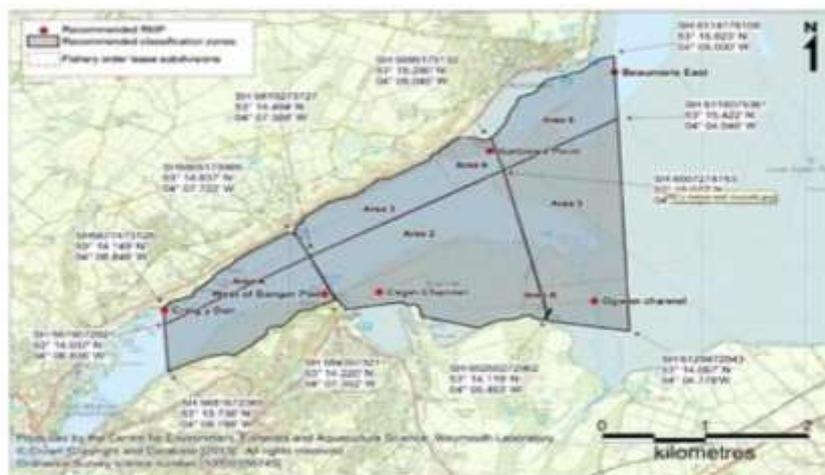
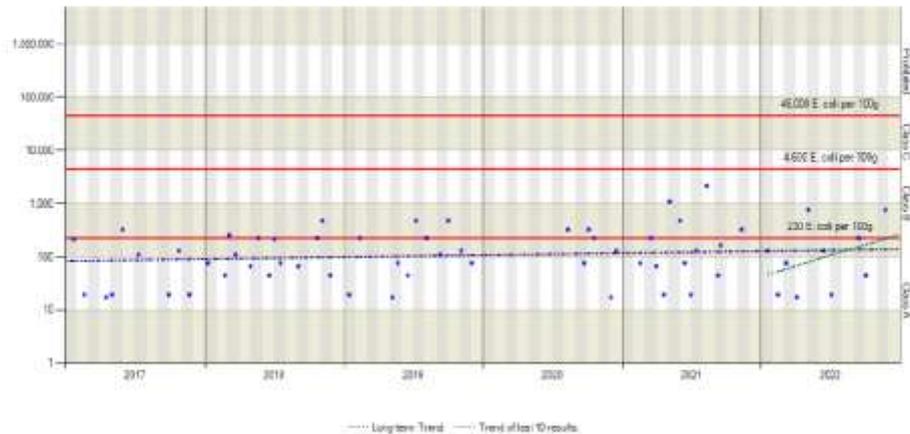


Figure 3.1: Recommended zoning and monitoring arrangements (mussels)

Results for the Cegin Channel RMP for the last 6 years¹ are shown below:



These data show that in the past 3 years 75% of samples (21 out of 28) fell within class “A” with 4 samples over the 700 E. coli /100g threshold, none of which have previously occurred within the period October to April inclusive. This indicates that the November 2022 result of 780 E.coli/100g is very unusual and likely to be caused by a contamination event.

3. Environmental Conditions

There is very high economic interest in better understanding the sources and patterns of E. coli contamination in the area. Several rivers with significant catchments and populations discharge into the Menai Strait. The area is affected by urban and rural municipal wastewater, discharge from wastewater treatment facilities and probably also by private septic tanks. Agricultural and wildlife-derived contamination may also affect the microbial water quality.

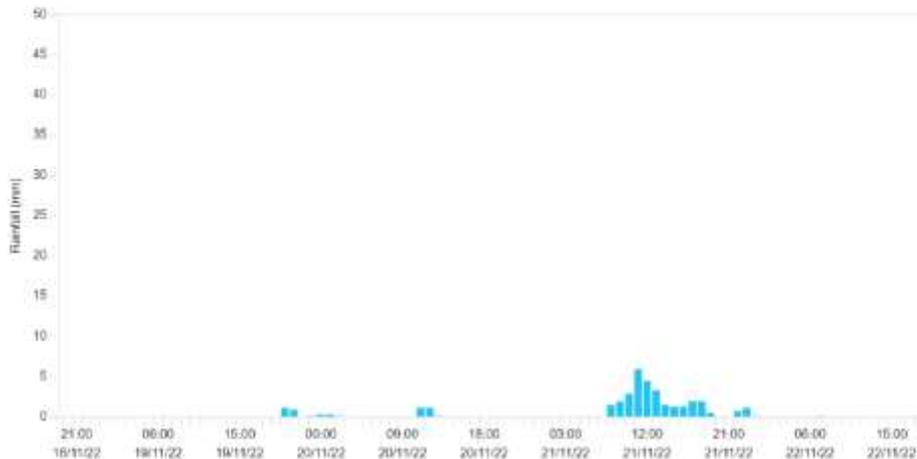
The current area classifications are based on the analysis of shellfish samples taken approximately monthly from Representative Monitoring Points (RMPs). This frequency does not sufficiently explore the temporal pattern of microbial contamination or the frequency of contamination ‘events’ and does not resolve the dynamics associated with high rainfall events. The current data lack information on whether the pollution is human sewage-derived or agriculture-related, nor the relative contribution of potential sources.

The Shellfish Centre (Bangor University) has been carrying out a study (: Project 12b Microbial sources tracking in Menai Strait, North Wales) which aims to better understand the environmental factors affecting microbial water quality and shellfish hygiene in the Menai East shellfish area and how variations in harvesting practices and sampling could be incorporated into modification of the application of the shellfish official control regulations. This project will also help to identify the

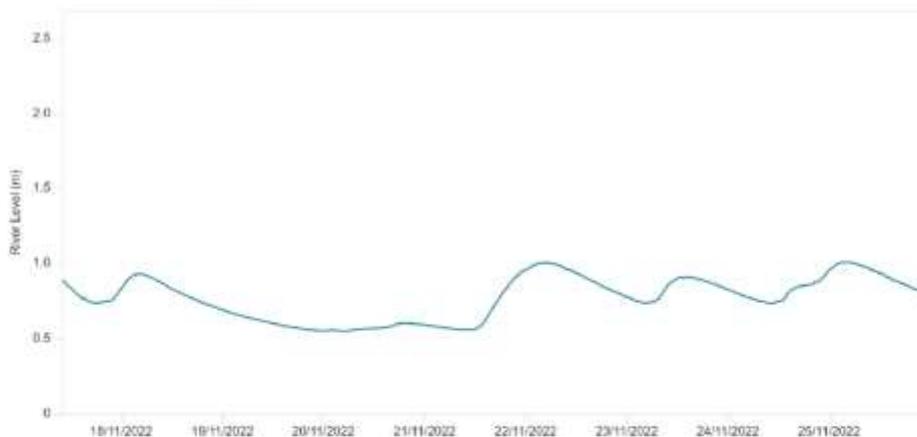
¹ <https://www.cefas.co.uk/data-and-publications/shellfish-classification-and-microbiological-monitoring/england-and-wales/shellfish-monitoring-results/details/?species=MUS&connection=SHS&PointID=B055T>

periods when faecal indicator concentrations peak, as well as inform on the source of contamination and the duration of higher risk periods. Data from this study has been used below in addition to information from Natural Resources Wales.

NRW Bethesda rain gauge recorded 31.6mm rain on 21st Nov.



The closest river gauging station operated by NRW is on the River Seiont at Peblic Mill:



The Seiont river level increased by around 0.5m between 1200 on 21st November and 0500 on 22nd November in response to the rainfall on 21st November.

Flows in the River Ogwen have been monitored by the Shellfish Centre study and show that there was a response in the discharge of the Afon Ogwen. Peak discharge of this event 24.59 m³/s @1615 21/11/22, remaining similar until around 2115. The investigation-triggering sample was taken at Cegin RMP around 17hrs later at 1400 22/11/22.

The routine sampling for the study also occurred on 21 and 22/11/22.

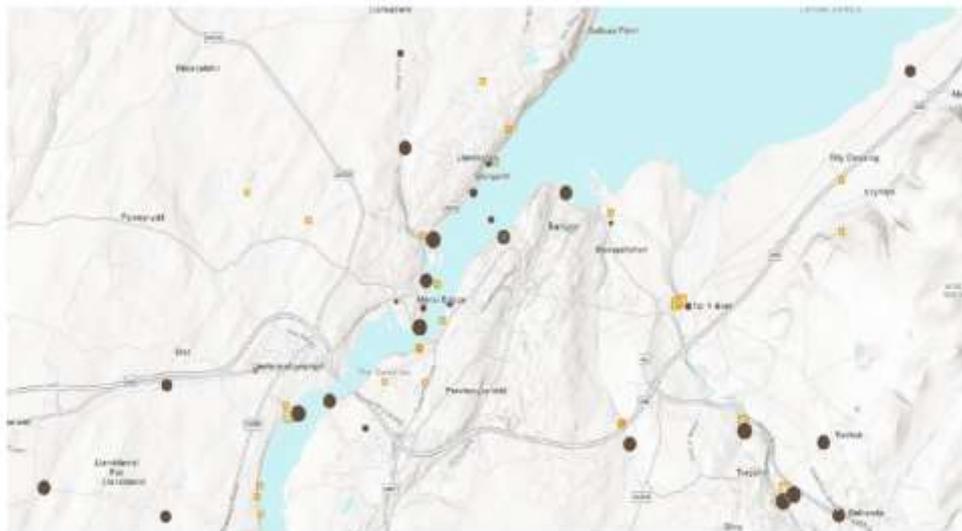
Triplicate river samples (taken before the Ogwen discharge peaked on 21/11/22) gave mean concentrations of

Ogwen	21/11/22 1420	10533 <i>E. coli</i> /100ml
Cegin	21/11/22 1400	666 <i>E. coli</i> /100ml
Adda	21/11/22 1342	4100 <i>E. coli</i> /100ml

The shellfish results are for the statutory RMPs and were taken earlier in the day than official control samples on 22/11/22

West of Bangor Pier	22/11/22 0825	490 <i>E. coli</i> /100g (MPN)
Cegin Channel	22/11/22 0819	490 <i>E. coli</i> /100g (MPN)
Gallows Point	22/11/22 0906	490 <i>E. coli</i> /100g (MPN)
Ogwen Channel	22/11/22 0942	1300 <i>E. coli</i> /100g (MPN)

There are a number of sewage treatment works (orange points) and Combined Sewer Overflows (CSOs – black circles)) which discharge either directly into the area or into rivers which flow into the Menai Strait. All of these discharges are consented and are monitored by Dŵr Cymru Welsh water (DCWW) and they are able to provide event duration data for all CSOs into the area.



The main discharges are:

To the Strait:

- Bangor Beach Road Pumping Station. Permit: CG0351702
- Gorad Road pumping station. Permit: CG0353701

To the Afon Ogwen:

- Tregarth sewage works settled storm. Permit: CG0083802
- Fron Ogwen pumping station (pumps to Tregarth) Permit: CG0083901
- Rock Terrace CSO, Bethesda. Permit: CG0164901
- Bethesda sewage works storm. Permit: CG0437401
- CSO at Maes Bleddyn, Rachub. Permit: MP3328XV (to a trib of the Ogwen)

To the Afon Cegin:

- Glasinfryn pumping station. Permit: CG0185201
- Rhiwlas sewage works. Permit: CG0086002

Verbal reports from NRW confirm that on 22nd November the CSOs at Tregarth Sewage Treatment Works and Bethesda Sewage Treatment Works were both discharging. Data has been requested from DCWW on the total daily spill duration (hours) for each asset on 20th, 21st and 22nd November 2022 and this report will be updated with this information when available

4. Conclusions

- The high E.coli result of 780/100mg was highly unusual for the Cegin RMP with only 4 samples in the past 3 years above the 700/100mg threshold and none at this time of year.
- There was a rainfall event on the day before sampling which resulted in an increased river discharge on 22nd November in the Afon Seiont and Afon Ogwen. This was probably replicated in other rivers flowing into the Strait. High levels of E. coli were recorded on the Ogwen 24 hours prior to the sample that had the high result (mean 10,533/100ml).
- Storm overflows at both sewage treatment works and CSOs were operating in the area spilling untreated sewage directly into the strait and the rivers flowing into the Strait.
- These discharges are highly likely to have caused this anomalous result which should be discounted.

Further to these observations, we would draw your attention to the difference between the result for the mussel sample taken from the Cegin Channel RMP at 0819 on the 22nd November (490 E.coli / 100ml) and the sample taken at 1400 on the same day (780 E.coli / 100ml). The former was taken when the tide was in, and is thus representative of the catch taken by mussel dredgers; the latter was taken when the tide was out, and does not represent the typical catch from this area.

ALAN WINSTONE
Chair, MSFOMA
12th December 2022

Annex B: Summary of shellfish sample results from the eastern Menai Strait for the period 2018-2023 (ending February 2023)

Sample Site	Mean E.coli	Max E.coli	Min E.coli	No. Samples	Count of A	Count over Limit for A	Count of B	Count of C	% >A	% >B	% >C	Geometric Mean*
Beaumaris East	209.7	1700	18	54	45	4	9	0	83.3%	100.0%	100.0%	102
Cegin Channel	227.3	2200	18	55	43	4	12	0	78.2%	100.0%	100.0%	117
Craig-y-Don	212.2	3300	18	54	43	2	11	0	79.6%	100.0%	100.0%	94
Gallows Point	218.9	2300	18	54	40	2	14	0	74.1%	100.0%	100.0%	114
Ogwen Channel	419.1	7900	18	55	41	10	13	1	74.5%	98.2%	100.0%	128
West of Bangor Pier	323.6	3300	18	55	40	6	15	0	72.7%	100.0%	100.0%	125

* The Geometric mean is the preferred value used by microbiologists, it is defined as the nth root of the product of n numbers⁴. The geometric mean of a set of numbers is always lower than the arithmetic mean.

⁴ https://en.wikipedia.org/wiki/Geometric_mean

Annex C: Shellfish sampling results for the period 2015-present day for all of the sample sites in the Menai Strait and also all of the “Seasonal A/B” shellfish beds elsewhere in England & Wales.

1. Introduction

This document collates the shellfish hygiene sample results for all of the Representative Monitoring Points (RMPs) in the Menai Strait over the past 5 years.

For comparison, the equivalent results for all of the Class A and Seasonal A/B shellfish production areas are also collated and presented here.

1.1 Notes

All of the data in the tables below is taken from the Cefas website⁵. These data were compiled on 19th April 2023, so any results posted after that date are not listed here.

2. Key to tables

To aid rapid interpretation of the data, the following formatting codes have been used in the tables:-

Item	Meaning
20	Result consistent with Class A (<230 <i>E.coli</i> / 100g)
490	Result consistent with Class B (230-4,600 <i>E.coli</i>), but <u>below</u> the limit (700 <i>E coli</i>) for Class A waters.
780	Result consistent with Class B (230-4,600 <i>E.coli</i>), and <u>above</u> the limit (700 <i>E coli</i>) for Class A waters.
	No Data
Month	Class A in this month
Month	Class B in this month

⁵ <https://www.cefas.co.uk/data-and-publications/shellfish-classification-and-microbiological-monitoring/england-and-wales/shellfish-monitoring-results/>

3. Menai Strait sites

3.1 Beaumaris East (Current Classification - B-LT)

Month	Year							
	2015	2016	2017	2018	2020	2021	2022	2023
January		780	110	78			78	220
February	45	45	20	230		18	170	78
March	20	78		57		133	170	
April	45	45	20	330		20	45	
May	1300	490	94	200		960	1300	
June	40	45		45		43	18	
July	45	105	130	94		110	45	
August	174	690			220	330		
September		164	330	20	110	78	110	
October	130	130	230	20	488		230	
November	18		78	220		20	490	
December		45			400			
Number of samples	9	11	8	10	4	9	10	2
# Class A	8	8	6	8	2	7	7	2
# Class B	1	3	2	2	2	2	3	0
% Class A	89%	73%	75%	80%	50%	78%	70%	100%
#>Class A Limit	1	1	0	0	0	1	1	0

3.2 Gallows Point (Current Classification - B-LT)

Month	Year							
	2015	2016	2017	2018	2020	2021	2022	2023
January		780	20	78			230	220
February	45	18	45	45		130	45	45
March	130	78		175		200	45	
April	78	20	18	490		18	330	
May	230	330	104	270		410	2300	
June	45	450		45		33	18	
July	170	94	45	88		40	20	
August	48	330			170	78		
September		415	130	130	110	78	330	
October	45	45	230	230	510		130	
November	45		20	124		78	780	
December		68			135			
Number of samples	9	11	8	10	4	9	10	2
# Class A	8	6	7	7	3	8	5	2
# Class B	1	5	1	3	1	1	5	0
% Class A	89%	55%	88%	70%	75%	89%	50%	100%
#>Class A Limit	0	1	0	0	0	0	2	0

3.3 Craig-y-Don (Current Classification B-LT)

Month	Year							
	2015	2016	2017	2018	2020	2021	2022	2023
January			20	330			78	230
February	18	18	78	45		330	110	78
March		20		310		104	78	
April	78	78	20	20		20	230	
May	1300	330	73	170		1684	490	
June	20	330		45		124	61	
July	20	150	40	49		20	20	
August	124	210			330	780		
September		230	78	170	45	78	220	
October	18	18	330	18	310		20	
November	20		68	150		20	330	
December		110			185			
Number of samples	8	10	8	10	4	9	10	2
# Class A	7	7	7	8	2	6	7	1
# Class B	1	3	1	2	2	3	3	1
% Class A	88%	70%	88%	80%	50%	67%	70%	50%
#>Class A Limit	1	0	0	0	0	2	0	0

3.4 West of Bangor Pier (Current Classification B-LT)

Month	Year							
	2015	2016	2017	2018	2020	2021	2022	2023
January		330	45	170			78	330
February	130	20	45	130		20	110	78
March	78	490		280		220	45	
April	18	18	45	78		20	18	
May	130	78	400	130		475	330	
June	45	18	20	78		95	230	
July	20	555	250	130		20	18	
August	110	490			490	1100		
September		188	78	45	78	130	780	
October	20	78	110	330	360		78	
November	78		40	57	3300	220	2300	
December		45			284			
Number of samples	9	11	9	10	5	9	10	2
# Class A	9	7	7	8	1	7	6	1
# Class B	0	4	2	2	4	2	4	1
% Class A	100%	64%	78%	80%	20%	78%	60%	50%
#>Class A Limit	0	0	0	0	1	1	2	0

3.5 Cegin Channel (Current Classification Seasonal A/B, Class A from 1st Oct to 30th April)

Month	Year							
	2015	2016	2017	2018	2020	2021	2022	2023
January		780	220	78			130	230
February	20	20	20	45		78	20	78
March	45	45		185		149	78	
April	130	68	18	68		20	18	
May	170	330	175	230		795	780	
June	230	45		45		49	130	
July	20	89	110	149		130	20	
August	62	1700			330	2200		
September		150	20	68	78	108	230	
October	18	20	130	230	280		45	
November	78		20	268		330	780	
December		330			74			
Number of samples	9	11	8	10	4	9	10	2
# Class A	8	7	8	7	2	6	7	1
# Class B	1	4	0	3	2	3	3	1
% Class A	89%	64%	100%	70%	50%	67%	70%	50%
#>Class A Limit	0	2	0	0	0	2	2	0

3.6 Ogwen Channel (Current Classification B-LT)

Month	Year							
	2015	2016	2017	2018	2020	2021	2022	2023
January		780	490	78			170	110
February		78	18	45		45	78	45
March	45	20		284		104	78	
April	110	68	130	1400		18	230	
May	330	1100	230	1100		739	490	
June	18	45		20		44	20	
July	68	235	68	48		780	78	
August	150	330			230	1100		
September		460	78	230	20	45	1100	
October	180	130	620	45	413		230	
November	130		20	108	1300	20	170	
December		78			48			
Number of samples	8	11	8	10	5	9	10	2
# Class A	7	6	5	6	2	6	6	2
# Class B	1	5	3	4	3	3	4	0
% Class A	88%	55%	63%	60%	40%	67%	60%	100%
#>Class A Limit	0	2	0	2	1	3	1	0

4. Results for Seasonal A/B Sites outside the Menai Strait

4.1 St Just, Cornwall (Class A season - 1st November - 31st August)

Month	Year							
	2015	2016	2017	2018	2020	2021	2022	2023
January		130	130		130	45	330	
February		230	230	450	230	45	170	68
March		78	18	230	78	18	170	78
April	18	110	18	20	170	18	18	490
May	20	20	330	78	78	20	130	
June	230	18	45	45	20	45	130	
July	490	20	45	110	78	330	45	
August		220			230	68	1100	
September	78	3100		2300	20	20	20	
October	330	20		45	130	230	18	
November	690	130			230	20	45	
December	1100		780	490	20	68	780	
Number of samples	8	11	8	9	12	12	12	3
# Class A	3	9	5	5	9	10	9	2
# Class B	5	2	3	4	3	2	3	1
% Class A	38%	82%	63%	56%	75%	83%	75%	67%
#>Class A Limit	1	1	1	1	0	0	2	0

4.2 Foulney Island, Cumbria (Class A season - 1st March to 31st May)

Month	Year							
	2015	2016	2017	2018	2020	2021	2022	2023
January		130	18	170	1100	490	20	230
February		490	170	20	45	330	330	20
March		45	130	110	18	40	130	20
April		20	78	40	130	170	170	
May		18	18	230	18	45	170	
June		45	68	330	45	230	20	
July	45	170	490	45	780	230	330	
August	18	2300	1300	78	78	110		
September	20		490	130	40	130	68	
October	310	330	78	230	490	490	170	
November	20	170	20	18	330	450	2300	
December	780		130	45	78	780	130	
Number of samples	6	10	12	12	12	12	11	3
# Class A	4	7	9	9	8	5	8	2
# Class B	2	3	3	3	4	7	3	1
% Class A	67%	70%	75%	75%	67%	42%	73%	67%
#>Class A Limit	1	1	1	0	2	1	1	0

4.3 West Brownsea, Poole (Class A season 1st April - 30th September)

Month	Year							
	2015	2016	2017	2018	2020	2021	2022	2023
January	490	330	110	330	170	230	130	2700
February	330	490	490	1300	1300	490	220	140
March	490	780	130	3300	130	170	78	130
April	140	18	1100		20	18	170	
May		18	18	490	45	18	18	
June	230	130	40	20	18	18	230	
July	20	78	20	170	18		78	
August	20	130	20	18	18	45	18	
September	490	330	490	170	18	18	130	
October	18	78	78	20	330	330	20	
November	110	78	330	170	780	45	490	
December	130	230	330	330	170	18	1700	
Number of samples	11	12	12	11	12	11	12	3
# Class A	6	7	7	6	9	8	9	2
# Class B	5	5	5	5	3	3	3	1
% Class A	55%	58%	58%	55%	75%	73%	75%	67%
#>Class A Limit	0	1	1	2	2	0	1	1

4.4 St Austell, Cornwall (Class A season 1st June - 31st January)

Month	Year							
	2015	2016	2017	2018	2020	2021	2022	2023
January	220	330	45	230		40	170	110
February	700	230	78	20		780	18	690
March	78	140	18	110	78	45	170	330
April	130	78	20	20	1700	20	18	330
May	78	20	317	18	49	20	18	
June	78	20	165	20	20	230	78	
July	20	18	18	20	18	18	18	
August	2300	61	230	18	20	20	18	
September		140	20	18	18	18	45	
October	130	110	18	20	18	78	490	
November	130	45	204	689	78	78	110	
December		210	18	110	78	68	45	
Number of samples	10	12	12	12	10	12	12	4
# Class A	8	10	10	10	9	10	11	1
# Class B	2	2	2	2	1	2	1	3
% Class A	80%	83%	83%	83%	90%	83%	92%	25%
#>Class A Limit	1	0	0	0	1	1	0	0

4.5 Black Rock, Cornwall (Class A season 1st January - 31st October)

Month	Year							
	2015	2016	2017	2018	2020	2021	2022	2023
January		40			230	490	18	450
February		78		230	230		45	45
March		20	78	78	330	18	18	20
April	18	490	110	130	78	18	78	
May	18	1300	3300	230	18	18	18	
June	230	18	130	45	220	78	18	
July	4900	45	270	780	130	45	78	
August	140	130		330	45	20	40	
September	130	330	20	330	33	45	78	
October	490	20	330	330	45	20	18	
November	130		45	170	2100	18	18	
December	20	130	68	330	130	20	68	
Number of samples	9	11	9	11	12	11	12	3
# Class A	6	8	6	4	8	10	12	2
# Class B	2	3	3	7	4	1	0	1
% Class A	67%	73%	67%	36%	67%	91%	100%	67%
#>Class A Limit	1	1	1	1	1	0	0	0

Welsh Government Activity

Background

The Welsh Government is responsible for managing inshore fisheries in Wales. This report provides a brief update on some Welsh Government Activities that may be relevant to the work of MSFOMA.

Recommendations

1. That the report is received, along with any verbal updates from the Welsh Government officials invited to the meeting.

1. Background

- 1.1 The Welsh Government website provides information about consultations and meetings of various stakeholder groups that are relevant to the Welsh Fishing industry. A brief summary of recent activity is provided below.

2. Meetings of Fisheries Groups

- 2.1 Welsh Government has established several groups to assist with the administration and management of Welsh fisheries. The key groups are:-

- a) **Inshore Fisheries Groups** - these groups were established to provide stakeholders with a forum for communicating and engaging with Welsh Government. They were disbanded several years ago, and at the same time the membership of the Welsh Marine Fisheries Advisory Group (WMFAG) was broadened and supported by ad-hoc "Task and Finish" groups. The most recent WMFAG meeting resolved to maintain this arrangement and to review its effectiveness in December 2020.
- b) **Welsh Marine Fisheries Advisory Group (WMFAG)** - this group was established to assist with the formulation of appropriate policies, plans, strategies and laws relating to marine fisheries in Wales. Information about this group is now available from <https://beta.gov.wales/wales-marine-fisheries-advisory-group>. The most recent published WMFAG minutes were for the meeting on 15th September 2020 (published on 10th December 2020 [here](#)), which were reported and discussed previous MSFOMA meetings.

It was reported at the last MSFOMA meeting what the Welsh Fishermen's Federation were liaising with the Minister about this group, and that it had been hoped that a meeting might take place in the spring. It is hoped that news of progress will be provided to the meeting.

- c) **Aquaculture Advisory Group** - this Group was established to help Welsh Government meet the targets that it set in the 2013 Wales Marine and Fisheries Strategic Action Plan for aquaculture production of 2,000t of finfish and 16,000t of shellfish by 2020. No meetings of this group have taken place recently. The most recent WMFAG meeting confirmed that the AAG has been "...suspended following poor attendance and dissatisfaction." WMFAG further resolved to

remove a reference to the AAG from its own Terms of Reference “...as that sub-group was disbanded.”

2.2 **Ministerial Group for Welsh Fisheries (MAGWF)** – this group was created by Welsh Government earlier this year. The first meeting of this group took place on the 14th July. The Chair of the Association attended the second meeting of MAGWF which took place on the 24th November 2022, and is due to attend the next meeting on the 24th April 2023. A copy of the agenda for this meeting and supporting papers is provided at Annex A to this report. The key points to note from the MAGWF meeting were:

- a) The Group has revised and agreed its Terms of Reference
- b) At the request of the Chair of MSFOMA, the meeting on 24th April will consider the future for Pacific oyster cultivation in Wales. The Chair has produced a report for the meeting to consider (see Annex A) which sets out the available information and asks MAGWF to provide its views on key questions that will determine the future of Pacific oyster cultivation in Wales.

2.3 Association Members and Observers meeting will be asked for a verbal update on any recent meetings of these and related groups that are not reported on the Welsh Government website.

3. Consultations

3.1 There are no open consultations for “Marine and Fisheries” on the Welsh Government website ([here](#)) that are directly relevant to MSFOMA.

4. Funding Opportunities

4.1 Welsh Government backed funding opportunities were discussed at the last Association meeting. Following that meeting the Chair and Secretariat worked with the North Wales Rivers Trust to secure funding for a project focussing on water quality in the Strait (see item 15 on agenda). The open funding opportunities at present are:-

- a) Welsh Marine & Fisheries Scheme: Health & Safety Funding – WG are seeking applications for funding for non-mandatory health & safety equipment. They have sought applications before 25th April 2023.
- b) Local Places for Nature – this is a capital grant scheme intended to enable communities in Wales to restore and enhance nature. There are no deadlines for grant applications. The Chair and Secretariat are due to discuss funding opportunities with North Wales Rivers Trust and the Anglesey Local Nature Partnership under this fund prior to the Association meeting and will provide a verbal update on progress.

5. Welsh Government Officials

5.1 There have been some informal discussions over the phone and in telephone conference calls with WG officials since the last meeting, but none of significance.

6. Communications with Cabinet Minister

- 6.1 Communications with the Cabinet Minister concerning Fishery Orders in the Menai Strait are reported in items 12 & 14 on the agenda.

MSFOMA Secretariat
April 2023

Annex A: Papers provided for Ministerial Advisory Group for Welsh Fisheries meeting, April 24th 2023.

MAGWF 2023 Meeting 1

**Ministerial Advisory Group for Welsh Fisheries (MAGWF)
2023 Meeting 1: Thursday 23 March 2023, 10:00 – 12:00**

Agenda

1	Welcome	10:00 – 10:10
2	Terms of Reference (ToR) update and previous meeting notes (Docs 1 and 2)	10:10 – 10:20
3	WG updates	10:20 – 10:40
4	Fisheries Management Plans (FMPs) (Docs 3 & 4)	10:40 – 11:10
5	Pacific Oysters Discussion Paper (Doc 5)	11:10 – 11:30
6	Whelk Fishery 2022/23 (Doc 6)	11:30 – 11:50
7	Cockle Fishery Management (verbal update)	11:50 – 11:55
8	AOB	11:55 – 12:00

Documents sent in advance:

- Doc 1: Notes and actions from MAGWF 2022 Meeting 2 (24-11-2022)
- Doc 2: Updated Terms of Reference (ToR) document
- Doc 3: Bass Fisheries Management Plan (FMP) for England and Wales
- Doc 4: King Scallop Fisheries Management Plan (FMP) for Wales and England
- Doc 5: Pacific Oysters
- Doc 6: Whelk Fishery Permit Period 2022-23: MAGWF update March 2023

Ministerial Advisory Group for Welsh Fisheries (MAGWF)

Meeting 2

10:00 – 12:00, Thursday 24 November

Notes and Actions

Attendees:

Colin Charman (CC) Natural Resources Wales, Sean Clement (SC) Marine Conservation Society / WEL, Nerys Edwards (NE) Syren Shellfish, Jim Evans (JE) Welsh Fishermen's Association, Natalie Hold (NH) Bangor University, Hannah Thompson (HT) Seafish, Alan Winstone (AW) MSFOMA, Colin MacDonald (CM)

Welsh Government: Tamsin Brown (Chair), Alun Mortimer (secretariat), Julian Bray, Gary Douch, Shelley Vince, Caryn Le Roux, Amanda Wilson

Apologies:

Gareth Bevington (GB) DD M&F Welsh Government, Carl Davies (Sea Fishing Trips), Lynn Gilmore (Seafish), Mark Gray (MG) Menai Seafood Company, John O'Connor (JO'C) Welsh Federation of Sea Anglers, Emily Williams (EW) RSPB / WEL,

Agenda

1. Welcome 10:00 - 10:10
2. Review notes and actions (see Doc 1) 10:10 – 10:20
3. Agree ToR update (see Doc 2) 10:20 – 10:40
4. Welsh Government update 10:40 – 11:00
5. Funding: new scheme to replace the EMFF (see Doc 3) 11:00 – 11:45
6. Forward look & AOB 11:45 – 12:00

Papers

Doc 1: Notes and actions from meeting 1, on 14 July.
Doc 2: Updated Terms of Reference (ToR).
Doc 3: Funding Policy update

Meeting notes

Meeting commenced (at 10:00)

1. Welcome

TB welcomed the group to the meeting and explained that GB is in the annual fisheries negotiations with the EU today.

2. Review notes and actions (see Doc 1)

Review of MAGWF - Meeting 1 notes (Doc 1):

Item 2 – JE It would be appreciated if we could have a copy of the WMFAG review please.

Item 3 – JE clarification: Whelk Order design was by task and finish group within WMFAG.

Review of actions (Doc 1):

- Second WEL rep – completed SC as well as EW.
- Co-management paper – rolled over
- Update ToR to include aquaculture - completed

3. Agree ToR update (see Doc 2)

The following points were made:

- Paragraph 1.2 had been updated – MAGWF will temporarily be the forum for species specific discussions until specific groups established.
- Members noted the Joint Fisheries Statement (JFS) has now been published and there should be a link between MAGWF, the JFS and Wales specific fisheries strategy and this could be reflected in the ToR.
- Later in the meeting, GD raised that an alternative option was for the industry to lead on a fisheries strategy.
- Members would like to receive an update on priorities for Wales discussed in previous meeting.
- Later in the meeting TB noted the Minister has said last time she spoke with the group that she didn't want to bring in a strategy, but noted we can consider what could be done on this topic.
- Paragraph 2.1 in ToR correction: WMAAG is now W-CASP.
- Would be useful to have a list of members of the group and who they represent and how this group relates to other groups. A diagram of how it all fits together perhaps.
- There are not many actual fishers in the group. It would be good if membership of the group were explained.
- NH offered to share paper on co-management from academic perspective.

4. Welsh Government update

TB advised the **Joint Fisheries Statement (JFS)** was published yesterday. TB pointed the group to the joint Government Response and noted a written response has been sent to the Economy, Trade and Rural Affairs Committee, in the Senedd, following their scrutiny of the JFS consultation. **ACTION – send link to written response - completed.**

TB noted the desire to hold a more detailed session on the JFS in future, and sought views on what should be covered.

It was suggested it would be useful to have a JFS session before the next scheduled MAGWF meeting. Preferably before the forerunner FMPs go out to consultation to allow the group to provide any global feedback that others can take into account should they choose to respond to them.

Concerns were raised by the group on lack of detail in the JFS and how it fits in the Welsh context, as well as how it will be delivered and implemented in Wales. Having a road map was considered, or a document, not necessarily too detailed, to set out what the JFS means for Wales. TB acknowledged these points and noted that publication of the JFS is the start of a journey and is why we are keen to discuss further the delivery of the JFS policies in Wales.

There was discussion on FMPs, the following points were raised:

- Some FMPs need evidence before management.
- JE noted, we are signed up to FMP list but not an obvious picture about how we're going to implement. The front runner FMPs have been worked on for some time. FMP work is a significant task to be understood and undertaken.
- Plans for FMPs needs to be communicated and easier to relate to.
- FMPs need something that will give us that roadmap. 6 frontrunners at the moment. Policy lab one probably the most advanced. Seafish ones at early stage.
- DEFRA spoke about the Whelk approach in Wales as good practice. It was suggested this be repeated. A directional document between JFS and FMPs saying how we're going to get them done would be helpful. Pace and ambition needed to get the FMPs done before we have to go back to the start (JFS reviewed in 6 years). There is a lot more in the JFS about food security. Interesting to consider what that means in Welsh context. Clarity on whether aquaculture is considered differently to catch fisheries would be welcomed.
- NH noted there are differences between Bass and Scallop engagement and these approaches can be learned from for future FMPs. Having an independent group whose skills lie in facilitation, engagement, communication might be helpful. Potentially a third party undertaking this role. Six-year JFS timeframe but there need to be longer term timeframes (10-15 years) that those 6-year blocks sit within.

JB acknowledged the valuable points raised and noted:

- The JFS was only published yesterday and there has been a lot of work undertaken to get it to this point.
- There is some direction in how FMPs are being progressed by trialling different approaches first and we are learning a lot and having regular conversations with colleagues in the UK.
- Example of bass and scallops FMP development in Wales taking very different paths. Bass FMP pre-consultation phase run by policy lab and scallops FMP being developed with a consultation group and Seafish.
- FMPs may be higher level than expected but once done, we can move forward with measures.
- Evidence for FMPs should be captured quite neatly due to the way they're being established. When we come to the Whelk FMP, we'll be in a different place because we already have monitoring and engagement etc in place.

- Have to be realistic with what can be achieved given resource constraints.

TB raised the **Retained EU Law Bill** for awareness, and it was noted this could have a significant impact. [Written Statement: The Retained EU Law \(Revocation and Reform\) Bill \(3 November 2022\) | GOV.WALES](#)

TB noted the **Autumn Statement** and response from Welsh Government - for awareness – unclear what this means for our budgets. [Written Statement: Welsh Government response to the UK Autumn Statement 2022 \(17 November 2022\) | GOV.WALES](#)

CLR – CaSP Cymru is now underway. Main topics being explored are:

- Ocean literacy, which is about how important the seas are in Wales. Working with schools, education, policy.
- Sustainable investment and
- Capacity building.

We would like to have more fisheries representatives on the group. Anyone who wants to be involved will be welcome. NE asked for more information.

5. Funding: new scheme to replace the EMFF (see Doc 3)

Power outage in Carmarthen area. AM delivered Funding Policy presentation as Gary Douch's internet connection was not reliable.

Discussion regarding funding raised the following points:

NH recommended not watering down funding for replacing the EMFF.

The funding currently available through the Welsh Marine and Fisheries Scheme and Coastal Capacity Building initiative is £6.2m over 3-year period.

GD advised that Welsh stakeholders are not doing well out of UK Funds, hence using some of the funding for CCB to improve access.

JE Disappointed with the marketing measures that have come out so far. Welsh Ministers could have designed a scheme for Wales... could have addressed the issues known. Could have been more accessible.

Had some good meetings recently where we can tweak some of these things. Think the flexibility of it is a useful thing.

NE - I feel strongly that round three funding should be focused on the ground, supporting the fishers with simple things like upgrading vessels & new IVMS systems to comply with all regulations & ensure vessels are fit for purpose.

GD canvassed for an aquaculture representative on the funding policy stakeholder advisory group. AW and Trevor Jones were proposed.

6. Forward look

Group members raised that another meeting sooner than next quarter would be advantageous to agree Welsh approach to JFS / FMPs. TB advised that this would be considered, otherwise the next meeting will be in approximately 3 months.

AOB:

A query about iVMS was raised by JE and NE. Shelley Vince joined the meeting to answer. Summary of discussion:

Believe there is an issue with several of the iVMS transmitters. Not clear it has been transmitting as expected. NE has forwarded report to WG control and enforcement colleagues.

SV confirmed she had responded to each point raised by email. FAQs on the website answers some of these questions. We are speaking to AST (hardware provider) about fishers not being able to see their information. We are aware that AST struggled to do a software update recently from the FMC. Possible devices were out of range or charge at the time or there was a fault. Devices are all covered under warranty at the moment. Faults raised are logged and can collate this information.

Closing (at 12:15)

Actions:

1. WG: consider updates and amendments to ToR as discussed. Completed.
2. NH: share academic co-management paper. Secretariat to share with group.
3. WG: share JFS and Government Response links. Completed.
4. WG: consider arranging a meeting to discuss JFS for Wales before next quarterly meeting. Completed - this was not possible.
5. WG: share CaSP info with NE. Completed.
6. WG: share Coastal Capacity Building workshop papers. Completed: see link: [Coastal Community Capacity Building Evidence-Synthesis report | GOV.WALES](#)

**Ministerial Advisory Group for Welsh Fisheries
(MAGWF)
Terms of Reference (ToR)**

Version control	
Version	Date update
v1.1	14 July 2022
v1.2	24 November 2022
V1.3	23 March 2023

1. Purpose

- 1.1. The Ministerial Advisory Group for Welsh Fisheries (MAGWF) is a strategic streamlined high-level group. It replaces the Wales Marine Fisheries Advisory Group (WMFAG). It has a broader range of membership and will be chaired by officials, or the Minister, where necessary will represent the Welsh fishing and aquaculture industries across the supply chain and provide advice to Ministers and officials on broad range of strategic fisheries and aquaculture issues.
- 1.2. Alongside the strategic group, more distinct groups will be established as required, to deliver co-management of specific Welsh fisheries. These groups will update the strategic group and keep them apprised of progress although there is no direct accountability from these groups to MAGWF. Until species specific groups are established MAGWF will be the temporary forum for these discussions.

2. Governance

- 2.1. Officials will ensure the alignment of governance structures and consistency of approach between the Ministerial Advisory Group for Welsh Fisheries (MAGWF) and the existing groups such as Coasts and Seas Partnership Cymru (CaSP Cymru).
- 2.2. An agenda will set out the work of the group in advance of meetings but will retain an element of flexibility to include matters arising.
- 2.3. Clear direction for the group will be set and a programme of work with defined roles.

3. Membership

- 3.1. Membership of MAGWF will include fishers' and aquaculture representative bodies, supply chain representatives, environmental group representatives and academia. The main purpose of the group is to shape fisheries strategies. The group membership will be flexible and reviewed so it can be open to new members.

The current membership of MAGWF is:

Name	Organisation
Jim Evans	Welsh Fishermen's Association
(TBC)	Welsh Fishermen's Association
Emily Williams	Wales Environmental Link (RSPB)
Gareth Cunningham	Wales Environmental Link (MCS)
Colin Charman	NRW
Mark Gray	The Menai Seafood Company
Natalie Hold	Bangor University
Lynn Gilmore	Seafish
Nerys Edwards	Syren Shellfish
Carl Davies	Sea Fishing Trips
John O'Connor	Welsh Federation of Sea Anglers
Colin MacDonald	Parsons Pickles
Alan Winstone	Menai Strait Fishery Order Management Association (MSFOMA)

4. Ways of working

- 4.1. Members of MAGWF will be asked to attend meetings on a quarterly basis. These will be held via Microsoft Teams, or in person and members are asked to provide any input outside of the meetings via email.
- 4.2. Members are expected to seek views of the representative bodies and where appropriate should forward the papers amongst their organisations. Papers should not be sent to anyone external to their organisations without prior consent from the Secretariat. Any information sharing should also adhere to data protection requirements.

5. Secretariat

- 5.1. Secretariat will be provided by Welsh Government's Marine and Fisheries Division, who will act as a central point for all communications.
- 5.2. 'Action' or 'Discussion' style minutes will be taken of each meeting and shared with members for approval. All queries should be directed to the Secretariat.

Discussion Paper for the Ministerial Advisory Group for Welsh Fisheries

The Future Role of Pacific Oyster Cultivation in Welsh Aquaculture

Alan Winstone MSFOMA March 2023

1. Introduction

The purpose of this paper is to facilitate a discussion on the potential future role of Pacific Oyster Cultivation in the development of marine aquaculture in Wales, identify what support, if any, is required and advise on the need for a specific policy position to be agreed.

2. Purpose

MAGWF are requested to provide views on:

- With the current and future limitations on the export of live mussels to the EU and the limited home market for live mussels what role could Pacific Oysters play in the development of aquaculture in Wales? How would it fit into an overall strategy for aquaculture in Wales?
- What are the risks and benefits of Pacific Oyster cultivation?
- What are the barriers to increased Pacific Oyster cultivation?
- Do we need a Pacific Oyster policy in Wales?
- What support, development and research would be required to facilitate Pacific Oyster production in Wales?

3. Background

There is a long history of aquaculture of non-native oysters in Wales dating back to the 19th century. The demise of the wild native oyster fisheries in the latter 20th Century due to dredging, pollution, changing habitats and disease brought about the development of oyster aquaculture, and the Pacific oyster was adopted as the only viable species to farm with its higher growth rate and better survival. Pacific oysters were introduced into Wales in the 1970's with government support but is now limited to two areas – Menai Strait and Milford Haven. There is an application with Welsh Government for a new Several Fishery Order in the western Menai Strait to enable cultivation of both mussels and Pacific Oysters and a licence application for Pacific Oyster cultivation in Angle bay, Milford Haven pending with Welsh Government. Both these applications have stalled due to a lack of clarity/policy on Pacific Oyster cultivation.

There are both opportunities and risks associated with Pacific Oyster cultivation. In England and Wales the Pacific Oyster is classed as an invasive non-native species (INNS) and within or adjacent to marine protected areas (e.g. SAC), a habitat regulations assessment is required to determine likely significant effects on designated conservation features (mostly loss of habitat area).

There are however benefits in maintaining and increasing production of Pacific Oysters which align with the aspirations of several national policies including the

benefits from development of sustainable aquaculture, with economic benefits to rural coastal communities, the Food Strategy for Wales 2010-2020 'Sustainability, Resilience, Competitiveness and Profitability', Wellbeing of Future Generations Act (2015), Marine Planning – Strategic Resource Areas for aquaculture, Low-carbon protein supply and positive ecosystem services/benefits. Across Europe production is around 100,000 tonnes per annum with France being the largest producer. In contrast in 2018 only around 1,000 tonnes were produced in Wales and England

4. Issues

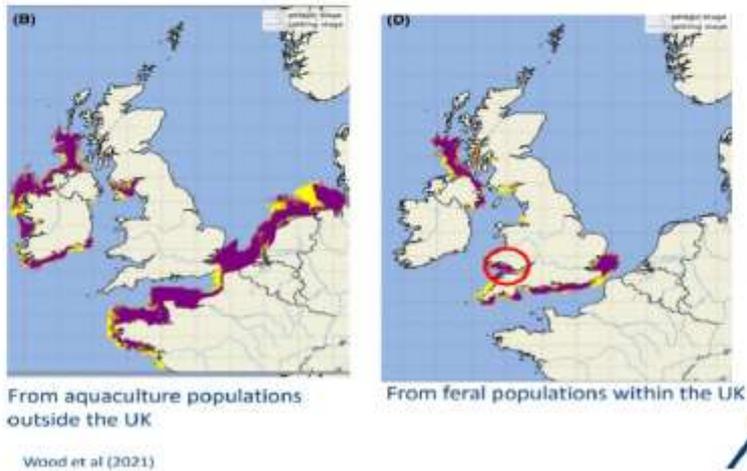
- **Feral Populations:** At the 2 current production areas, surveys have found them present at low densities with no change (or decline) in feral Pacific oyster populations over decades despite aquaculture sites operating and extensive areas of suitable habitat.

Due to the presence of locally self-sustaining populations, Pacific oysters are considered naturalised in all other European countries where they are farmed. Pacific oyster farms are permitted within conservation areas (i.e. Natura 2000 sites) and are often recognised as supporting wildlife and increasing overall biodiversity where they occur.



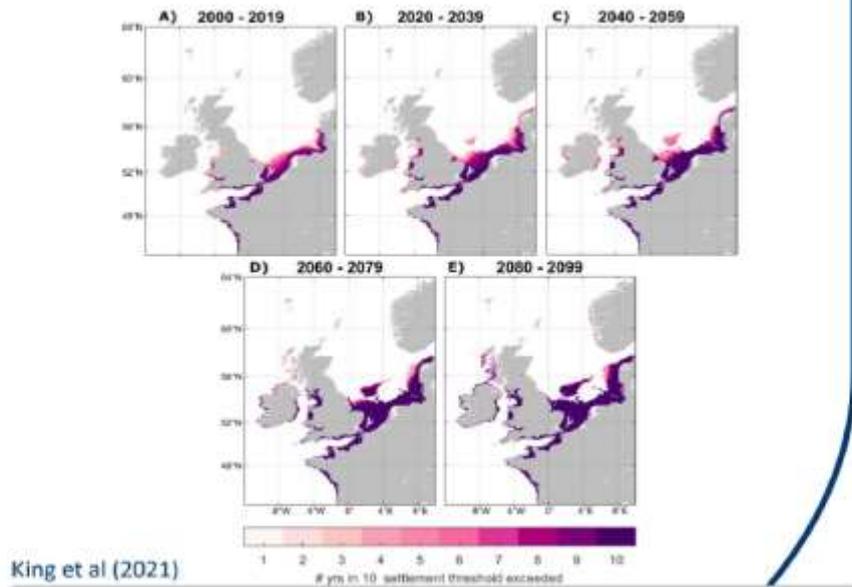
Predictive models of larval dispersal show potential spread of feral populations with connectivity across the channel, south coast of England and south Wales. Feral settlement in south Wales may originate from across the Bristol Channel.

RANGE EXTENSION BY LARVAL DISPERSAL

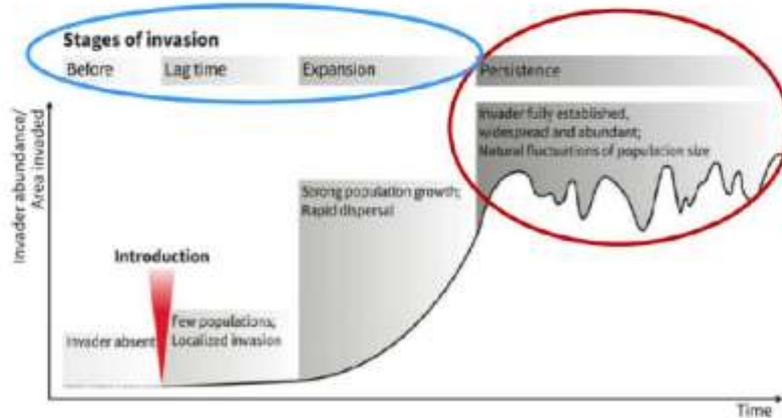


Based on thermal niche modelling for spawning and settlement (degree days), expansion of range across NW Europe over coming decades is likely due to rises in sea temperatures.

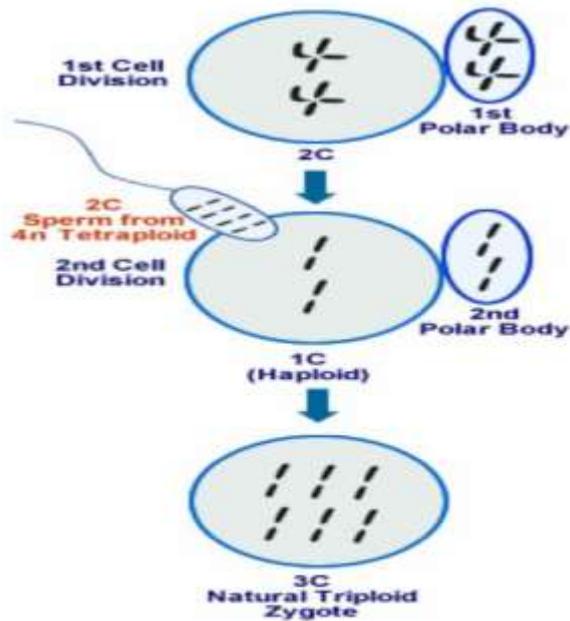
CLIMATE CHANGE – PROJECTED RANGE EXPANSION



- **Habitat Impact:** Pacific oysters can form large reefs which may impact natural reef features although there are differing views on the ecological impact. Management options are limited unless applied through monitoring and early removal.



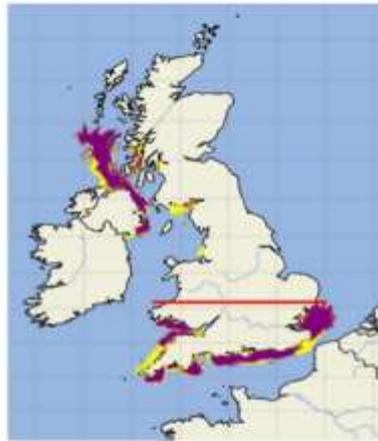
- **Mitigation Measures:** Triploid oysters are a potential mitigation in reducing the risk of wild recruitment from farmed oysters.



The most reliable are "mated" triploids, produced by crossing tetraploid x diploid parents. This method is widely used in France (about 25% of hatchery production) but it is not a straightforward solution and is not suitable for conditions at all sites. Also hatchery production is limited with currently only one supplier to UK farms.

- **Defra Policy:** Recent policy accepts Pacific oysters as established below 52°N. Where established, farms may be licensed, pending assessment of effects on adjacent MPA's. Above 52°N, not considered to be established and sites require mitigation, monitoring and controls. In all cases, assessment of impacts on MPA's still required i.e. no change in policy for many sites.

RECENT DEFRA POLICY FOR ENGLAND CONSIDERS PACIFIC OYSTERS TO BE ESTABLISHED BELOW 52°N



5. Conclusions

- Pacific Oyster cultivation in Wales is currently limited to two sites and there are proposals to expand production which are on hold.
- At these two sites there is no evidence of the establishment of feral populations despite operating over decades and suitable habitat due to prevailing sea temperature regimes.
- Predictive models indicate the potential spread of feral populations to south Wales. Over the coming decades expansion of the range is likely across NW Europe (including Wales) due to climate change and increasing sea temperatures. So irrespective of aquaculture releases, Pacific Oysters are likely to expand.
- Monitoring and early removal can be effective management controls but once established and abundant, control is very problematic.
- Mitigation using Triploid oysters is very effective but supply is currently very limited.

North West Inshore Fisheries and Conservation Authority Activity

Background

The North West Inshore Fisheries and Conservation Authority (NWIFCA) are responsible for managing sea fisheries including mussel fisheries in the coastal waters lying between the Dee and the Solway Firth. This area includes the UK's largest seed mussel resource, which is vital to the ongoing success of the Menai Strait mussel fishery. This report provides a brief update on NWIFCA activities that could have an impact on the Menai Strait mussel fishery.

Recommendations

1. That the report is received.
2. That the Association should keep the need for a Morecambe Bay Mussel Management Plan on the future agenda for NWIFCA.

1. IFCA Meetings

- 1.1 Since the last meeting of the Association the NW-IFCA has held one quarterly meetings, on the 23rd March 2023. A meeting of the Technical, Science and Byelaws (TSB) Sub-Committee took place on the 7th February 2023.

2. Changes to Byelaws

- 2.1 There are no proposals to alter any NWIFCA byelaws that may impact the mussel industry at its next meeting.

3. Changes to Personnel

- 3.1 In January 2023 the Authority appointed Mr Mark Taylor as its new Chief Executive Officer. Mr Taylor took up his post on the 11th April 2023. He had previously been working for the North West Rivers Trust, and also for the Marine Management Organisation.

4. Bivalve Mollusc Working Group

- 4.1 No meetings of the Bivalve Mollusc Working Group have taken place since the last MSFOMA meeting.

5. Morecambe Bay Mussel Management Plan

- 5.1 It was reported last year that MSFOMA participants in NWIFCA business had asked the Authority to proceed with the implementation of the Morecambe Bay Mussel Management Plan. It proved impossible for NWIFCA to progress this plan last year.
- 5.2 Given the long-term importance of the Morecambe Bay Mussel Management Plan to the shellfish farmers in the Menai Strait, it will be important to also keep this

item on the agenda for NWIFCA action. The Secretariat (also vice-Chair of NWFICA and the NWIFCA TSB) will encourage action on this area of work.

MSFOMA Secretariat
April 2023

Menai Strait (East) Mussel & Oyster Fishery Order **2022**

Background

The Menai Strait Oyster and Mussel Fishery Order was made in 1962 and provided the legal foundations for the mussel fishery in the eastern Menai Strait. This Order was the basis for the most successful and productive aquaculture area in Wales. The 1962 Order expired on 1st April 2022 and was succeeded by a new Order, the Menai Strait (East) Mussel & Oyster Fishery Order 2022.

This report considers the progress that has been made with implementing the new Fishery Order since it came into force on 2nd April 2022.

Recommendations

1. That the report is received.
2. That the Secretariat should work with NRW staff and mussel farmers to review the “Managed Areas” that have been established on a precautionary basis around the “reef” habitat features in the eastern Menai Strait.

1. Introduction

- 1.1 Since 1962, a “Fishery Order” made by the Fisheries Minister under national legislation has provided the legal foundation for both the cultivation of mussels and oysters and for the regulation of the fishery for wild mussels in the eastern end of the Menai Strait. This has been the most successful Fishery Order in the UK.
- 1.2 The Menai Strait Oyster and Mussel Fishery Order 1962 expired on the 1st April 2022, and was immediately replaced by the new Menai Strait (East) Mussel and Oyster Fishery Order 2022, which will remain in force for 35 years. Although the wording of the new Fishery Order is different to its predecessor, and the boundary along the Anglesey coastline has been altered, it is in practical terms a “like for like” replacement which will allow mussel cultivation to proceed as before. A copy of the new Order can be viewed on the UK Government legislation website [here](#).

2. Progress with implementation

- 2.1 The process of implementing the new Fishery Order was completed earlier this year. Leases have been issued for all eight of the leased areas, and invoices for lease fees have been sent to all tenants.
- 2.2 It was noted at the previous MSFOMA meetings that some further work is required to confirm the extent of some of the precautionary “managed areas” that have been established within leased areas. These areas set a 100m buffer around known reef features on the seabed. As the need arises, the Secretariat will work with the mussel farmers and NRW to determine the extent to which these areas can be reduced without placing natural habitat features at risk.

MSFOMA Secretariat
April 2023

Menai Strait Partnership Forum

Background

At the last Association meeting it was agreed that the Chair and Secretariat should work with the North Wales Rivers Trust (NWRT) to apply for funding from the Welsh Government's "Coastal Capacity Building Fund" for a project related to water quality in the Strait.

A bid for funding was submitted in early January, and was successful. This report provides an update on the work that MSFOMA and the NWRT

Recommendations

1. That the report is received and that the early success of the Menai Strait Partnership Forum is noted.
2. That the Association should determine whether it is appropriate to formalise its partnership with NWRT to provide a stable basis for the Menai Strait Partnership Forum, and also a foundation for securing further funding.

1. Progress Report

- 1.1 A copy of the grant application is attached at Annex A for this report. The key points to note from this are that it had an overall budget of £27,500, to be spent on collating data, building a website and organising a meeting of the new "Menai Strait Partnership Forum". The two delivery partners were North Wales River Trust (NWRT) and MSFOMA, allocated funds of £21,500 and £6,000 respectively. The application was submitted on the 11th January 2023. Funding was confirmed on the 26th January, and the project completion date was the end of March 2023.
- 1.2 The key achievements of this project were the production of on-line materials documenting the threats to water quality in the Strait (<https://northwalesriverstrust.org/menaistrait>) and also the inaugural meeting of the Menai Strait Partnership Forum. These are both documented in an on-line "Impact Report" (available [here](#)). The key conclusions that can be drawn from the meeting are summarised below.
 - a) The meeting on the 23rd March was attended by 66 delegates and heard presentations from 7 speakers.
 - b) Questionnaires were sent to delegates before and after the meeting. All of the post-meeting respondents felt that the event was beneficial, and were concerned about the future of the Strait. There is clearly an appetite to engage with a range of issues, with water quality being the biggest concern among respondents.
- 1.3 The progress that was made with this project during February and March was very much assisted by Association participants, notably James Wilson and Lewis LeVay, as well as the Chair. A considerable amount of goodwill / *pro bono* support from many people was central to the success of the project.

2. Next steps

- 2.1 It is clear from the feedback from the meeting in March that there is a feeling among many users of the Menai Strait that sustained local action is vital to secure improvements in water quality and to share information about the Strait. The Menai Strait Partnership Forum has been welcomed by stakeholders as a vehicle for achieving this.
- 2.2 Both NWRT and MSFOMA share an interest in facilitating and progressing Menai Strait Partnership Forum. We have set out some short-term milestones and objectives for the Menai Strait Partnership Forum (see Annex B).
- 2.3 Neither MSFOMA nor NWRT have sufficient resources (either staff or financial) to give the forum the level of support that it will require. Progress would be dependent on securing more grant support.
- 2.4 The Chair and Secretariat both consider that if the Association supports further work on the Menai Strait Partnership Forum, then it would be appropriate to draw up a formal statement setting out the Terms of Reference for the Forum, and also the relationship between MSFOMA and NWRT. A meeting with NWRT has been scheduled for the 25th April 2023 to discuss this, and a verbal update will be provided to the meeting.

MSFOMA Secretariat
April 2023

Annex A: Coastal Capacity Building Challenge Fund Grant Application



Coastal Capacity Building Challenge Fund 2022/2023

Name of LNP / lead applicant:	Isle of Anglesey
Collaborating Organisations:	North Wales Rivers Trust, Menai Strait Fishery Order Management Association
Contact name:	Aurora Hood
Contact email:	aurorahood@ynysmon.llyw.cymru
If this plan involves a collaboration with any other LNP(s), please state which one(s):	

Section 1. Checklist - Please tick to confirm the following:

X	That you have read the guidance and that all activity will comply with both this and the LNP Cymru terms and conditions
X	That you have included relevant supporting information such as maps or photographs to help the grants panel understand what you are trying to achieve
X	That all necessary permissions and licenses are in place for you to undertake this work or will be secured before work begins
X	That all works will be completed by 31 March 2023
X	That funding is not substituting a scheme that would otherwise or normally have been funded by any of the partners and nor will it deliver prior funded work.
X	That you will monitor and report on the impact of the spend and provide at least 1 case study
X	That all project partners will sign a Partnership Agreement, based on the approved application form, to help govern the project should the application be successful
X	That you will follow your accounting procedures in relation to revenue expenditure, failure to do so could result in claw back of grant.
X	That you will participate in Welsh Government's wider communication and evaluation of the Fund.
X	That you will promote the Welsh Government contribution to these activities and comply with the branding guidelines supplied

Section 2. Summary

Please complete the following pages and then return to summarise your project/s here. Please list your projects in order of preference for funding i.e. P1 will be the first preference.

Project Name	Location	Summary of project objectives (30 words max)	Total cost.
Designing a nation-wide coastal bird habitat data visualisation tool - Phase 1	National	<ul style="list-style-type: none">To design a fully-costed multi-partner, multi-year proposal applicable across the entire Welsh coastlineTo gather information from key stakeholders through online workshops	£37,103.00
Menai Strait Sustainable Catchment Management Initiative	Menai Strait, North Wales	<ul style="list-style-type: none">Collate and share current public water quality, wildlife, and fisheries data onlineExpand current partner networkDevelop capacity to plan for future funding bids and initiatives	£27,500.00
Design and prototyping of biomaterials for food packaging and agriculture	Anglesey	<ul style="list-style-type: none">Engaging packaging design experts and local crop producers to optimise design of food packaging.Produce and share prototypes with local growers for feedback.Establish relationships for future projects.	£22,767.50

Please complete a separate Section 3 and Financial Profile (Excel sheet) for each project listed above.

Section 3. Activities that make a positive impact on nature recovery, sustainable growth and engage communities

Project Name: **Menai Strait Sustainable Catchment Management Initiative**

How will your proposal deliver towards the vision of enhanced human and social capital, grass-roots investment and better public understanding of the marine environment and the challenges/pressures it faces?

Please tell us what the grant will fund. If you are proposing a demonstrator project in one geographic area, please set out your rationale.

Background

The Menai Strait is a 30 km tidal channel separating mainland Wales from the Isle of Anglesey (Figure 1). Freshwater inputs to the Menai Strait are numerous but their volumes are small relative to the tidal exchange; a large proportion of the water in the Menai Strait is exchanged on each tide. Tidal streams flood the strait from the West then East, meeting in the central strait, then ebb in both directions. As a result, sources of contamination can impact upon both sides of their discharge location. There is a residual westward flow which may result in contamination tending to flush in a westerly direction. There are several significant watercourses, the Afon Ogwen, Afon Cegin, Afon Adda and Afon Seiont as well as numerous smaller river catchments which discharge to intertidal areas and shellfish production areas.



Figure 1: Map of the Menai Strait showing Water Framework Directive Cycle 3 classification (Yellow = Moderate; Green = Good).

These freshwater inputs follow channels at lower states of tide and will create plumes over the intertidal areas at higher states of tide. All river catchments receive diffuse contamination sources including nutrients from urban and agricultural runoff. Microbial contributions from runoff and from the operation of CSOs are expected to increase after rainfall events, resulting in higher microbial flux into coastal waters. These inputs have an impact on the water quality, wildlife, fisheries, recreation and amenity in the Strait. Ensuring that catchment use is managed sustainably is vital to the wellbeing, economy and wildlife supported by the Menai Strait.

The Menai Strait is ecologically important and is part of the Menai Strait and Conwy Bay Special Area of Conservation (SAC), the Liverpool Bay Special Protection Area (SPA) and Lavan Sands SPA as well as a number of Sites of Special Scientific Interest (SSSIs). The Strait is also an important area for tourism, amenity and recreation, particularly walking, wild swimming, sailing and watersports.

The eastern end of the Menai Strait contains one of the largest mussel fisheries in the UK and is administered by the Menai Strait Fishery Order Management Association ("MSFOMA" <https://www.msfoma.org>). The businesses and livelihoods of local mussel farmers in the Strait depend on being able to export live mussels to the EU. Since EU-exit, this requires that live shellfish exported from the UK to the EU must originate from class "A" waters. Class "B" shellfish can no longer be exported to the EU.

The classified shellfish beds have good quality mussels which are mostly consistent with regulatory Class A. However, due to periodically high microbial (*E. coli*) counts, only one of six areas has a seasonal "A" classification (1st October to 30th April), with the remaining areas classified as "B" (Figure 2). Bangor Mussel Producers (the cooperative of companies that operate the mussel production leases within the Several Order) depend on export to the EU. Since EU-exit, this requires that live shellfish exported from the UK to the EU must originate from class "A" waters. Between 2016 and 2019 the Fishery produced between 3,000 and 5,000 tonnes of mussels per annum but since 2020 has fallen to less than 400 tonnes per annum, with all exports coming from the seasonal "A" production area. It is vital for the survival of local businesses that this seasonal "A" classification is maintained. The sampling results for other locations show that several other areas are close to attaining the "A" class result.

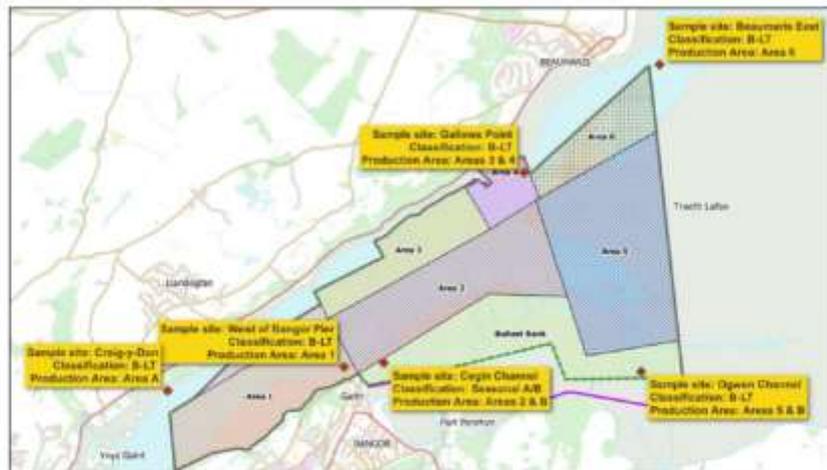


Figure 2: Map of the Eastern Menai Strait showing shellfish sampling locations, classification results, and production areas.

Established in 2010, MSFOMA not only promotes sustainable local shellfish production, but works with a variety of other local and regional organisations to ensure best practice in their management. These partners include the North Wales Rivers Trust (NWRT), Natural Resources Wales, Bangor University, and local councils of all sizes as well as their member shellfish producers.

Deliverables

Water quality in the Menai Strait is important to the well-being of local businesses, residents and wildlife. This project will focus on improving understanding of the factors that impact water quality, identifying priorities for improvement, and building cross-sectoral partnerships for action. If successful, this proposal will deliver three main deliverables by 31 March 2023:

1. To establish a web-based resource which summarises available information on the water quality, wildlife and fisheries in the Menai Strait and the factors affecting their use and wellbeing. While publically-available datasets are numerous and extremely valuable for informing the management of fisheries and waterways, these datasets are often scattered among different organisations and websites, making it difficult for general use. This project will aim to collate the most relevant datasets into one web-based resource for the use of the NWRT, MSFOMA, and their partners.
2. To signpost relevant publicly available information held by other organisations to provide an overall picture of the activities, interactions, and ongoing initiatives and groups on and around the catchment of the Menai Strait. While there are a number of networks and bodies available which do share information of this sort, none currently cover all of the necessary factors which affect the Menai Strait (e.g. fisheries, agriculture, natural resources, nature conservation, etc.). This project aims to bring the relevant information from all of the above sectors to allow managers to better understand all of the factors affecting the watercourse.
3. To establish an initial virtual forum of partner organisations that can be used to develop capacity to identify future initiatives and project funding bids. Although a partnership currently exists to use available information to make the most informed possible management decisions, expanding the network would allow for higher-quality management and more ambitious projects in the future.

To achieve this, the proposed funding will be used to pay for NWRT staff time and MSFOMA consultant costs from 1 February to 31 March 2023.

How will the proposal deliver at least one of the following objectives?

- Enhanced human and social capital i.e. greater skills and capability within coastal communities, enabling organisations to work together and develop projects to deliver on the outcomes.
- Improved sustainability and financial resilience of grass-roots organisations within coastal communities and local business sectors such as the fishing and aquaculture industries. The development of a stronger evidence base and through this better understanding of the marine environment and the challenges/pressure it faces to inform the development of a pipeline of future projects and actions.

This proposal will create the capacity for both of these deliverables, assuming the continuation of funding (either through the Coastal Capacity Building scheme, or through new sources of funding) into the coming years. *See Pipeline section for more information.*

The main goal of this proposal is to build the capacity within an existing local network to expand, further enabling its members to collaborate on projects and to communicate their work with others. This expansion will not only build resiliency in its members by creating a larger, more secure support system, but will also allow for the members to work together toward common goals: in this case, the use of data to better inform management and conservation decisions on the Menai Strait. If this can be achieved, it will not only have a positive impact on the fishing industry, but also create a cleaner, safer, and more biodiverse waterway.

How will you engage local communities?

Please explain how you will engage residents, beneficiaries or visitors so that they are aware of the importance of the project.

For this initial project, a communications plan will be in place to make the general public aware of the project and its aims. *See Communication section for more information.*

As one of the most important direct stakeholders, the local shellfish producers will be kept informed through their membership in MSFOMA, who will be working in close partnership with the NWRT on this project.

Is the proposal based on sound evidence for coastal capacity building?

Please explain what evidence you have drawn on from a coastal capacity building perspective to ensure that your planned activities will bring about the intended outcomes. How specifically will these activities restore and enhance nature?

Since its establishment over a decade ago, MSFOMA has gained first-hand experience in the needs and challenges faced by local fisheries and their management. Together with the NWRT, who is a regional leader in sustainable catchment management and river restoration, these two organisations and their partners have called on their combined expertise to assess steps which will lead to better management decisions and greater collaboration in the future. Much in the same way that Local Nature Partnerships Cymru has previously worked closely with the Local Environmental Records Centres around Wales to inform their work, this project hopes to use data and cross-sector collaboration to carry out successful partnership projects in the future.

Which partners will you work with and what are their specific roles?

Please complete the table below and indicate how much of the requested grant will be distributed to each partner. Please copy and paste more tables if required. Remember to include your own organisation.

Partner Name:	North Wales Rivers Trust
Grant required	£21,500
Role:	Project lead and delivery partner

Partner Name:	Menai Strait Fishery Order Management Association
Grant required	£6,000
Role:	Delivery partner

Timeframe

What are the key milestones and deliverables of this proposal from January 2023 to 31 March 2023?

	Milestones	Est. spend
1.	Dataset collation and webpage building	£13,500
2.	Relevant projects and initiatives signposted	£7,000
3.	Partner Forum created	£7,000

Communication

How will the project be publicised, and the contribution of Welsh Government funding be recognised?

The communication plan for the project will be for partners to advertise the project and its aims through a number of channels, including:

- Social media (Twitter, Instagram, Tiktok, Facebook)
- Dedicated page on NWRT website
- Publication of magazine on the ISSUU digital platform (embedded on websites)
- Short animation infographic
- Press release

All forms of communication will be fully bilingual and will credit Welsh Government for its support.

Risk

Tell us about how you will manage risks associated with Covid -19 and the top 3 other risks attached to this project and how you will manage these.

Risks	Mitigation measures
Risks related to Covid-19	All staff have homeworking capabilities and are subject to organisational mitigation procedures which are kept up-to-date through regular risk assessment.

Risk 1: Hesitancy to engage from new partners due to commercial sensitivities	Both NWRT and MSFOMA maintain close working relationships with large networks of partners and have received positive responses in the past. Both organisations will seek to maintain these good relationships and work with a variety of partners to ensure good coverage should a partner wish to leave.
Risk 2: Delay due to technical issues	NWRT staff are experienced in this type of work and project time has been budgeted to mitigate any unforeseen delays.
Risk 3: Delay due to unexpected staff absences	All staff time has been allocated to mitigate unexpected shortfalls, with meetings taking place online to avoid any travel-related absences (cancelled trains, poor weather, etc.).

Funding

Where appropriate, please set out the contribution from your authority e.g. staff (other than those paid for by the project office), management, finance functions, on-going maintenance etc.

Outputs

Please estimate your project outputs.

Output measure	Coverage/ quantity
Increased support for tackling nature and climate emergencies	X
Commitment to improved management of the marine environment	X
Support and promotion of blue carbon projects	
Increase public understanding of marine issues	X
Increasing capacity for sustainable aquaculture, tourism and recreation opportunities	X
Increased opportunities for local seafood supply chains	X
Delivery of 'Fisheries Objectives'	X
Other	

Pipeline

Please list any plans for pipeline projects that you could pursue in 2023-24 should further funds become available in year. Copy and paste the table below as required.

Project Name and Location:	Implementing identified catchment interventions to protect and enhance the coastal environment - Menai Strait
Description	Using the data gathered from the initial proposed project, the project partners would like to work with stakeholders to implement the identified interventions which would positively affect the catchment. Expected interventions are (but not limited to): <ul style="list-style-type: none"> Sustainable drainage & natural flood risk management to reduce surface water contamination impacting the Strait and inflowing rivers, preferably involving Dŵr Cymru Welsh Water as partners.

	<ul style="list-style-type: none"> • Creating buffer zones along watercourses to reduce silt, nutrient, and bacterial runoff while providing wildlife corridors. • Working with local farms to advocate for sustainable water, slurry, and agricultural waste management to reduce risks from runoff.
Coastal Capacity Building Objectives Met:	Improved sustainability and resilience of local business sectors
Approx. cost:	
Project Name and Location:	Water quality monitoring - Menai Strait
Description	Using the expanded partnership aim of this initial project proposal, partners could implement targeted water quality surveys using a citizen science model to better understand the temporal and spatial influences with affect fisheries, wildlife, and recreation on the Strait.
Coastal Capacity Building Objectives Met:	Enhanced human and social capital
Approx. cost:	
Project Name and Location:	History and heritage of local fisheries educational programming - Anglesey and Gwynedd
Description	Due to the Menai Strait's long history of shellfish cultivation and harvesting, the expanded partnership could implement a history and heritage educational campaign highlighting the industry and its role in ecosystem services and the local economy. This would also offer the opportunity to promote the local fishing and aquaculture industry and its sustainable practises to increase local markets.
Coastal Capacity Building Objectives Met:	Enhanced human and social capital; Improved sustainability and resilience of local business sectors
Approx. cost:	

What happens next?

Please submit your completed application, together with supporting evidence (photographs, maps etc) to LNP@WCVA.Cymru

The deadline for applications is: **11 January 2023**. These will be assessed by an independent panel coordinated by WCVA..

If demand and funding availability require, a further submission deadline and panel will be advertised.

By submitting this application you are agreeing to the details in the WCVA privacy notice [here](#).

Annex B: Summary of proposed next steps for the Menai Strait Partnership Forum (taken from the Impact Report available [here](#)).

