




PROJECT UK

DELIVERING FISHERY IMPROVEMENTS IN THE NORTH EAST ATLANTIC

Project UK: Round 1 Channel Scallop

Year 5 report

April 2022

POSEIDON

AQUATIC RESOURCE MANAGEMENT

Report Information

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Contents

1. Introduction

1.1 Introduction

Project UK includes 12 fisheries, through eight Fishery Improvement Projects (FIPs). These fisheries were selected by the supply chain because they bring commercial, economic, and cultural benefits to UK communities. As part of Project UK, these FIPs address 61 individual actions. These actions address multiple milestones across a five-year period, representing best practice in working towards an environmentally sustainable future.

The first round of FIPs[1] to participate in Project UK (Channel scallop, monkfish, plaice & lemon sole, and crab & lobster) were launched in 2017. So far, these fisheries have made demonstrable progress against their Action Plans, focusing on developing and documenting progress in stock assessment, fisheries data and mitigating environmental impacts.

With these five year FIPs coming to their end in April 2022, there is a need to review their overall progress to date and agree on the next steps to be taken. In the case of this Channel scallop FIP, the stakeholders have agreed to extend the FIP by two years to April 2024. As a result these next steps will be embedded into a new Action Plan for Year 6 & 7 of the FIP. This review will document the position of the FIP with respect to individual Performance Indicators (PI) and scoring guideposts (SG) of the current (version 2.1) MSC Fisheries Standard.

The **Marine Stewardship Council** (MSC) has contracted **Poseidon Aquatic Resource Management Ltd** to provide technical advice to the FIPS and conduct annual benchmarking of progress against the action plans. This contract also covers this final review and action plan update.

1.2 Structure of the report

This report has been divided into three main parts:

1. **Annual review and benchmarking**: this assesses what progress has been made over the past year in addressing the actions in this FIP up to the end of the original five year FIP timescale.
2. **Revised pre-assessment**: this section documents the position of the FIP Channel scallop fishery with respect to individual Performance Indicators (PI) and scoring guideposts (SG) of the current (version 2.1) MSC Fisheries Standard.
3. **Action plan extension**: this provides a revised action plan that extends any remaining unclosed actions over the extension period.

2. Annual Review and Year 5 Benchmark

2.1 Annual Review

This section presents the annual review for the Channel scallop FIP based on work progressed during year 5.

[1] Following the success of Round 1, the Round 2 UK scallop and Nephrops FIPs were launched in 2019. Each includes three fishery areas around the UK (North Sea, West of Scotland, and Irish Sea), and so operate on a larger scale than Round 1 FIPs.

Project UK: Channel Scallop Action Plan

Version: 5.3

Date: 06 April 2022

Overview

Fishery name: English and Western Channel Scallop (*Pecten maximus)*		**Start date:** 01 January 2017
Fishery location: Western Channel (7e) and Eastern Channel (7d) *Presumes UoC is UK vessels only, but could be outside UK waters e.g. in Baie de Seine*	**Fishing methods:** Mechanical dredge **UoA vessels**: all UK vessels	**Annual reviews:** End Year 1: March 2018 Completed April 2018 End Year 2: March 2019 Completed April 2019 End Year 3: March 2020 Completed 14 April 2020 End Year 4: March 2021 Completed 12 May 2021 **End Year 5: March 2022 Completed 6 April 2022**
Project leaders: Project UK Fisheries Improvements – Round 1		**Improvements recommended by:** POSEIDON AQUATIC RESOURCE MANAGEMENT

Overview of the Action Plan:

This Action Plan has been undertaken as part of Project UK Round 1 and is applicable to UK vessels using mechanized dredge targeting king scallop in the Western (7e) and Eastern (7d) English Channel. It has been informed by an MSC pre-assessment (completed in 2017), quarterly steering group meetings and a review process at end of Year 1, 2, 3 and 4. Actions and milestones have been completed for the MSC performance indicators (PIs) that fail to reach Scoring Guideposts (SG) 60 and/or 80. The Action Plan highlights an ambitious set of actions designed to raise the scores over a defined period to a point at which the fishery could enter MSC assessment. The focus of the action plan is outlined for each MSC Principle below.

Principle 1 (target stock):

- defining appropriate reference points,
- development of **Harvest Strategy**,
- development of harvest control rules and tools at stock level,

Principle 2 (ecosystem):

- understanding the catch composition,
- interactions with ETP species & additional management requirements in an **ETP Strategy**.
- assessment of commonly encountered and VME habitats impacts, and management as appropriate,
- documenting current habitat management measures in place within IFCA areas and outside 6 NM,
- introduction of vessel monitoring systems on all vessels to record the footprint of the fishery accurately / reliably.

Principle 3 (management):

- development of a Fisheries Management Plan,
- documenting stakeholder roles and responsibilities (within the FMP),
- together with development of short- and long-term fishery objectives.

It should be noted that a separate FIP for UK scallops in the North Sea, West of Scotland and Irish Sea is being undertaken by Project UK Round 2.

Colour code in tables below:	Principle 1	Principle 2	Principle 3

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Annual Review (end of year 5)

This section summarises the annual review process at the end of year 5 in a five year Fisheries Improvement Project (FIP) for the UK English Channel king scallop dredge fishery, providing a review of the progress made in year 5. The FIP is being extended for a further two years.

Main findings

Progress in Year 5 is depicted in the BMT trackers for the 7.d.N eastern north stock indicating the improved position of the fishery with respect to overall BMT score.

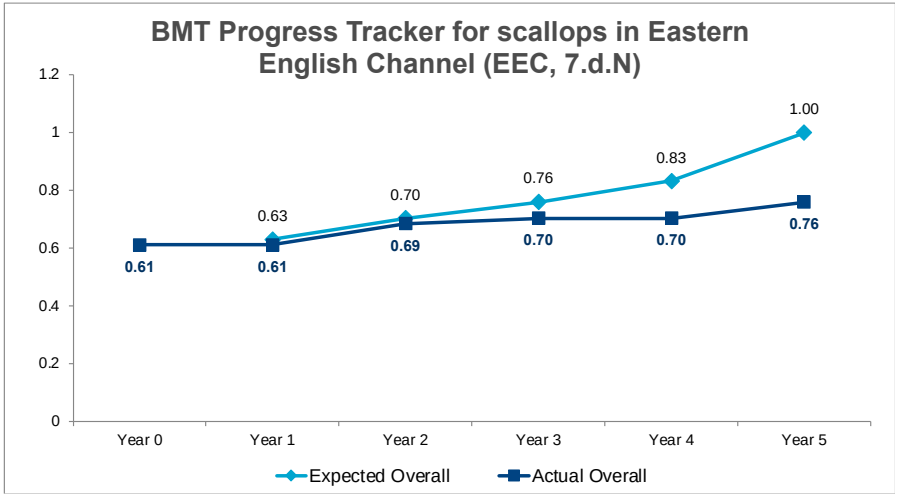
There is less uncertainty related to the establishment of the Trade & Cooperation Agreement (TCA) and the draft Joint Fisheries Statement proposes the development of a King Scallop Fisheries Management Plan for scallops in English and Welsh waters with priority development from 2021-2023. Despite this, the overall harvest strategy and fishery management mechanisms for Channel scallop remain in-complete and mismatched; within the UK EEZ there is effort control for ≥15m UK vessels and total catch control (yet to be implemented) for non-UK vessels; while outside the UK EEZ there is total catch control (yet to be implemented) for UK vessels.

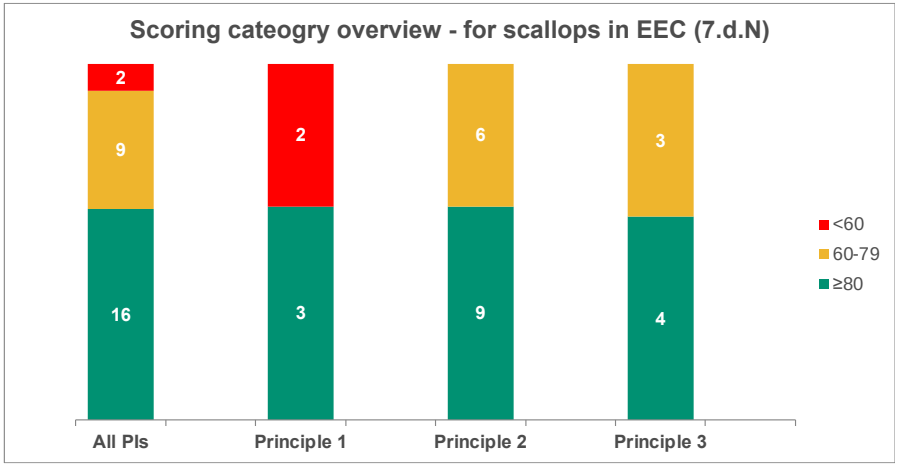
The FIP remains to progress from the <60 scoring guidepost for harvest strategy and harvest control rules, and this remains a priority for the extension period. The stock management should be designed to ensure it can be responsive to the status of individual stocks within the Channel.

The Channel scallop fishery has progressed milestones in other Principle 1 area during year 5, notably, the fifth annual survey and stock assessment took place, delivering improved results for stock status PI (1.1.1). Reduced harvest rates in 2020 and 2021 indicated improved status relative to HR_{MSY} for two stocks, leading to increased scores from **60-79** to **≥80** for inshore Cornwall and eastern north. The stock status for each of the four Channel scallop stocks have been reviewed by comparing their harvest rates (HR) with the defined HR MSY based on stock assessments from 2016 to 2021 with the following results: Western English Channel (WEC) inshore (7.e.I) **≥80**, WEC Lyme Bay (7.e.L) **60-79**, WEC Offshore (7.e.O) **≥80** and Eastern English Channel (EEC, 7.d.N) **≥80**.

Progress in Principle 2 included three PI score increases from **60-79** to **≥80** within the primary and secondary species components, specifically due to improved understanding of the catch composition based on the Cefas bycatch report. While understanding has improved on the management measures in place for habitats and ETP species due to the comprehensive Seafish Kingfisher MPA mapping tool, the outcome status and management scores did not improve and concern remains on the uncertainty of the spatial footprint of under 12m vessels, specifically inside 6 nautical miles (that are not represented in VMS data).

Principle 3 actions continue to address Fisheries-Specific Management, through development of a Fisheries Management Plan (FMP), the first draft of which remains in progress.





An Action Plan for years 6 and 7 has been revised to remove closed / completed milestones and bring focus to the key areas of action for the extension period.

Project UK: Channel Scallop Action Plan

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Table 1: Action Plan

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
Action 1: Stock status & stock rebuilding **Overview** Stock area identification and providing basis for management **Performance indicator** 1.1.1 Stock status 1.1.1 (7.e.I) ≥80 1.1.1 (7.e.L) 60-79 1.1.1 (7.e.O) ≥80 1.1.1 (7.d.N) ≥80 1.1.2 Stock rebuilding Requirement at SG80: (a) it is highly likely that the stock is above the PRI (b) The stock is fluctuating around a level consistent with MSY	Action lead: CEFAS Partners: Defra Stakeholders: Industry, MMO, Marine Scotland	**1a.** Yr 1: Engagement with WG Scallop & other stakeholders.	**Complete** The Scallop Industry Consultation Group (SICG) has been engaging with the ICES WG Scallop via CEFAS, where SICG activities include studies of exportation rates and exploitable biomass. Engagement includes sharing work planning and results. Some members of the Steering Group also sit on the ICES Scallop WG. Engagement with them and other stakeholders is regular. Milestone has been met and is closed.	None
		1b. Yr 2: Proposals for stock units developed	**Complete** Sampling programme on target, delivered early 2018 (report due in the New Year). Industry involved with sampling (inc. providing a vessel). ICES WG Scallop meeting in Oct 18, (FIP specifically discussed in relation to P2). Discussions included presentation of CEFAS stock assessment and produced joint messages, including climate change forcing, and that questions over larval transport / missing (inc. between dredged and un-dredged) still exist but is difficult to assess (maybe under Action 4). There have been a number of genetic studies in the Channel. Currently working from 2018 stock assessment (the next scallop stock assessment available end of April 2019). Areas based on these, but there is a hole in southern half in 7d. Majority is covered by French survey. **Is still best estimate of an 'assessable stock' area**. 2018 / 2019 stock assessment Includes some beds south of 50 deg but need additional info from French <12 nm. areas. There is a is a 'data gap' below 50 and 49 degrees N (where IFREMER take over). Station every 15 km. coarse but effective. Current work will capture most dynamics of scallop movement. Theory is that undredged area are virgin biomass so need less frequent survey areas. Fisheries areas need more regular survey. D&E areas are the Channel potting box. Tows in fished areas and CCTV in undredged areas. Have cross-correlated efficiency of tows vs CCTV. Both around 40-50% efficient. Uncertainty taken into account via bootstrapping against undredged areas. CEFAS stock assessment was presented at the ICES WG Scallop (Oct 18) and is published in the minutes and represents a *de facto* agreement on stock assessment areas to be used for the future. Cefas / Defra want to carry on stock assessments, refining dredged area limits every 5 years. There are voids which will be included e.g. in French area which could be addressed through cooperation with the French. Milestone has been met and is closed.	None
		1c. Yr 3.Stock areas agreed	**Complete** As above justification, achieved at end of Year 2. This data confirmed that stock assessment areas were comprehensive. Stock assessment areas are defined and agreed, with proposal for review every 5 years. Milestone has been met and is closed.	None
	Action lead: Cefas Partners: Defra	**1d.** Yr 4: Stock areas incorporated into management planning.	**Progressing** The fifth annual stock assessment report for the period 2020/2021 was published on 1 April 2022 (see below). The stock assessment surveys for 2022 have been confirmed. Having undertaken five annual stock assessments, knowledge on harvest rates for each stock is becoming more accurate (through continued improvements in data certainty for all stock removals,	None

<table>
<tr><th>Standard requirement</th><th>Lead & partners</th><th>Timescale / milestones</th><th>Progress / outcome</th><th>Revised milestone</th></tr>
<tr><td></td><td>Stakeholders: Industry, MMO, Marine Scotland</td><td></td><td>including by non-UK fleets) and assessing the stocks relative to HR MSY is being undertaken with more confidence.
Developments are underway for establishing an overarching harvest strategy and harvest control rules. This is being led by a sub-group of the SICG, and is demonstrating an effective co-management process by industry and government.
While it is expected HCRs will be responsive to the status of stocks, these stock areas are yet to be incorporated into management.</td><td></td></tr>
<tr><td></td><td>Action lead: Cefas

Stakeholders: Industry

Resources: ICES Scallop WG</td><td>1e. Yr 3 and annually thereafter: Review stock assessments to determine status of each stock with respect to available reference points.</td><td>Milestone on target, BMT behind target for WEC Lyme Bay (7.3.L) due to stock status
The harvest rate (HR_{MSY}) of each stock is summarised in the table below.
<table>
<tr><th>Reference point</th><th>Value</th></tr>
<tr><td>F_{MSY}</td><td>F35%SpR</td></tr>
<tr><td>HR_{MSY} 27.7.d.N</td><td>21.5%</td></tr>
<tr><td>HR_{MSY} 27.7.e.I</td><td>19.5%</td></tr>
<tr><td>HR_{MSY} 27.7.e.L</td><td>21%</td></tr>
<tr><td>HR_{MSY} 27.7.e.O</td><td>20.9%</td></tr>
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The use of the harvest rate reference points (35% of spawner recruit) is a proxy. Three years data is needed for certainty. Biomass reference points would need longer e.g. 5 years or more to be identified and incorporated into management, and is therefore likely to be a condition on the fishery should it move into full assessment .Note that the calculated harvest rate is based on removals so is one year behind. Access to international landings data in the past has caused increased uncertainty.
Cefas estimate the provisional harvest rates experienced by the surveyed portion of stocks by comparing international landings to the available biomass estimates. This is undertaken either for the dredged area only, or also including the biomass from un-dredged areas.
The HR_{MSY} for each stock, together with the harvest rates measured on the dredged portion of the stock is presented in the figure below (Cefas, 2018; Cefas, 2019; Cefas 2020, Cefas 2021; Cefas 2022). The current position of the stock with respect to the MSY candidate reference point can be summarised as follows:
• Eastern English Channel (EEC) 27.7.d.N: the harvest rate dropped significantly in 2019 and is now at HRMSY.
• Western English Channel (WEC) Inshore 27.7.e.I: the harvest rate has been above the MSY candidate in 2017, but fell in 2018 to levels consistent with MSY where it has remained fluctuating around MSY from 2019 to 2020
• WEC Lyme Bay 27.7.e.L: the harvest rate was over 3 times the MSY in 2018, but has dropped significantly in 2019, with this downward trend continued in 2020.
• WEC Offshore 27.7.e.O: the harvest rate has been well below the MSY candidate reference point throughout the time series. While the 2022 stock assessment report shows that the harvestable biomass of the dredged portion of the WEC Offshore assessment area has dropped from 2020 to 2021, the harvest rate is well below HR_{MSY}.</td><td>Added v4.1</td></tr>
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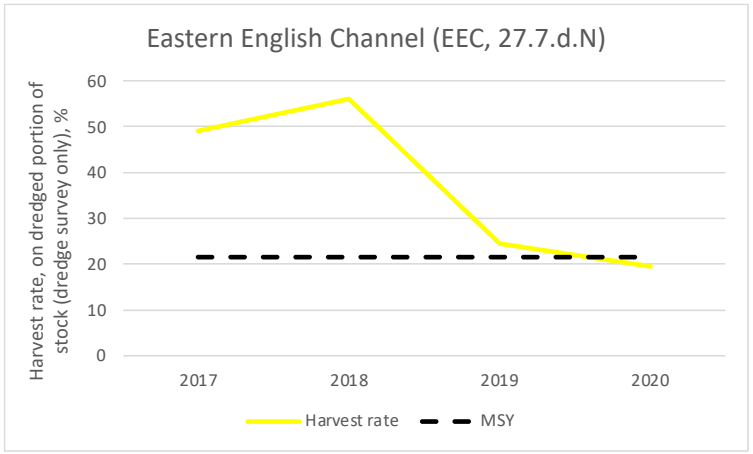
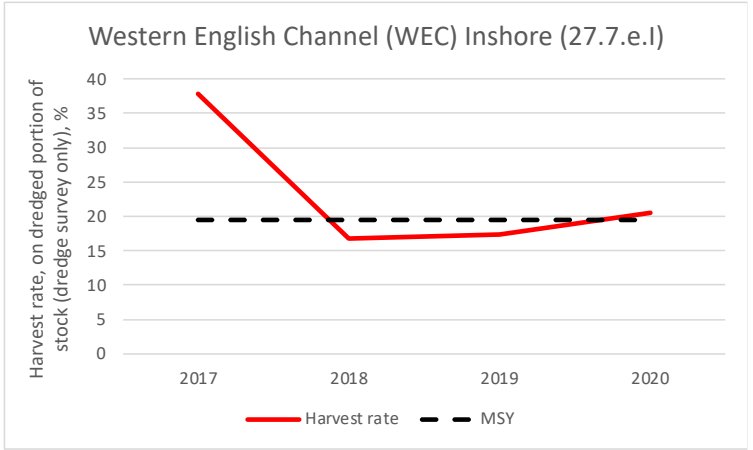
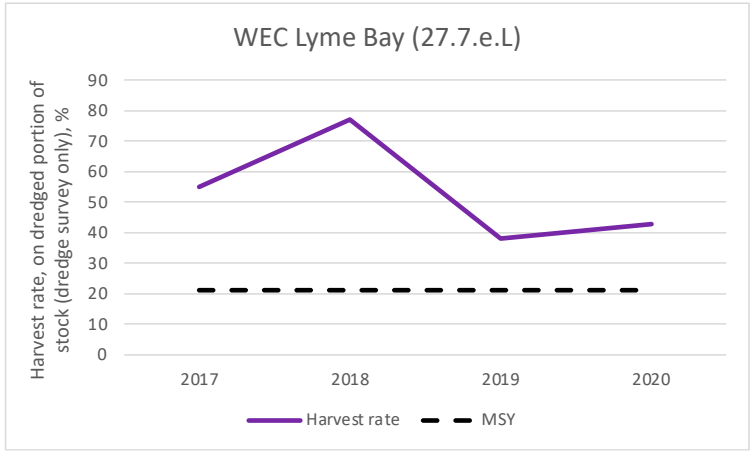
Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone







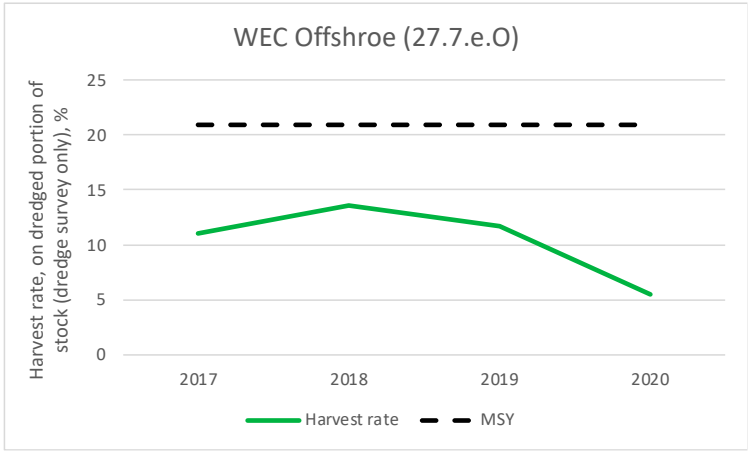


Figure 1: Harvest rates calculated for the dredged portion of stock (based on the dredge survey i.e. not including UWTV of wider stock) and candidate MSY level (based on 2022 assessment report)

Based on data provided within Cefas, 2018; Cefas, 2019; Cefas, 2020; Cefas, 2021; Cefas 2022).

1f. Yr 4: Develop proposal for establishing a reference point related to point of recruitment impairment (PRI) for each stock.	**Progressing** Cefas recommend that the fishing mortality (F) Maximum Sustainable Yield (MSY) reference point (F_{MSY}) for Channel scallop stocks is set at the fishing mortality that generates 35% of the virgin spawning potential ($F_{35\%SpR}$). Using this as the F_{MSY}, the Cefas model generates an MSY candidate for the harvest rate (HR_{MSY}) of each stock. There is therefore a proxy reference point for F_{MSY}.	Added in v4.1

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
			Biomass reference points (B_{lim}, B_{pa} or B_{MSY}) and fishing mortality limit reference points (F_{lim} or F_{pa}) are not yet defined for the Channel scallop stocks. The recent trends in fishing mortality rate may be used as a means of scoring stock status. In this case F should be low enough for long enough to ensure required biomass levels are met. Cefas confirm that when more data is available, the reference points will be reviewed, but for the moment will continue to use HR_{MSY}. Currently, Cefas do not have any biological basis to agree a reference point for Blim (the level below which recruitment is likely to be impaired) yet. In the absence of a biological basis for reference point, observable reference points such as the use a B_{loss} (the lowest historical recorded stock size) can be trialled as reference point for biomass. Discussions are underway for developing recruitment indices. Action: • AL to keep the Steering Group informed of any progress made on developing a Bloss for Channel scallops	
		1g. Yr 4-5: Define PRI reference point for each stock.	**Progressing** Cefas acknowledge that investigating potential reference points for PRI for each stock is on their agenda, but progress is yet to be made.	Added in v4.1
		1h. Yr 4-5:.Develop rebuilding plans for stocks less than 80 at 1.1.1 (7.e.L)	**This milestone is yet to be commenced.**	
<u>Action 2: Harvest Strategy</u> **Overview** Develop formal harvest strategies **Performance indicator** 1.2.1 Harvest Strategy **< 60** <u>Requirement at SG80:</u> (a) The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives reflected in PI 1.1.1 SG80.	Action lead: SICG Partners: Cefas, ICES WG Scallop, IFCA, Industry, Defra Stakeholders: Marine Scotland	**2a.** Yr 2-3: Develop proposals for stock / fisheries harvest strategies, based on stock units identified in Action #1 above.	**Complete** Led by SICG. In 2018 the industry commissioned a UK-wide scallop management plan, now completed and will be published shortly. This was followed by a UK Scallop Management Conference in February 2019 (proceedings available) SICG Management WG set up to develop an UK-wide scallop Fisheries Management Plan (FMP), including long-term and short-term objectives, harvest strategy, HCRs for UK scallop different fisheries. SICG management group have undertaken an assessment of interventions for the UK king scallop fishery. The draft report was circulated to industry for consultation prior to the final report being submitted to UK Government in Nov 2019. Current management can be summarised as follows per vessel length category: • Over 15m – effort restrictions in Channel and Western Waters • 10-15m – need scallop entitlement but no effort ceilings. • under 10m – no scallop entitlement needed There has been a growth in 10-15m fleet targeting scallops due to enacting latent entitlements. Seafish reported falling CPUE across the UK fishery. SICG proposed interventions options are summarised as follow:	Timescale revised based on progress delayed due to Brexit (in v4.1).

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
(b) The harvest strategy is achieving its objectives (although may not be fully tested). (f) There is a regular review of alternative measures of minimising mortality of unwanted catch.			Intervention 1: stop expansion of industry • Freeze latent scallop entitlements (already done in Scotland and Isle of Man). • Cap effort in 10-15 and 10m vessels at current levels. This is considered the prerequisite to managing the fishery, as any measure would be ineffective if the fishery is still open to new entrants. Intervention 2: management options 1. TACs – catch controls. Consider hybrid to prevent consolidation within inshore e.g. inshore and offshore TAC, regional TACs (as in Norway). 2. Effort system – expand to all segments and all areas. Avoid displacement. 3. Harmonise technical conservation measures – dredge limitations, Scottish system tighter and more prescriptive. Deliberately reducing efficiency of vessels, makes sense in effort system as limited by time. But not for TAC, as reducing efficiency increases footprint of fishery. 4. Closed areas and closed seasons. SICG next steps: • Earliest possible implementation of fleet measures to stop expansion. • Develop management measures and timetable for implementation. Documentation: CEFAS status reports, Poseidon report, Seafish CPUE & scallop workshop in Feb 19. Defra put out a call for evidence in summer 2021 on three key issues: management proposals for the <15m fleet, how to address the issue of latent capacity in the shellfish sector in England and proposals to replace the Western Waters regime. The outcome of this consultation is not yet available. Post-Brexit management of UK scallop removals from French EEZ is to be subject to a tonnage limit (TAC), and similarly EU removals from UK EEZ is also subject to a tonnage TAC. It is noted that the EU and UK have agreed not to monitor tonnage this year (2021) and therefore it is unlikely fishing patterns will change significantly during 2021. However, when the tonnage limits are implemented, two different scallop management regimes will be active in the Channel; with UK vessels fishing against effort in the UK EEZ and by tonnage in EU waters. In summary, proposals for the management of scallops in the Channel have been developed and are in the process of being debated at government and industry level through the development of Fishery Management Plan.	
	Action lead: SICG Partners: Cefas, ICES WG Scallop, IFCA, Industry, Defra	**2b.** Yr 3-4: Proposals put out for consultation and finalised.	**Progressing** In December 2019 the SICG presented the above interventions to Defra and other UK Fisheries Administrators (FAs). The UK Fisheries Bill and commitment to develop Fisheries Management Plans for shellfish species coincides well with this FIP work. SICG advocates earliest possible implementation of fleet measures (intervention 1), with wider discussion still to be had on management measures, and their timetable for implementation. There is a need to continue consultation and collaboration with UKFAs, and it is noted that there is no buy-in from Marine Scotland in relation to the interventions.	Timescale revised based on progress delayed due to Brexit (and COVID-19).

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
	Stakeholders: Marine Scotland		Defra recognise there has been a delay in responding to SICG proposed management interventions (due to election and Brexit). Defra have reviewed the management proposals and put together questions and points for clarification. Defra will finish reviewing proposals and work with the other UK FAs to go through these, clarify points with industry, and prioritise management measures in terms of short & long term. Defra will coordinate this response to and from other UK FAs. France and Ireland – it is a parallel process looking at join management plan for channel scallops, although progress has entirely been taken over by Brexit / access / effort shares. Carrying on with work, but with extended timescale. There is an obligation for joint management between UK and France as it is a shared resource. Progress is expected after EU-UK fisheries agreement made. Macduff and SWFPA are still willing to sit on a join French/UK working group, but it would be good to have SWFPO and a retailer participate too. The larval distribution work will be important in relation to this action as it could help understand how the scallop stock in the Bay de Seine might be connected to the Eastern Channel. It is considered that the complexities in the Channel may be exacerbated by Brexit. Currently the Western Waters Regime is being continued with 3.3million kilowatt days for the UK fleet until it is replaced by a new management regime. Proposals have been put out to consultation, but not yet finalised.	
		2c. Yr 4: Preliminary harvest strategies embedded in management processes.	This action has not yet commenced.	None
		2d. Yr 5. Review and finalisation of harvest strategies, inc preliminary evidence that the harvest strategy will achieve its objective.	This action has not yet commenced.	None
Action 3: HCR **Overview** Development of formal harvest control rules **Performance indicator** 1.2.2 HCRs & tools **< 60** Requirement at SG80: (a) Well-defined HCRs are in place that ensure exploitation rate is reduced as PRI is approached and stock is expected to be consistent or above MSY. (b) HCRs are likely to be robust to the main uncertainties.	Action lead: SICG Partners: Cefas, ICES WG Scallop, IFCA, Defra Stakeholders: Industry, Marine Scotland	**3a.** Yr 2-4: Develop outline Channel scallop management plan, inc. proposals for stock / fisheries harvest control rules, based on the strategies identified in Action #2 above.	**Progressing** A Channel Scallop Fisheries Management Plan (FMP) is being developed and in draft form. Macduff is coordinating the developing of this FMP, which includes a timeline for implementation of a FMP tracking document is in place to outline responsibilities for completing each section of the FMP. The Channel scallop FMP will be nested within the UK-wide scallop management approach being developed by the SICG and Defra. However, two separate FMPs will be developed (one for Channel Scallop and one for UK Scallop) so that entering full MSC assessment is not delayed for the Channel scallop. HR MSY reference points exist for each stock, which could be used to trigger management actions. The FMP is under development. HCR are yet to be agreed and defined.	Updated timescale to Yr 2-4 to reflect delays in Action 2 (in v 4.1)
		3b. Yr 4: Proposals put out for consultation and finalised.	**Progressing** The SICG submitted management proposals to Defra and UK fisheries administrators. These have also been circulated for wider consultation within SICG membership across the UK scallop industry. It is noted that Defra's scallop FMP is more advanced than most other fisheries due to the progress made by SICG and Project UK. The situation is affected by Brexit considerations, including uncertainty around UK access to French waters.	Updated timescale to Yr 4 to reflect 3a (in v4.1)

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
(c) Available evidence indicates that tools in use are effective in achieving exploitation rates required under HCR.			Proposals have therefore been out for consultation through the SICG, Defra and other UK FAs. However, proposals for HCRs remain to be finalised and agreed.	
		3c. Yr 4-5: Preliminary harvest control rules embedded in management processes.	This action has not yet commenced.	Updated timescale to reflect Brexit & COVID delays (in v4.2)
		3d. Yr 5. Review and finalisation of harvest control rules.	This action has not yet commenced.	None
Action 4: Information & monitoring **Overview** Gather additional stock information to support Actions #1, #2 & #3. **Performance indicator** 1.2.3 Information & Monitoring **≥80** Requirement at SG80: (a) Sufficient relevant information related to stock structure, stock productivity…..to support harvest strategy. (c) There is good information on all other fishery removals from the stock.	Action lead: Cefas Partners: ICES WG Scallop, IFCA, Defra Stakeholders: Industry, Marine Scotland	**4a.** Yr 1: Identify information gaps for Action #1, #2 & #3.	**Complete** A virtual meeting was held on 12 January 2018 and a brief email summarising the substance of the discussions was received on 3 April 2018. This suggests that no major gaps in information exist to support the stock assessment processes. One gap related to scallop larval distribution has since been identified, specifically in relation to interactions between areas that are surveyed and areas that are not surveyed (or dredged and undredged areas).	None
		4b. Yr 2: Conduct feasibility assessment of the research identified in gap analysis.	**Complete** There is currently a knowledge gap in the stock assessment data around the distribution of scallop larvae and their interactions across dredged and undredged areas. While this might not impact scoring it is recognised that it would contribute to harvest strategy development (e.g. spatial management). In addition this is considered a priority for industry. The project would involve fine scale hydrographic modelling to understand hydrographic flows, coastal processes and therefore patterns in larval dispersal and distribution. Conclusion on feasibility: this project is not necessarily a FIP priority (based on PI requirements), however it is recognised as an industry priority and therefore a decision has been taken to proceed with close engagement with the SICG.	Edited in v4.1 focus on feasibility of undertaking research within FIP
		4c. Yr 3-4: Undertake larval distribution project.	**Complete** In 2013, Cefas undertook preliminary research into scallop connectivity in the Channel (Nicolle et al, 2013). The report showed the level of connectivity between the fishing grounds in the Channel, but it did not show interaction between undredged and dredged areas. Cefas have developed a ToR for the larval distribution project, which is expected to cost £55-60k, be an entirely desk-based study (with significant computer processing power) and take a few months to complete. There is currently a knowledge gap in the stock assessment data around the distribution of scallop larvae and their interactions across dredged and undredged areas.	Edited in v4.1 milestone is now project specific and therefore updated to Yr3-4

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
			While this data gap remains, from an MSC PI perspective **sufficient information from the stock assessments and knowledge of the fishery exist to meet SG80** and therefore this work might represent a recommendation. However, this is recognised as a priority for industry and has been discussed by the SICG project steering board. It is thought that this work could help understand what level of connectivity there is and to further define stock boundaries. Cefas have indicated that the modelling is complete, but the report is not yet finalised or available for circulation.	
		4d. Yr4: Assess EU landings data on scallop removals by other fisheries i.e. French vessels	**Complete** Cefas noted that STECF database has not been updated recently and data on removals of scallops by French vessels was not currently available beyond 2016. Some information had been seen, but not specifically entered into the assessment models. The STECF database has recently (March 2020) been updated based on the 2019 data call and now includes landings data for 2017 and 2018. This milestone has been added to check that the data within STECF is sufficient to determine French removals from each scallop stock assessment area and that this data is in an appropriate resolution for modelling needs. The 2020 scallop survey (Cefas, 2021) included updated data on all removals of scallop, including French vessels.	Added in v4.1
		4e. Yr 4: Final report on larval distribution made available, including on-going information / monitoring needs.	The final report is not yet available.	None
Action 5: Primary & Secondary species **Overview** Gather additional information on primary & secondary species. **Performance indicator** **2.2.2 Management 60-79** **2.1.3 & 2.2.3 Information (primary & secondary species) 60-79**	Action lead: Cefas Partners: Industry, IFCA, Defra Stakeholders: Marine Scotland	**5a.** Yr 1: Review of existing observer data.	**Complete** CEFAS have conducted an analysis of their observer programme, looking at different spatial areas, ecologies and species composition. Bell & Mangi (2018) presented the current knowledge of primary and secondary bycatch from scallop dredges from observer data. Whilst the scallop fleet is included in the Data Collection Framework (DCF) coverage it is at very low-level coverage. There is also a need to include Scottish vessels in VII d. Bell & Mangi (2018)[2] noted that the sampling rate, particularly in 27.7.d is very low and the results of this analysis are therefore highly uncertain. Even in 27.7.e where the sampling rate is higher and covers the full year there are questions as to the representativeness of the samples. They suggest a more intensive bycatch recording program will be required to improve the robustness of the dataset and include the scope of an enhanced observer programme. There is a need for a short-term, more detailed quarterly observer project. CEFAS will propose a year's programme which will need additional funding on top of the DCF.	None

[2] Bell, E & S. Mangi (2018). C7488: Project UK Fisheries Improvements: Task 4. Report to MSC by CEFAS. 15 pp plus appendices.

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
Requirement at SG80: 2.2.2 e. There is regular review of the potential effectiveness and practicality of alternative measures to minimise unwanted catch and they are implemented as appropriate. 2.1.3 & 2.2.3 a. Some quantitative information is available and is adequate to assess impact of the UoA on the main primary or secondary species			On particular issue that needs to be addressed in this observer programme is the number of skates and rays discarded, which is not currently quantitatively assessed (although is noted as a quota species). This has been reviewed at Year 3. The EU DCF includes discards by species and presents data as if it is in tonnage. Cefas provide this data as number of individuals, so expect the units of measure to be incorrect in the DCF. There is potential for numbers of individuals & their lengths that are recorded within the observer program to be transformed into biomass. This would be based on estimates of biomass per species and length category. This has been done before. Cefas observer sampling does not have at-sea balanced scales, so cannot record biomass at sea, hence use of lengths and number of individuals. It is expected that the data available for the Eastern and Western Channel would be sufficient to inform the species characterisation for P2 Primary & Secondary assessment purposes. The lack of data for non-English vessels is not a significant concern, as they are fishing in the same area, so observer data for English vessels would be representative. Need to agree the scale at which data is assessed. Bell & Mangi (2018) consider the English Channel to be two ecosystems: the Western and the Eastern, and therefore recommend assessing species composition separately for these two ecosystems. Other research considered a joint ecosystem management approach is more appropriate (Dauvin, 2012[3]). Steering group considered whether Western and Eastern English Channel should be deemed as separate ecosystems and therefore assessed as separate UoAs for P2 components. Based on this discussion, the Steering group agree that it is appropriate for the Channel to be assessed as one ecosystem for P2 purposes. The advantage of the observer data is that it is a long term dataset and would be relatively fast and cost effective means of meeting the requirement for 'some quantitative data'. In addition, there is also landing statistics, which records landings of retained species. The landing obligation presents further mode of verification for retained quota species. It is also noted that individual POs also maintain data on catches from their vessel members. Data sources to quantify total catch: - Observer programme data transformed from individual count and length to tonnage by species. - Landing statistics for dredge gear. Note that MSC Vocabulary defines quantitative as "data expressing a certain quantity, amount or range. Usually, there are measurement units associated with the data (e.g. metres) in the case of the height of a person. It makes sense to set boundary limits to such data, and it is also meaningful to apply arithmetic operations to the data". MSC terminology appears to go in the order of some – good – comprehensive. Cefas analysed scallop survey catch data and provided quantitative data on proportion of catch by species weight (by July 2021).	

[3] Dauvin, J.C. (2012). Are the eastern and western basins of the English Channel two separate ecosystems? Marine Pollution Bulletin, Volume 64, Issue 3, https://www.sciencedirect.com/science/article/abs/pii/S0025326X11006485

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
			Cefas recently produced a catch composition report for the scallop fishery in the English Channel, ICES Areas 7d and e, which showed the primary, secondary and ETP species analysed scallop survey catch data. The report was based on landings data and estimates of discards from Cefas' observer programme. Each species was converted to biomass through the use of length-weight keys The content of the report can be considered as 'some quantitative information' for an MSC assessment. Limitations of the assessment include: that less than 1% of trips were covered by the observer programme, non-commercial invertebrates were not included and there were no estimates of unobserved mortality. Despite the low proportion of observer trips, the data is conclusive that the vast majority of catch is king scallops (96%-97%). Dredge gear was seen to have low interactions with ETP species, and the main bycatch species was spider crab, showing up at 1% of the catch biomass. There were no 'main' bycatch species, comprising of 5% or more of total catch weight (or 2% if a deemed a less-resilient species). It is noted that other information may be available (from UK Scallops FIP) on UK scallop bycatch of non-commercial invertebrate species, which would also provide further context. The seasonal coverage of the Cefas observer program was queried by the SG. It is confirmed that the observer trips were undertaken across all seasons and are therefore expected to be representative of the fishery.	
		5b. Yr 2-3: Design and resourcing of observer program, with initial trials, if required.	**No longer required** Cefas have provided a preliminary costing for this and ToR. This is expected to cost approximately £150k and covers a comprehensive annual survey of total catch from the scallop Channel fishery. To determine if this goes ahead or not, based on conclusion of 5a.	Updated timescale based on 5a delayed decision.
		5c. Yr 4: Collation of representative catch data to determine main and minor species, either by specific survey, observer program or other appropriate means.	**Progressing** Note: focus is required on the primary and secondary species themselves. Significant work has been undertaken on the resilience of macro benthos to the effect of dredging. For example, it is understood that the seven arm starfish is quite sensitive to dredging. Irish Sea and English Channel communities are more resilient, as have experienced dredging for decades. The common starfish and sea urchin are more resilient. A study in the Irish Sea found that fluctuations in starfish were controlled more by environmental conditions, which effected recruitment every year. Action: • Obtain any further research and begin to build knowledge base on primary and secondary species.	Updated timescale based on delay to 5b, updated text to allow variation from specific survey.
		5d. Yr 4. One or more year's data collection and formal report published	**No longer required**.	None
		5e. Yr 4. Review alternative measures for minimising unwanted catch of primary and secondary species.	**Complete** **This action is aligned with Round 2 UK Scallop FIP** A review of alternative measures has been undertaken for mechanical dredge targeting king scallop. This review is applicable to the Round 1 Channel Scallop and Round 2 UK Scallop FIPs. The review includes consideration of whether alternative gear or other measures have been implemented as appropriate.	Added v4.1

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
			Due to technical gear regulations, a derivation is required to change gear specifications, including ring size and attachment of skis to the dredge. Trials are underway through Heriot Watt and Bangor University to explore efficiency of gear adaptations, including addition of skis. Factors to be analysed include, bycatch rates, catch rates of target species, gear seabed penetration and efficiency. The process for the regular review of alternative measures will be documented within the FMP.	
Action 6: ETP **Overview** Gather additional information on nature & scale of ETP interactions and impacts. **Performance indicator** 2.3.1, 2.3.2, 2.3.3 ETP species outcome, management & information 60-79 Requirement at SG80: 2.3.1 (b): Direct effects of the UoA are highly unlikely to not hinder recovers of ETP species 2.3.2 (b) there is a strategy in place that is expected to ensure UoA does not hinder recovery of ETP species; (e) there is a regular review of the potential effectiveness and practicality of alternative measures to minimise mortality 2.3.3 (b) information is adequate to measure trends and support a strategy to manage impacts on ETP species.	Action lead: TBC Partners: JNCC, MMO, Natural England, Cefas, Industry, IFCAs, Defra Stakeholders: Marine Scotland	**6a.** Yr 1: GIS-based risk assessment. Listing of potential ETPs interacting with UoAs, and then mapping of ETP distribution overlap with UoA dredging effort.	**Complete** Holden (2017)[4] provides a report into the risk to ETP species from scallop dredging in the Channel scallop fishery. This GIS-based study includes a gaps analysis and future research priorities and an action plan.	
		6b. Yr 2: Development of possible management approaches for reducing ETP interactions and impacts, if necessary.	**Complete** The SG reviewed the results and recommendations from Holden (2018) in April 2019. They concluded that most ETP species (e.g. skates and rays) have a commercial TAC and any unwanted catch could be discarded as it has an exemption though it is high post-discard survivability. As a result no pilot projects are needed. They also noted that, although POs have worked with the UoA on careful elasmobranch handling, this may need reinforcing.	
		6c. Yr 3-4: Review of ETP species list (and associated risk assessment) to determine comprehensive list which reflects current environmental legislation including qualifying species within MPAs.	**Complete** The Round 2 UK scallops FIP has undertaken an extensive review of ETP species, and it is recommended that the Channel Scallops FIP re-assesses the ETP list, based on developments in Marine Protected Areas and environmental legislation. It is noted that many ETP species are missed from the current list, and some are not in fact ETP species (as a quota exists for some elasmobranchs). It is understood that consideration of priority marine features (PMF) and defining specific species and habitats as PMFs in English waters is not anticipated to occur in the short-medium term. The ETP species list has been reviewed and updated. Actions below represent continual review to ensure the list reflects any changes in species or designations, together with knowledge on level of interactions. Actions: • JPO, FB, AB to review updated ETP list from industry perspective • HS to review updated ETP list from NGO/conservation perspective and the Secretariat to follow up with Natural England for their input	Added v4.1

[4] Holden, R (2017). Managing UK Fisheries for Risk: An Ecological Risk Assessment of Endangered, Threatened and Protected (ETP) Species and their Interaction with the Channel Scallop Fishery. A report submitted in partial fulfilment of the requirements for the MSc and/or the DIC. Imperial College, London. 128 pp + appendices

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
		6d. Yr 3-4. Develop an ETP bycatch management strategy in the Fisheries Management Plan (FMP).	**Progressing** Based on the review of ETP species list, the requirement for management should be reviewed. It is noted that occurrence of elasmobranchs is considered rare, and individuals are returned to sea. Industry already have skate and ray ID guides designed in collaboration with the Shark Trust but identifying can be tricky as even the MMO can struggle to distinguish species at times. Noted that management of species would need to focus on SACs and protected areas, of which there are many in the in-shore area: about 40% of Devon's waters are closed off to protect marine features and incorporate buffer areas. The management plan should document what measures are currently in place and applicable to the dredge UoA. A list of management measures and Byelaws that are applicable to scallop dredge operations within the Channel IFCAs jurisdiction has been documented and included in the FMP. A Seafish project is underway to document and map MPAs and fishing restrictions to inform fishermen. This project has been extremely positively received by industry. The project is expected to conclude in October 2021. Recording incidental interactions with ETP species is being aligned with Round 2 UK Scallop FIP. In March 2021 a new bycatch reporting app was launched by Clean Catch UK. Through collaboration with the UK fishing industry, Clean Catch UK have produced an app designed to gather data on accidental wildlife bycatch. In October 2021, Macduff and South West Fish Producers' Organisation (SWFPO) vessels agreed to participate in a trial of the app, with one of these vessels already using the app. Other vessels await an access code to allow the trial to commence. It is expected that if the trial is successful, it will be rolled out to the wider fleet. There is an outstanding action to agree on and document the current ETP management measures and recording mechanisms in the fishery management plan (FMP). The Kingfisher MPA tool has been developed, providing detailed information on fisheries management measures within MPAs, which is relevant for ETP species. Actions • FdB to lead on adding ETP management text to the FMP, with Secretariat support. • Secretariat to: ○ share habitats post-doc report with CN to be used in Defra's call for evidence for management measures in MPAs. ○ to facilitate formation of MPA sub-group for the FIP by contacting LP, CB, RW, HG and Leanne Stockdale before next Steering Group meeting. ○ contact the Seafish Kingfisher project lead to ask for scallop specific mapping as well. • FN to update her mapping review to include French regulation and protected areas. • HG to check within MMO for most appropriate person to join the MPA focus group. • CB to check within Defra for most appropriate person to join the MPA focus group. • RW to provide text on the MPA procedure for English waters to the Secretariat.	Milestone revised in v6.4 to align with FMP. Timescale edited to allow for review in 6c in v4.1

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
			• The MPA sub-group agreed to review the current ETP list (RW, LP, HG and CB)	
		6d. Yr 4: Finalise ETP bycatch management strategy in the FMP.	This action has not yet commenced.	Updated to 'finalise' in v4.1
Action 7: Habitats **Overview** Spatial scale, intensity and impact of the fishery on habitats assessed and management measures developed where appropriate. **Performance indicator** **2.4.1, Habitat outcome 60-79** **2.4.2, management 60-79** **2.4.3, information ≥80** Requirement at SG80: **2.4.1:** The UoA is highly unlikely to reduce the structure and function of the: (b) VME habitats to a point where there would be serious or irreversible harm. **2.4.2(a):** There is a partial strategy in place; (b) there is an objective basis for confidence that the partial strategy will work; (c) there is some quantitative evidence that the partial strategy is being implemented successfully.	Action lead: Seafish SAG Partners: Cefas, Industry, IFCAs, Defra, JNCC, MMO Stakeholders: Marine Scotland	**7a.** Yr 1-3: Research commenced which reviews existing information. Fishery footprint analysis and habitat mapping.	**Complete** A two-year post-doctoral study (started January 2018) commissioned from Bangor University, ending March 2020 (e.g. end Y3). Currently being undertaken by Steven Newstead (was Christina Mangano) who has made various presentations to the SG on their literature search, VMS analysis and fisher surveys. Three different actions. Habitat modelling, cameral use and fishermen interviews. • *Habitat modelling*: maps showing 56 vulnerable spp. / habitat sensitivity. Have presence and absence data. Creating species distribution models. Combining with swept area ratios to predict sensitivity (as a measure of recoverability). 68 vulnerable spp. Identified. Have longevity information for each (to estimate recoverability). MaxEnd spp. Distribution model. 5 different environmental parameters e.g. chlorophyll, bathymetry, sea bottom temperature, substrate, bed shear stress. Calculate area swept, area coved by spp., and area covered by species and is fished. Models up and running, so turning to the analysis. • *Cameras*. Looking at recording benthic bycatch. 6 cameras ready to go, but not been able to get on vessels as yet & need to identify range of vessels to participate. Difficult due to lack of fisher knowledge of laming obligation, esp. when quota is scarce. Piloted but no commercial uptake so far. • *Fisher interview*. Completed & being compiled. 43 responses to date. Bycatch starfish spiders, brittle stars, urchins. Higher in unexploited areas. The final work will be presented to the SG for consideration and then the management approaches considered. Update at Year 3. The Post Doc work and reporting is due in March/April 2020. This work characterised commonly encountered habitats and sensitive species within those habitats to determine extent of interaction with scallop dredging, as well as length of time to recover. Overall the work considered that ALL commonly encountered habitats meet SG100. VMEs have not been specifically looked at, but could be added to the model, if VME locations can be identified. It is noted that the footprint of the fishery is determined by the VMS data provided by Cefas (which is thought to include all vessels ≥12m). Vessels <12m are not included within the analysis, as there is no spatial data available. It was considered that the VMS for >12m vessels is representative of the scallop grounds targeted by the fleet and that <12m vessels would not skew the results. Update at Year 4. The Post Doc work was completed and reported in April 2020. The assessment undertook: 1) A species by species approach to understand the sensitive species present in the Unit of Assessment (UoA).	

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
			2) A whole community approach to understand habitat vulnerability, using the Bangor University Benthic Habitat Tool. Approach 1: Sensitive species: this considered longevity of a species, whether the species create a structurally complex habitat, and whether rare or threatened species were once common in the UoA. A MaxEnt model combined known species records and environmental variables to predict the likely habitat for each species. Scores for fishing mortality, depletion and recoverability of each organism were used to determine the relative benthic status (RBS). 39 different habitat types were identified in the UoA, with the RBS for only one habitat type scoring below the 0.8 RBS threshold – deep circalittoral coarse sediment. The assessment went on to demonstrate that the recovery period for deep circalittoral coarse sediment would take an estimated 2.5 years (i.e. below the 5-20 years recovery time specified within MSC methodology). Approach 2: Benthic habitat tool: which produces RBS scores directly. Results from this approach indicated that all habitat scores were above 0.8, indicating that no commonly encountered habitat types were failing as set out by the MSC Standard. Vulnerable marine ecosystems (VMEs) were considered to overlap with the fishery by approximately 20%. Of these, two were of note: sandbanks and reefs, where individual species had a low RBS value but averaged above the 0.8 threshold, implying that habitat type could still pass full MSC assessment.	
		7b. Yr 4. Development of possible management approaches for reducing habitat interactions and impacts	**Progressing** The Post Doc habitats work identified one key recommendation for habitat management of a VME designated within MCZ. The Kingfisher MPA tool has been developed, providing detailed information on fisheries management measures within MPAs. The Steering Group agreed that an MPA focus sub-group should be formed to discuss appropriate management of ETP species and sensitive habitats in the English Channel. Defra, MMO, Natural England and an Inshore Fisheries Conservation Authority (IFCA) representative met in October 2021 for the first sub-group meeting. Actions from the meeting were to improve understanding of the fleet composition and timeline of MMO MPA management rollout in English waters. A MPA & Habitat sub-group meeting was held in October 2021 with the objectives to: - Understand each body's views on MPA network in the Channel and whether current designation of MPAs is considered sufficient to protect VMEs and ETPs. - Understand concerns about areas outside designated MPAs being impacted by dredging. The following actions were agreed: • HG offered to find out who the MPA lead assessor was in the MMO and share with the subgroup • Further engagement is needed with JNCC, and the relevant departments in Defra and MMO • The Secretariat offered to follow up with Ed Baker to obtain more information on the MPA process • LP offered to follow up with MMO on: the process of data sharing, who can view/use it and if data cannot be shared could end uses such as maps or tabled results be shared. LP also	

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
			offered to find out if she can share permit data, and ask the other IFCAs if they even have that information • A possible MSC intern would be a candidate to take on the MPA footprint analysis of Devon and Severn IFCA iVMS data, pending whether data can be shared beyond the IFCA and the MMO • RW recommended arranging a call with the team at Natural England who were focussing on seabed integrity, and agreed to help the Secretariat facilitate it	
		7c. Yr 4. Prepare pilot projects for habitat management approaches, if required	This action has not yet commenced.	
		7d. Yr 4: Implementation of pilot projects, if required.	This action has not yet commenced.	
		7e. Yr 5: Mainstreaming of habitat management approaches and introduce of the risk-monitoring system.	This action is not being addressed until Year 5	
Action 8: Ecosystems **Overview** Conduct a Scale Intensity Consequence Analysis (SICA) analysis of scallop dredging in the UoA. **Performance indicator** **2.5.1 Ecosystem: Outcome status 60-79** Requirement at SG80: 2.5.1 (a): The UoA is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	Action lead: TBC Partners: Cefas, Industry, IFCAs, Defra, JNCC Stakeholders: Marine Scotland	**8a.** Yr 2: Constitute expert group and conduct SICA analysis of main ecosystems impacted by scallop dredgers.	**Complete** SICA workshop conducted for April 2018 suggested a borderline pass. Needs greater VMS (only 2 hour ping) / inshore activity data. Report by Lambert *et al*, 2019[5]. Inshore activity: it is noted that iVMS for all vessels >8 m will be introduced by 2021 & D&SIFCA is currently trialling technology (10 min ping rate). Now in byelaw since August (to determine which year) 87 units and first 2 years airtime paid for by EMFF & NGO sources. Now 136 mobile iVMS mobile gear. Succour fish or AST Marine Services units. Globavista FMC via MMO, with IFCA link. Also helps with gear conflicts. Notable increase in compliance. Also helping manage MPA areas e.g. whether to keep areas open or closed. Also trialling gear in gear out technology. Offshore: >12 m vessels ping rate only 2 hours, which is insufficient for 15 min tows. OK for effort management but is limiting for habitat management. Not needed until full management rules are available for MCZs. Need to keep eye on the Kingfisher Project. Lambert *et al*, 2019 suggest that spatially-limited scallop fisheries can offer a "sustainable option".	
		8b. Yr 4: Based on the SICA results (and NE analysis), identify and recommend further research and management actions that reduce ecosystem disruption to acceptable levels.	**Aligned with Action 6 and 7** The SICA undertaken by Cefas identified the functional group composition as the most relevant ecosystem sub-component to be affected by the fishery. The report concluded that the consequence score is likely to be 60 "due to the spatial and temporal footprint of the activity as well as the type of gear used and its known impact on the benthos". As a result of this, the potential management actions	Updated timescale to Yr4 in v4.1

[5] Lambert, G., R. Martinez & S. Mangi (2019). Information for Scale Intensity Consequence Analysis (SICA) of performance indicator (PI) 2.5.1. C7488 Project UK Fisheries Improvement - Task 5. Scallop ecosystem assessment. Report version 1.5, issued 18-01-2019

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
			are aligned with the objectives of Action 6 (for ETP) and Action 7 (for habitats), which include spatial restrictions to fishing operations, specifically through IFCA Byelaws. The SICA also identified a lack of knowledge on the <12m vessels. The score for the ecosystem action is expected to increase based on the outputs from Action 6 (ETP) and Action 7 (habitats). The Steering Group has also been discussing ways to monitor and evaluate the fishery, through the use of technologies such as geofencing. There is technology available to inform vessels when they are approaching protected areas, such as MPA maps and increased ping rates. Actions: • RW to provide an update on the roll out of iVMS in English waters.	
Action 9: **Overview** Defined and agreed management jurisdictions. Other responsibilities e.g. for stock assessment and research can also be better detailed. **Performance indicator** **3.1.2 Consultation roles & responsibilities: 60-79** Requirement at SG80: 3.1.2 (a): Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are explicitly defined and well understood for key areas of responsibility and interaction.	Action lead: Defra Partners: Industry, IFCAs. Stakeholders: ICES WG Scallop, Marine Scotland	**9a**. Yr 2/3: Develop management agreements for the fisheries / stock units (as identified in Action #1 above) and proposals put out for consultation and finalised.	**Behind target** Being addressed by SICG who are developing the FMP. This FMP will be aware of other fisheries, inc. the French for joint management, esp. for the East Channel. This will be based upon the stock assessment areas agreed in Action 1. AB is currently working on the FMP which will be circulate once more detail has been added, and after the SICG have a response from Defra on their management proposals. The Defra response is expected at the start of March. While sections are being completed of the FMP, the draft document is not yet available for review due to harvest strategy and HCR to be agreed. The draft FMP is available to be reviewed by Steering Group.	
		9b. Yr 4: Finalisation of UoA management arrangements in FMP	This action has not yet commenced.	
Action 10: **Overview** Development of fisheries-specific management plans. **Performance indicators** **3.2.1 Fishery-specific objectives: 60-79** **3.2.2 Decision-making processes: 60-79**	Action lead: TBC Partners: ICES WG Scallop, Defra, Industry, IFCAs. Stakeholders: Marine Scotland	**10a**. Yr 2: Initiate Development of scallop fisheries management plan. Draft FMP to be reviewed by Steering Group at the end of Y3 (March 2020)	**Behind target** Being addressed by SICG who are developing the FMP. The Fishery Management Plan (FMP) is a central document that summarises all aspects of management in the fishery. MacDuff are leading the Channel scallop FIP FMP, with support from SG members for specific sections. Overview: Section 1.4, social and economic information, requires updating as based on 2018 data Section 2, governance and policy, reflects the current understanding of the Fisheries Act, to be updated as required.	None

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
Requirement at SG80: **3.2.1(a):** Short and long term objectives, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are explicit within the fishery-specific management system. **3.2.2 (a)** There are established decision-making processes that result in measures and strategies to achieve the fishery-specific objectives.			Section 3, fisheries management, requires information on how the IFCAs and Defra manage scallop fisheries in the Channel as well as information on the Scallop Industry Consultation Group (SICG) Project Steering Board (PSB). Section 4, harvest strategy and control rules, is awaiting the outcome of SICG/Defra co-management discussion. Section 5, ecosystem impacts, contains a lot of information already such as: the Cefas catch composition report, FdB's ETP management document. The Scale, Intensity, Consequence Analysis (SICA) and the Bangor University habitat study needed to be summarised and added by a Steering Group member. Section 6, stock assessment and analysis, is well populated from Cefas contributions. Section 7, compliance and monitoring has been reviewed by the MMO and can be reviewed again when or if management changes are introduced. Section 8 and 9 are yet to be drafted, although there is guidance available in Section 8. Actions • Secretariat to check if Seafish can provide info on the social and economic importance of the Channel scallop fishery • JH to share information on the SICG PSB meeting with Cefas with AB. • CB to share information on Defra-IFCA roles and responsibilities when she has access to it. • Secretariat to share the SICA with CN, who will summarise and share with MS and AB to insert into the FMP.	
		10b. Yr 3: Develop draft fisheries management plan(s) and put out for public consultation.	This action has not yet commenced.	None
		10c. Yr 4. Finalise and formalise fisheries management plan(s)	This action has not yet commenced.	None
Action 11: **Overview** External evaluation of the management of these scallop fisheries. **Performance indicator** **3.2.4 Monitoring & Evaluation ≥80**	Action lead: TBC Partners: Cefas, Defra, Industry. Stakeholders: ICES WG Scallop	**11a.** Yr 2-4: To seek clarification on whether the steering group meetings and annual consultant reviews are sufficient.	**Complete** Steering group meetings and annual consultant reviews are not sufficient to count as an independent review. An independent review of the UK scallop industry was conducted in 2018 (Cappell *et al*, 2018[6]) which is due to be published by client SICG. SICG are also conducting a harmonisation process with other scallop FIPs. It is considered that this review – which involved both government and industry, is sufficient to count as an external review. As a result, this Action is concluded. However, it is recommended that further external reviews are encouraged as the SICG-led FMP is finalised and agreed at all levels. Also, external pre-assessment by a CAB in Y4 would also count. Update at Year 3.	Updated timescale to reflect FMP delivery (in v4.1)

[6] Cappell, R., Huntington, T., Nimmo, F., and MacNab, S. (2018) UK scallop fishery: current trends, future management options and recommendations. Report produced by Poseidon Aquatic Resource Management Ltd.

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
Requirement at SG80: **3.2.4(b): The fishery-specific management system is subject to internal and occasional external review.**			The MSC standard would accept an external review from another department within an organisation, a peer organisation or an independent external reviewer. The Poseidon review commissioned by the SICG constitutes an external review. Project UK's Round 2 scallop Steering Group is seeking input from the ICES WG, so Round 1 could also be included as there will be a large amount of overlap. Action: Secretariat to investigate having the ICES WG to review FMP once complete	
		11b. Yr 3-4: External review of Channel Scallop FMP completed, and report & any recommendations made available to FIP.	This action has not yet commenced.	Combined 11b&c into 11b
Recommendation 12: **Overview** Future labour requirements	Action lead: Steering group Partners: Defra, Industry.	**12a.** Ensure the fishery remains in scope of MSC with regards to any future labour requirements and the current scope requirement: No vessel shall be eligible that has had a conviction in the last 5 years.		

2.2 Year 5 Benchmark

2.2.1 Western English Channel (WEC) inshore (7.e.I)

Principle	Component	Performance Indicator	Pre-Assessment Year 0	Actual Year 1	Actual Year 2	Actual Year 3	Actual Year 4	Actual Year 5	Expected Year 1	Expected Year 2	Expected Year 3	Expected Year 4	Expected Year 5
1	Outcome	1.1.1 Stock status	<60	<60	≥80	60-79	60-79	≥80	<60	60-79	60-79	60-79	≥80
		1.1.2 Stock rebuilding	---	---	---	---	---	---	---	---	---	---	---
	Management	1.2.1 Harvest Strategy	<60	<60	<60	<60	<60	<60	<60	60-79	60-79	60-79	≥80
		1.2.2 Harvest control rules and tools	<60	<60	<60	<60	<60	<60	<60	60-79	60-79	60-79	≥80
		1.2.3 Information and monitoring	60-79	60-79	60-79	≥80	≥80	≥80	60-79	60-79	≥80	≥80	≥80
		1.2.4 Assessment of stock status	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
2	Primary species	2.1.1 Outcome	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.1.2 Management	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.1.3 Information	60-79	60-79	60-79	60-79	60-79	≥80	60-79	60-79	60-79	60-79	≥80
	Secondary species	2.2.1 Outcome	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.2.2 Management	≥80	≥80	≥80	60-79	60-79	≥80	≥80	≥80	≥80	≥80	≥80
		2.2.3 Information	60-79	60-79	60-79	60-79	60-79	≥80	60-79	60-79	60-79	60-79	≥80
	ETP species	2.3.1 Outcome	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		2.3.2 Management	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		2.3.3 Information	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80	≥80
	Habitats	2.4.1 Outcome	<60	<60	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80
		2.4.2 Management	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80
		2.4.3 Information	60-79	60-79	60-79	≥80	≥80	≥80	60-79	60-79	60-79	60-79	≥80
	Ecosystem	2.5.1 Outcome	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80	≥80	≥80
		2.5.2 Management	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.5.3 Information	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
3	Governance and Policy	3.1.1 Legal and customary framework	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		3.1.2 Consultation, roles and responsibilities	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		3.1.3 Long term objectives	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
	Fishery specific management system	3.2.1 Fishery specific objectives	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		3.2.2 Decision making processes	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80
		3.2.3 Compliance and enforcement	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		3.2.4 Management performance evaluation	60-79	60-79	≥80	≥80	≥80	≥80	60-79	60-79	≥80	≥80	≥80
Total number of PIs equal to or greater than 80			10	10	12	12	12	16	10	11	14	18	27
Total number of PIs 60-79			13	13	13	13	13	9	14	16	13	9	
Total number of PIs less than 60			4	4	2	2	2	2	3				
Overall BMT Index			**0.61**	**0.61**	**0.69**	**0.69**	**0.69**	**0.76**	**0.63**	**0.70**	**0.76**	**0.83**	**1.00**

2.2.2 WEC Lyme Bay (7.e.L)

Principle	Component	Performance Indicator	Pre-Assessment Year 0	Actual Year 1	Actual Year 2	Actual Year 3	Actual Year 4	Actual Year 5	Expected Year 1	Expected Year 2	Expected Year 3	Expected Year 4	Expected Year 5
1	Outcome	1.1.1 Stock status	<60	<60	≥80	<60	60-79	60-79	<60	60-79	60-79	60-79	≥80
		1.1.2 Stock rebuilding	---	---	---	---	---	---	---	---	---	---	---
	Management	1.2.1 Harvest Strategy	<60	<60	<60	<60	<60	<60	<60	60-79	60-79	60-79	≥80
		1.2.2 Harvest control rules and tools	<60	<60	<60	<60	<60	<60	<60	60-79	60-79	60-79	≥80
		1.2.3 Information and monitoring	60-79	60-79	60-79	≥80	≥80	≥80	60-79	60-79	≥80	≥80	≥80
		1.2.4 Assessment of stock status	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
2	Primary species	2.1.1 Outcome	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.1.2 Management	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.1.3 Information	60-79	60-79	60-79	60-79	60-79	≥80	60-79	60-79	60-79	60-79	≥80
	Secondary species	2.2.1 Outcome	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.2.2 Management	≥80	≥80	≥80	60-79	60-79	≥80	≥80	≥80	≥80	≥80	≥80
		2.2.3 Information	60-79	60-79	60-79	60-79	60-79	≥80	60-79	60-79	60-79	60-79	≥80
	ETP species	2.3.1 Outcome	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		2.3.2 Management	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		2.3.3 Information	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80	≥80
	Habitats	2.4.1 Outcome	<60	<60	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80
		2.4.2 Management	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80
		2.4.3 Information	60-79	60-79	60-79	≥80	≥80	≥80	60-79	60-79	60-79	60-79	≥80
	Ecosystem	2.5.1 Outcome	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80	≥80	≥80
		2.5.2 Management	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.5.3 Information	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
3	Governance and Policy	3.1.1 Legal and customary framework	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		3.1.2 Consultation, roles and responsibilities	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		3.1.3 Long term objectives	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
	Fishery specific management system	3.2.1 Fishery specific objectives	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		3.2.2 Decision making processes	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80
		3.2.3 Compliance and enforcement	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		3.2.4 Management performance evaluation	60-79	60-79	≥80	≥80	≥80	≥80	60-79	60-79	≥80	≥80	≥80
Total number of PIs equal to or greater than 80			10	10	12	12	12	15	10	11	14	18	27
Total number of PIs 60-79			13	13	13	12	13	10	14	16	13	9	
Total number of PIs less than 60			4	4	2	3	2	2	3				
Overall BMT Index			**0.61**	**0.61**	**0.69**	**0.67**	**0.69**	**0.74**	**0.63**	**0.70**	**0.76**	**0.83**	**1.00**

2.2.3 WEC Offshore (7.e.O)

Principle	Component	Performance Indicator	Pre-Assessment Year 0	Actual Year 1	Actual Year 2	Actual Year 3	Actual Year 4	Actual Year 5	Expected Year 1	Expected Year 2	Expected Year 3	Expected Year 4	Expected Year 5
1	Outcome	1.1.1 Stock status	<60	<60	≥80	≥80	≥80	≥80	<60	60-79	60-79	60-79	≥80
		1.1.2 Stock rebuilding	---	---	---	---	---	---	---	---	---	---	---
	Management	1.2.1 Harvest Strategy	<60	<60	<60	<60	<60	<60	<60	60-79	60-79	60-79	≥80
		1.2.2 Harvest control rules and tools	<60	<60	<60	<60	<60	<60	<60	60-79	60-79	60-79	≥80
		1.2.3 Information and monitoring	60-79	60-79	60-79	≥80	≥80	≥80	60-79	60-79	≥80	≥80	≥80
		1.2.4 Assessment of stock status	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
2	Primary species	2.1.1 Outcome	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.1.2 Management	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.1.3 Information	60-79	60-79	60-79	60-79	60-79	≥80	60-79	60-79	60-79	60-79	≥80
	Secondary species	2.2.1 Outcome	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.2.2 Management	≥80	≥80	≥80	60-79	60-79	≥80	≥80	≥80	≥80	≥80	≥80
		2.2.3 Information	60-79	60-79	60-79	60-79	60-79	≥80	60-79	60-79	60-79	60-79	≥80
	ETP species	2.3.1 Outcome	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		2.3.2 Management	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		2.3.3 Information	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80	≥80
	Habitats	2.4.1 Outcome	<60	<60	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80
		2.4.2 Management	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80
		2.4.3 Information	60-79	60-79	60-79	≥80	≥80	≥80	60-79	60-79	60-79	60-79	≥80
	Ecosystem	2.5.1 Outcome	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80	≥80	≥80
		2.5.2 Management	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.5.3 Information	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
3	Governance and Policy	3.1.1 Legal and customary framework	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		3.1.2 Consultation, roles and responsibilities	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		3.1.3 Long term objectives	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
	Fishery specific management system	3.2.1 Fishery specific objectives	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		3.2.2 Decision making processes	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80
		3.2.3 Compliance and enforcement	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		3.2.4 Management performance evaluation	60-79	60-79	≥80	≥80	≥80	≥80	60-79	60-79	≥80	≥80	≥80
Total number of PIs equal to or greater than 80			10	10	12	13	13	16	10	11	14	18	27
Total number of PIs 60-79			13	13	13	12	12	9	14	16	13	9	
Total number of PIs less than 60			4	4	2	2	2	2	3				
Overall BMT Index			**0.61**	**0.61**	**0.69**	**0.70**	**0.70**	**0.76**	**0.63**	**0.70**	**0.76**	**0.83**	**1.00**

2.2.4 Eastern English Channel (EEC, 7.d.N)

Principle	Component	Performance Indicator	Pre-Assessment Year 0	Actual Year 1	Actual Year 2	Actual Year 3	Actual Year 4	Actual Year 5	Expected Year 1	Expected Year 2	Expected Year 3	Expected Year 4	Expected Year 5
1	Outcome	1.1.1 Stock status	<60	<60	≥80	<60	60-79	≥80	<60	60-79	60-79	60-79	≥80
		1.1.2 Stock rebuilding	---	---	---	---	---	---	---	---	---	---	---
	Management	1.2.1 Harvest Strategy	<60	<60	<60	<60	<60	<60	<60	60-79	60-79	60-79	≥80
		1.2.2 Harvest control rules and tools	<60	<60	<60	<60	<60	<60	<60	60-79	60-79	60-79	≥80
		1.2.3 Information and monitoring	60-79	60-79	60-79	≥80	≥80	≥80	60-79	60-79	≥80	≥80	≥80
		1.2.4 Assessment of stock status	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
2	Primary species	2.1.1 Outcome	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.1.2 Management	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.1.3 Information	60-79	60-79	60-79	60-79	60-79	≥80	60-79	60-79	60-79	60-79	≥80
	Secondary species	2.2.1 Outcome	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.2.2 Management	≥80	≥80	≥80	60-79	60-79	≥80	≥80	≥80	≥80	≥80	≥80
		2.2.3 Information	60-79	60-79	60-79	60-79	60-79	≥80	60-79	60-79	60-79	60-79	≥80
	ETP species	2.3.1 Outcome	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		2.3.2 Management	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		2.3.3 Information	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80	≥80
	Habitats	2.4.1 Outcome	<60	<60	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80
		2.4.2 Management	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80
		2.4.3 Information	60-79	60-79	60-79	≥80	≥80	≥80	60-79	60-79	60-79	60-79	≥80
	Ecosystem	2.5.1 Outcome	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80	≥80	≥80
		2.5.2 Management	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		2.5.3 Information	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
3	Governance and Policy	3.1.1 Legal and customary framework	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		3.1.2 Consultation, roles and responsibilities	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		3.1.3 Long term objectives	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
	Fishery specific management system	3.2.1 Fishery specific objectives	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80	≥80
		3.2.2 Decision making processes	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	60-79	≥80
		3.2.3 Compliance and enforcement	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80
		3.2.4 Management performance evaluation	60-79	60-79	≥80	≥80	≥80	≥80	60-79	60-79	≥80	≥80	≥80
Total number of PIs equal to or greater than 80			3	6	9				7	9	12	18	25
Total number of PIs 60-79			19	18	18				16	16	14	10	3
Total number of PIs less than 60			6	4	1				5	3	2		
Overall BMT Index			**0.61**	**0.61**	**0.69**	**0.67**	**0.69**	**0.76**	**0.63**	**0.70**	**0.76**	**0.83**	**1.00**

3. Revised pre-assessment

3.1 Summary of Performance Indicator level scores

3.1.1 Principle 1

Performance Indicator	Draft scoring range	Data deficient?	Issue	SG60	SG80
1.1.1 – Stock status – WEC inshore [7.e.I]	**≥80**	No	a	✓	✓
			b	-	✓
Rationale: Updated assessments based on improved landings data - including international data. HR has been at or below HRMSY since 2018 and the stock is therefore considered to be at MSY.					
1.1.1 – Stock status – WEC Lyme Bay [7.e.L]	**60 – 79**	No	a	✓	×
			b	-	×
Rationale: The harvest rate was over 3 times the MSY in 2018, but has dropped significantly in 2019, with this downward trend continued in 2020. The HR is currently twice the HRMSY level. Given the dramatic decrease in exploitation rate, it is considered likely that the stock is above PRI. Scoring for stock status has therefore remained at 60-79.					
1.1.1 – Stock status – WEC offshore [7.e.O]	**≥80**	No	a	✓	✓
			b	-	✓
Rationale: Current HR is below HR MSY and has been for three year time series. Therefore highly likely to be above PRI and at least at (if not above) MSY. This stock shows a drop in harvestable biomass available based on 2021 surveys. This is not yet equated into a 2021 harvest rate for the stock. Given the very low HR compared to HRMSY, the drop in harvestable biomass is not expected to alter the >80 assessment.					
1.1.1 – Stock status – EEC [7.d.N]	**≥80**	No	a	✓	✓
			b	-	✓
Rationale: The HR dropped to MSY level in 2019 where it has remained in 2020. Improved data improves the certainty around this assessment.					
1.1.2 – Stock rebuilding – WEC Lyme Bay [7.e.L]	**<60**	No	a	×	×
			b	✓	×
Rationale: Where 1.1.1 does not reach SG80, PI 1.1.2 is scored. Based on the 1.1.1 assessment, a rebuilding strategy is required for the WEC Lyme Bay stock. This requires a rebuilding timeframe to be specified and evidence that the strategies are rebuilding the stock. Scallop generation time is 2-5 years, and therefore the rebuilding timeframe should be between 5 to 10 years. Monitoring in the form of survey and stock assessment is in place and therefore SG60b is met. SG80b requires evidence of rebuilding or modelling to show it is likely within the timeframe.					

1.2.1 – Harvest Strategy	**<60**	No	a	×	×
			b	×	×
			c	✓	-
			d	-	-
			e	N/A	N/A
			f	✓	✓

Rationale: While there is some limitation on fishing effort through the Western Waters effort regime, this is only for ≥15m vessels, with effort by <15m not currently manageable. There is no overall control of fishing effort in each of the stock units identified and therefore, management is not responsive to the status of the stocks.

There are no defined steps to take when HR MSY is exceeded and there are no defined limit reference points.

There is robust monitoring for the fishery, including landings recorded through Registration of Buyers and Sellers and iFISH database, VMS on ≥12m vessels and iVMS being implemented on vessels <12m, IFCA Byelaws and enforcement, Cefas observer programme and Cefas surveys and stock assessments.

The target species is not a shark and therefore issue e is not scored.
There has been considerable work in documenting the range of alternative measures that have been researched and are currently ongoing, via gear sampling. The steering group provides a forum to discuss further developments and share best practice and knowledge in this area. Gear trials for scallop dredgers fitted with skids have been ongoing in 2021/2022, with final reporting expected later in 2022.

1.2.2 – Harvest control rules and tools	**<60**	No	a	×	×
			b	-	×
			c	×	×

Rationale: There are currently no HCR rules defined that are linked to reference points. There is no evidence that control measures are response to stock status for individual stocks.

1.2.3 – Information and monitoring	**≥80**	No	a	✓	✓
			b	✓	✓
			c	✓	✓

Rationale: Stock assessments are undertaken annually, stock structure (stock assessment areas defined), productivity known (biomass estimated), fleet composition known, based on fishing licences and scallop licences. Other data includes UK MMO iFISH database of landings by ICES rectangle and by port of landing and VMS data.

1.2.4 – Assessment of stock status	**≥80**	No	a	-	✓
			b	✓	✓
			c	✓	✓
			d	-	-
			e	-	✓

Rationale: A range of sources inform the stock assessments including annual surveys, the observer programme, robust data on removals via Registration of Buyers & Sellers and iFISH

database; and improved landings data for international landings was noted in the Cefas 2022 stock assessments.

The stock assessments estimate stock status relevant to HR MSY. Major sources of uncertainty are identified and taken into account e.g. international landings.

The stock assessments are subject to peer review through the ICES Scallop Working Group.

3.1.2 Principle 2

Performance Indicator	Draft scoring range	Data deficient?	Issue	SG60	SG80
2.1.1 – Primary Outcome	**≥80**	No	a	✓	✓
			b	-	-
Rationale: The Cefas King Scallop Catch Composition Report (Santos and Lawler, 2021) confirms that there are no main primary species in the scallop dredge fishery. Therefore SG80 is met.					
2.1.2 – Primary Management	**≥80**	No	a	✓	✓
			b	✓	✓
			c	-	✓
			d	N/A	N/A
			e	✓	✓
Rationale: No main primary species; SG80 is met.					
2.1.3 – Primary Information	**≥80**	No	a	✓	✓
			b	-	-
			c	✓	✓
Rationale: The Cefas King Scallop Catch Composition Report (Santos and Lawler, 2021) combines data from the Cefas Observer Programme and national landing statistics to provide a weight based proportion of the total catch. This is considered to qualify as some quantitative data and SG80 is met.					
2.2.1 – Secondary Outcome	**≥80**	Yes	a	✓	✓
			b	✓	✓
Rationale: The Cefas King Scallop Catch Composition Report (Santos and Lawler, 2021) confirms that there are no main secondary species in the scallop dredge fishery. Therefore SG80 is met. Note, this does not include non-commercial invertebrate species, such as star fish. It is recommended to continue to collate catch composition data from other scallop dredge fisheries to provide further context to the likely levels of non-commercial invertebrates within the catch.					
2.2.2 – Secondary Management	**≥80**	No	a	✓	✓
			b	✓	✓
			c	-	✓
Rationale: No main primary species; SG80 is met. A partial strategy is in place based on a range of measures including: Western Waters management regime; protections within a number of MPAs and IFCA Byelaws that include temporal and spatial restrictions to scallop dredge gear. Note that non-commercial invertebrate distribution is likely to extend beyond scallop dredge habitats.					
2.2.3 – Secondary Information	**≥80**	No	a	✓	✓
			b	-	-
			c	✓	✓
			d	N/A	N/A

			e	✓	✓
Rationale: As 2.2.1. In addition, the alternative measures paper produced for Round 2 is applicable to Round 1, as described in 1.2.1.					
2.3.1 – ETP Outcome	**60 – 79**	No	a	N/A	N/A
			b	✓	×
			c	-	×
Rationale: The Cefas King Scallop Catch Composition Report (Santos and Lawler, 2021) identified limited interaction with ETP species, with some incidental catch of ray species, including starry ray. Based on the distribution of starry ray, it is considered likely that the scallop dredge fishery will not hinder recovery. Sufficient knowledge on the level of interaction is not available to determine this to a 'highly unlikely' SG80 category.					
2.3.2 – ETP Management	**60 – 79**	No	a	N/A	N/A
			b	✓	×
			c	✓	×
			d	-	×
			e	✓	×
Rationale: There are measures in place in the form of IFCA byelaws and MPA closed areas, but not a cohesive strategy. There is some consideration of alternative measures to minimise mortality (release rays back to sea and how to handle rays on board), but this is not formalised or regular practise.					
2.3.3 – ETP Information	**60 – 79**	No	a	✓	✓
			b	✓	×
Rationale: The Cefas King Scallop Catch Composition Report (Santos and Lawler, 2021), together with landing statistics provides some quantitative information on the interaction with ETP species, but this does not cover all species e.g. invertebrates. Further information, including self-reporting, would improve knowledge to support an ETP strategy.					
2.4.1 – Habitats Outcome	**60 – 79**	No	a	✓	✓
			b	✓	×
			c	✓	-
Rationale: The Project UK Channel Scallops Habitat Assessment (Newstead et al., 2020) provides evidence that dredging within the channel is highly unlikely to reduce the structure and function of commonly encountered habitats to the point of serious or irreversible harm. The relative benthic status (RBS) score per habitat type indicated that for the largest habitat present in subarea VIIe (A5.15) had an RBS score of 0.74 under current fishing, but which would recover to >0.8 within a few years. This meets SG80 for 2.4.1a. The objectives and management measures within existing MPAs (MCZs and SACs) are considered to meet the SG60 requirement for vulnerable marine ecosystems (VMEs). The Newstead et al. (2020) report identified three species as VME indicators (*Sarcodictyon roseum*, *Amphianthus dohrnii* and *Arctica islandica*), with RBS scores below 0.8 and recovery unlikely within 20 years, this raises concern for VMEs and points to further management requirements to allow SG80 to be met. In addition to VME indicator species, concern was also identified for the East of Start Point MCZ with qualifying feature of subtidal sand (A5.2). VMS data indicates an overlap of the scallop dredge fishery within this MCZ.					
2.4.2 – Habitats Management	**60 – 79**	No	a	✓	×
			b	✓	×

			c	-	✕
			d	✓	✕
Rationale: There are measures in the form of IFCA byelaws and MPA management, including temporal and spatial closure, as well as technical gear restrictions. However, this is not a partial strategy and does not work to manage the impacts identified in the Newstead et al (2020) report, therefore SG80 is not met.					
2.4.3 – Habitats Information	**60 – 79**	No	a	✓	✓
			b	✓	✓
			c	✓	✕

Rationale: There is a very good level of detail to inform the habitat assessment for scallop dredge fishery in the Channel. The range of habitat types, VMEs and sensitive species are well documented. Based on the information presented in 2.4.1, it is clear that data is appropriate to support the development of a habitats strategy for scallop dredging.

One area of concern, that has been raised by a member of the Round 1 Steering Group, is the lack of spatial footprint data for scallop dredge vessels <12m in length.

There are 33 UK vessels under 12m that hold a scallop licence and are registered to administrative ports located in the Channel area. Of these, 18 are non-sector and 15 are a member of a Producers Organisation (PO) (including Cornish Fish PO and South Western Fish PO) (based on data provided in Defra vessel lists). There are no UK vessels under 10m in length that hold a scallop licence.

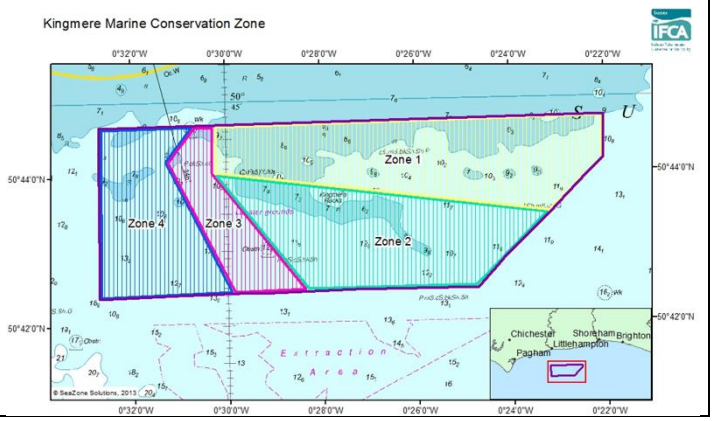
The 33 vessels under 12m that hold a scallop licence have their administrative port listed as: Brixham (10), Plymouth (8), Newlyn (7), Hastings (5) and Poole (3). The majority of the 33 vessels are based from administrative ports within the Devon and Severn IFCA jurisdiction (18), as well as the Cornwall IFCA (7), Sussex IFCA (5) and Southern IFCA (3).

Management of scallop dredging within each of these IFCA jurisdictions can be summarised as follows:

Devon and Severn IFCA have a **Mobile Fishing Permit Byelaw** which includes both temporal and spatial restrictions on scallop dredging, along with technical restrictions on the gear. There are closures to scallop dredging in the following marine protected areas (in some cases there is access to parts of the MPA): Lundy SAC and Lundy MCZ; Lyme Bay and Torbay SAC; Torbay MCZ; Plymouth Sound and Estuaries SAC; Start Point to Plymouth Sounds and Eddystone SCI; Skerries Bank and Surrounds MCZ; Severn Estuary SAC. The features which are protected in those sites include; infralittoral and circalittoral rock, subtidal mud, seagrass and subtidal coarse sediment.

Southern IFCA have a **Bottom Towed Fishing Gear Byelaw** 2016, which sets out a series of closed areas for scallop dredging. As well as spatial management, temporal restrictions are in place (active dredging/fishing permitted between 07:00 to 19:00 only).

Sussex IFCA have a **Fishing Instruments Byelaw** which prohibits scallop dredging within 3nm; **Scallop Closed Season Byelaw** prohibits scallop dredging anywhere in the district June to October inclusive. The only MPA outside 3nm, is Kingmere MCZ and this includes a prohibition for bottom towed gear except for in Zone 3 July - March. The

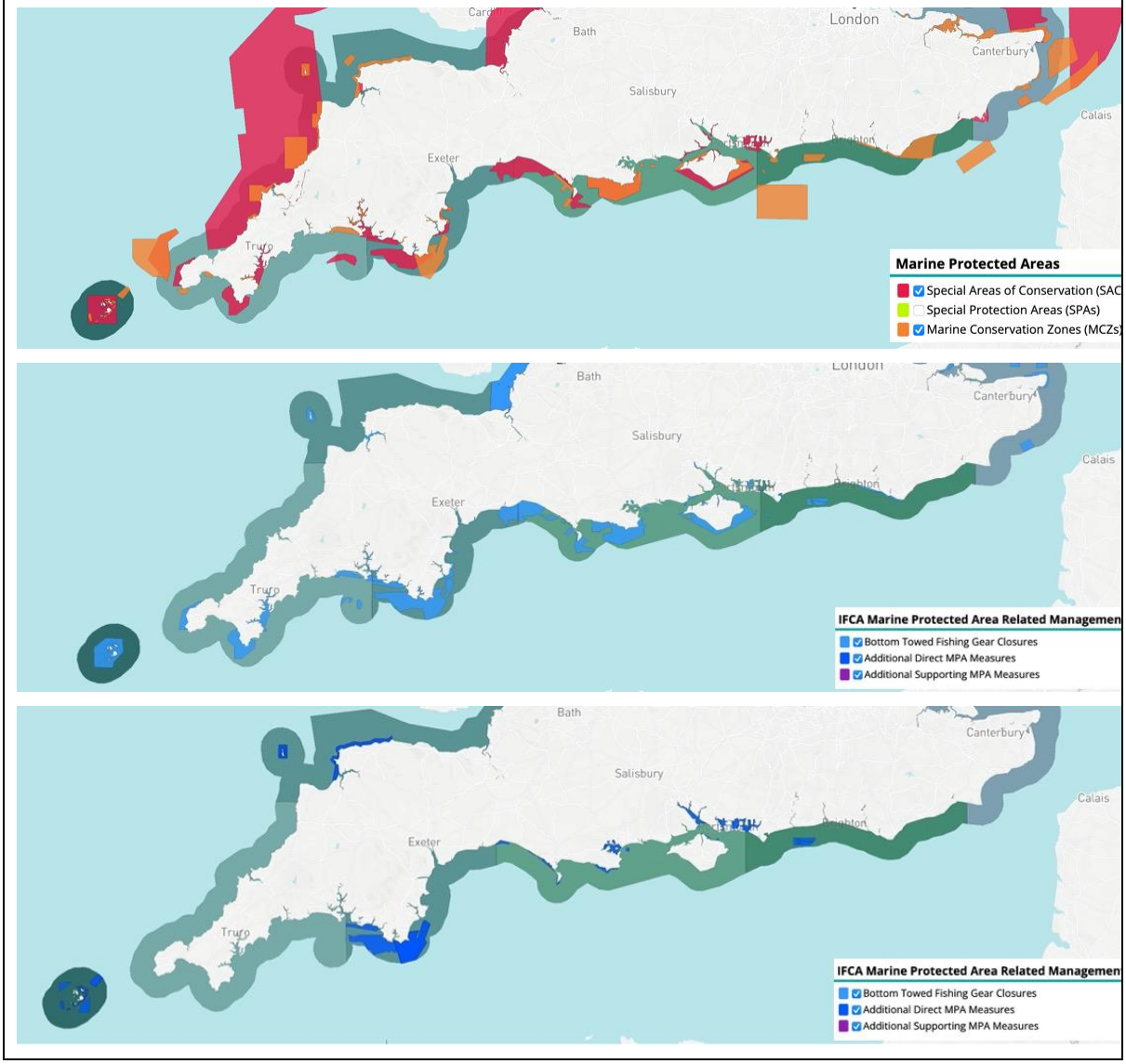


designated features are black seabream, chalk and infralittoral rock with sediment veneer.

Cornwall IFCA have a **European Marine Sites (Closed Areas) Byelaw 2** – whereby all bottom towed gear, including scallop dredging, is prohibited in all SACs (with the exception of the open zones in parts of the Start Point to Plymouth Sound SAC). A range of habitat features are protected, including: infralittoral reef, circalittoral reef, seagrass, maerl, large shallow inlets and bays, sandbanks slightly covered by sea water at all times, estuaries, pink sea fans, pink sea fan anemone and subtidal macrophyte dominated sediment. As well as spatial management, temporal restrictions are in place (active dredging/fishing permitted between 07:00 to 19:00 only).

The location of MPAs and associated MPA management, including bottom towed fishing gear closures are depicted below.

Marine Protected Areas (top) and MPA related management of fisheries (IFCA, 2022)



The rational for this PI meeting SG80 for scoring issues a and b is as follows:

- Reliable spatial data is available for all vessels 12m and over, with data up to 2020 currently publicly available.
- The scallop grounds targeted outside 6 NM by vessels 12m and over are representative of the grounds that vessels under 12m would also target, outside 6 NM (as scallops are located in distinct areas which are well understood based on Cefas stock assessment and surveys).
- The areas inside 6 NM are protected by a range of IFCA Byelaws which limit the temporal and spatial activity of scallop dredging.
- The range of measures described below, indicate comprehensive management of the MPAs within IFCA jurisdiction. It is therefore considered that VMEs are appropriately managed within 6 NM. Within the 6 NM area, it is understood where scallop dredging is not occurring, based on area closures.
- Uncertainty remains for the spatial footprint of the 33 under 12m vessels potentially fishing within 6 NM.

It can be postulated that it is known where these under 12m vessels are prohibited from fishing (i.e. based on MPA management measures), but concern remains related to their activity outside these areas, and also from an enforcement perspective to monitor compliance with MPA measures. Scoring issue c requires that reliable information on the extent of interaction and on the timing and location of use of the fishing gear is available. While this is accessible for vessels 12m and over, it is not yet available for under 12m vessels. Inshore VMS is being implemented throughout 2022, and it is anticipated that the entire UK scallop dredging fleet will have some form of vessel tracking in the near future. To take account of concerns raised in the Steering Group meetings, and the lack of knowledge on the location of fishing activity by the under 12m vessels, a precautionary assessment has been made for **scoring issue c, which does not meet SG80.**

2.5.1 – Ecosystems Outcome	**60 – 79**	No	a	✓	×

Rationale: The wider ecosystem effects of scallop dredging are well documented: a number of studies indicate that benthic communities in areas subject to a long history of scallop dredging will have become simplified to a suite of species that are relatively resistant to fishing disturbance (Currie & Parry 1996; Bradshaw et al. 2002; Brown 2013). Such impacts will be highly localised to dredged areas and are not expected to disrupt key elements at an ecosystem level to the point of serious harm. This is particularly relevant for the English Channel which is a highly dynamic and tidally dominated shallow marine system (Paphitis et al., 2010).

A SICA undertaken for scallop dredging in the Channel highlighted the knowledge gap related to the lack of spatial data for the under 12m vessels. The SICA confirmed that SG60 is met for ecosystem outcome status, but SG80 is not met. The ecosystem effect is considered to be focused on potential impacts to species composition, functional group composition and distribution of communities as a result of the disturbance from the dredge gear penetrating the seabed, rather than the removal of scallops. A such, the ecosystem outcome status is likely to be closer aligned to footprint related management, including intensity and spatial overlap.					
2.5.2 – Ecosystems Management	**≥80**	No	a	✓	✓
			b	✓	✓
			c	-	✓
Rationale: A range of measures exist including MPA, temporal and spatial restrictions, Western Waters effort regime. While not designed specifically for the ecosystem component, these are expected to work towards restraining overall impacts. There is some evidence that these measures are implemented successfully, via VMS and IFCA monitoring.					
2.5.3 – Ecosystems Information	**≥80**	No	a	✓	✓
			b	✓	✓
			c	-	✓
			d	-	✓
			e	-	✓
Rationale: The English Channel is a well-studied ecosystem and good quality information is available for key elements e.g., productivity modelling, trophic work, and habitat mapping. The impacts of scallop fisheries on these elements is adequately understood e.g., habitat damage, biomass removal, species size & maturation studies, etc. And the nature of impacted communities is understood, e.g. target and bycatch spp. (composition, volume & function), ETP e.g. skates / rays are known. Information covers both fisheries-dependent (landing statistics) and fisheries-independent variables (observer programme).					

3.1.3 Principle 3

Performance Indicator	Draft scoring range	Data deficient?	Issue	SG60	SG80
3.1.1 – Legal and customary framework	**≥80**	No	a	✓	✓
			b	✓	✓
			c	✓	✓
Rationale: The Fisheries Framework consists of the Act and associated statutory instruments, relevant retained EU law, the JFS, Fishery Management Plans (FMPs), and the Fisheries Framework Memorandum of Understanding. The latter sets out principles on ways of working and collaboration on fisheries management between the fisheries policy authorities (Defra, 2022). The JFS defines how the fisheries policy authorities have understood the eight fisheries objectives of the Fisheries Act and how they will apply them to fisheries policy. The JFS covers sea fisheries policy and management within UK waters, and in negotiations with other coastal States. The JFS will also inform the UK's approach to international agreements and engagement with international fora.					
	60 – 79	No	a	✓	×

3.1.2 – Consultation, roles and responsibilities			b	✓	✓
			c	-	✓
Rationale: UK roles are well defined with fisheries a devolved matter and therefore managed by authorities in the UK's devolved authorities. Defra sets UK fisheries policy and for English waters with the MMO & IFCAs implementing that policy as management authorities. IFCAs operate out to 6nmiles and MMO in the English EEZ. The MMO acts as a policy and legal advisor on the process of making IFCA byelaws. The IFCA will consult the MMO at various stages of the byelaw making process (Defra, 2011) with Natural England the statutory agency providing advice on nature conservation out to 12nm. Co-operative roles with the EU are defined in the Trade & Cooperation Agreement and are now established with the Partnership Council and Specialised Committees becoming operational (first meeting in July 2021 set out how the SCF would be organised and operate; second meeting in October 2021 set out a work plan and procedures). Changes to legislation and the development of fishery management plans are subject to UK government consultation processes which provides opportunity for interested parties to be involved, including Consultation on Joint Fisheries Statements and Fisheries Management Plans. The scallop FMP is currently being developed. There remains a need to fully understand the roles and responsibilities within the management being proposed within the scallop FMP.					
3.1.3 – Long term objectives	**≥80**	No	a	✓	✓
Rationale: The Fisheries Act 2020 and TCA agreement have MSY and precautionary objectives in line with the MSC criteria. The JFS (draft) sets out the fishery policy authorities interpretation of the eight objectives set out in the Act and how they will deliver them.					
3.2.1 – Fishery specific objectives	**60 – 79**	No	a	✓	×
Rationale: SG80 requirement is for: "Short and long term objectives, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are **explicit** within the fishery and associated enhancement management system(s)". They could currently be viewed as implicit (SG60) within current UK fisheries, but SG80 is not met. The UK scallop FMP is currently being drafted and is understood to include a range of short and long term fishery specific objectives, that include P1 and P2 objectives. The English and Welsh aspects of this scallop FMP will be subject to a formal consultation process.					
3.2.2 – Decision making processes	**60 – 79**	No	a	✓	×
			b	✓	×
			c	-	×
			d	✓	×
			e	✓	✓
Rationale: Decision-making processes by the UK as an independent coastal state relate to management of UK stocks, shared stocks (with the EU and Norway) and the integration of scientific advice. No established decision-making processes for fishery-specific objectives. The SG effectively undertakes this, together with SICG and Defra and IFCAs. Need to formalise this process. Management performance information is not readily available.					
3.2.3 – Compliance and enforcement	**≥80**	No	a	✓	✓
			b	✓	✓

			c	✓	✓
			d	-	✓
Rationale: Monitoring, Control and Surveillance (MCS) has not fundamentally changed with the UK departure from the EU. The UK and EU have agreed to continue to work together to "ensure efficient and effective control and enforcement, including the sharing of various, relevant data. Logbook data for UK vessels >12m fishing in EU waters is currently available, as is VMS positional data. Sanctions are applied consistently, there is some evidence that fishers comply and there is no evidence of systematic non-compliance.					
3.2.4 – Management performance evaluation	**≥80**	No	a	✓	✓
			b	✓	✓
Rationale: Key parts of the management are evaluated, e.g. western waters. UK Fisheries Act includes review provisions for fisheries management plans. The TCA has provisions to be re-evaluated after 5.5 years. There is internal and external review and so the scoring is likely to be at 80.					

4. FIP Extension

4.1 Action Plan

This section presents the Action Plan for the Channel scallop FIP extension period of two years (year 6 and year 7).

Project UK: Channel Scallop Action Plan

Version: 6.1

Date: 06 April 2022

Overview

Fishery name: English and Western Channel Scallop (*Pecten maximus)*		**Start date:** 01 January 2017
Fishery location: Western Channel (7e) and Eastern Channel (7d) *Presumes UoC is UK vessels only, but could be outside UK waters e.g. in Baie de Seine*	**Fishing methods:** Mechanical dredge **UoA vessels**: all UK vessels	**Annual reviews:** End Year 1: March 2018 Completed April 2018 End Year 2: March 2019 Completed April 2019 End Year 3: March 2020 Completed 14 April 2020 End Year 4: March 2021 Completed 12 May 2021 **End Year 5: March 2022 Completed 6 April 2022** End Year 6: March 2023 End Year 7: March 2024
Project leaders: Project UK Fisheries Improvements – Round 1		**Improvements recommended by:** POSEIDON AQUATIC RESOURCE MANAGEMENT

Overview of the Action Plan:

This Action Plan has been extended for two years, up to March 2024. Actions and milestones completed in the initial five-year FIP have been removed and are available in version 5.3. This FIP is part of Project UK Round 1 and is applicable to UK vessels using mechanized dredge targeting king scallop in the Western (7e) and Eastern (7d) English Channel. It has been informed by an MSC pre-assessment (completed in 2017), revised pre-assessment (completed in 2022), quarterly steering group meetings and a review process at end of Years 1 to 5. Actions and milestones have been completed for the MSC performance indicators (PIs) that fail to reach Scoring Guideposts (SG) 60 and/or 80. The Action Plan highlights an ambitious set of actions designed to raise the scores over a defined period to a point at which the fishery could enter MSC assessment. The focus of the action plan is outlined for each MSC Principle below.

Principle 1 (target stock):

- defining appropriate reference points,
- development of **Harvest Strategy**,
- development of harvest control rules and tools at stock level,

Principle 2 (ecosystem):

- Delivering fishery dependant ETP monitoring,
- Demonstrating implementation of iVMS,
- Defining where effects remain a concern for ETP and habitat interaction and developing appropriate management strategies.

Principle 3 (management):

- development of a Fisheries Management Plan, including documenting stakeholder roles and responsibilities, and development of short- and long-term fishery objectives.

It should be noted that a separate FIP for UK scallops in the North Sea, West of Scotland and Irish Sea is being undertaken by Project UK Round 2.

Colour code in tables below:	Principle 1	Principle 2	Principle 3	Recommendations

Project UK: Channel Scallop Action Plan

Version: 6.1

Date: 06 April 2022

Action Plan

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
Action 1: Stock status & stock rebuilding **1.1.1 Stock status** WEC Lyme Bay: **60-79;** WEC inshore, WEC offshore & EEC **≥80** Requirement at SG80: (c) it is highly likely that the stock is above the PRI (d) The stock is fluctuating around a level consistent with MSY **1.1.2 Stock rebuilding** Requirement at SG80: (a) A rebuilding timeframe is specified	**Action lead:** Cefas **Partners:** Defra **Stakeholders:** Industry, MMO, Marine Scotland **Resources:** ICES Scallop WG	**1a.** Yr 6-7: Develop and define reference points related to point of recruitment impairment (PRI) for each stock.		
		1b. Yr 6 & 7: Review stock assessments to determine status of each stock with respect to available reference points.		
		1c. Yr 6-7:.Develop a rebuilding strategy for WEC Lyme Bay, including specified timeframe.		
Action 2: Harvest Strategy 1.2.1 Harvest Strategy **< 60** Requirement at SG80: (a) The harvest strategy is responsive to the state of the stock. (b) The harvest strategy is achieving its objectives (although may not be fully tested).	**Action lead:** SICG **Partners:** Cefas, ICES WG Scallop, IFCA, Industry, Defra **Stakeholders:** Marine Scotland	**2a.** Yr 6-7: Define harvest strategy with stock areas incorporated into management planning.	.	
		2b. Yr 7: Implement harvest strategy, which is responsive to the status of the stocks.		
		2c. Yr 7. Provide preliminary evidence that the harvest strategy is achieving its objective.		
Action 3: HCR 1.2.2 HCRs & tools **< 60** Requirement at SG80: (a) Well-defined HCRs are in place that ensure exploitation rate is reduced as PRI is approached and stock is expected to be consistent or above MSY. (b) HCRs are likely to be robust to the main uncertainties. (c) Available evidence indicates that tools in use are effective in achieving exploitation rates required under HCR.	**Action lead:** SICG **Partners:** Cefas, ICES WG Scallop, IFCA, Defra **Stakeholders:** Industry, Marine Scotland	**3a.** Yr 6-7: Develop and implement harvest control rules related to relevant reference points.		
		3b. Yr 7: Provide available evidence that the HCR tools are effective in reducing exploitation rates, e.g. modelling of effort reduction or catch scenarios.		
Action 4: ETP 2.3.1, 2.3.2, 2.3.3 ETP species outcome, management & information **60-79**	**Action lead**: SG **Partners**: JNCC, MMO, Natural England, Cefas, Industry, IFCAs, Defra	**4a**. Yr 6: Demonstrate recording and reporting of fishery dependant interactions data via the Clean Catch App.		

Project UK: Channel Scallop Action Plan

Version: 6.1

Date: 06 April 2022

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
Requirement at SG80: 2.3.1 (b): Direct effects of the UoA are highly likely to not hinder recovers of ETP species 2.3.2 (b) there is a strategy in place that is expected to ensure UoA does not hinder recovery of ETP species 2.3.3 (b) information is adequate to measure trends and support a strategy to manage impacts on ETP species.	**Stakeholders**: Marine Scotland	**4b**. Yr 6: Define where direct effects of the fishery remain a concern for ETP species (including identifying ETP species and location).		
		4c. Yr 6-7: Develop and implement ETP management strategy.		
Action 5: Habitats & ecosystem 2.4.1 & 2.5.1, 2.4.2, 2.4.3, Habitat & Ecosystem outcome, Habitat management & information **60-79** Requirement at SG80: **2.4.1:** The UoA is highly unlikely to reduce VME habitats to a point where there would be serious or irreversible harm. **2.4.2(a):** There is a partial strategy in place; (b) with objective basis for confidence it will work; (c) evidence it is being implemented successfully. **2.4.3(b):** reliable information on spatial extent, location & timing of fishing gear.	**Action lead:** Seafish SAG **Partners:** Cefas, Industry, IFCAs, Defra, JNCC, MMO **Stakeholders:** Marine Scotland	**5a.** Yr 6-7: Provide evidence of successful implementation of iVMS for under 12m vessels.		
		5b. Yr 6: Define where direct effects of the fishery remain a concern for habitats, including MPA, VMEs and commonly encountered habitats (including identifying habitat species and location).		
		5c. Yr 6-7: Develop and implement habitat management strategy.		
Action 6: Governance and management 3.1.2 Consultation roles & responsibilities: **60-79** 3.2.1 Fishery-specific objectives: **60-79** 3.2.2 Decision-making processes: 60-**79** Requirement at SG80: 3.1.2 (a): Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are explicitly defined and well understood for key areas of responsibility and interaction. **3.2.1(a):** Short and long term objectives, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are explicit within the fishery-specific management system. **3.2.2 (a)** There are established decision-making processes that result in measures and strategies to achieve the fishery-specific objectives.	**Action lead:** SICG **Partners:** ICES WG Scallop, Defra, Industry, IFCAs. **Stakeholders**: Marine Scotland	**6a**. Yr 6-7: Develop Fishery Management Plan.		
		6b. Yr 6-7: Consult on Fishery Management Plan		
		6c. Yr 7: Implement Fishery Management Plan.		

Project UK: Channel Scallop Action Plan

Version: 6.1

Date: 06 April 2022

Standard requirement	Lead & partners	Timescale / milestones	Progress / outcome	Revised milestone
Action 7: Recommendations	Action lead: Steering group Partners: Defra, Industry, Cefas, IFCAs	**7a.** Future labour requirements - ensure the fishery remains in scope of MSC with regards to any future labour requirements and the current scope requirement: No vessel shall be eligible that has had a conviction in the last 5 years.		
		7b. Principle 1 – Circulate final report on larval distribution		
		7c. Principle 2 - Obtain any further research on representative catch data to build knowledge base on primary and secondary species.		
		7d. Principle 3 – Undertake an external review of Channel Scallop FMP.		

4.2 Benchmarking tool

The BMT for the extension period is presented below, combined for all Chanel scallop stocks.

Principle	Component	Performance Indicator	Actual Year 5 WEC Lyme Bay	Actual Year 5 WEC offshore, WEC inshore, EEC	Expected Year 6	Expected Year 7
1	Outcome	1.1.1 Stock status	60-79	≥80	≥80	≥80
		1.1.2 Stock rebuilding	---	---	---	---
	Management	1.2.1 Harvest Strategy	<60	<60	<60	60-79
		1.2.2 Harvest control rules and tools	<60	<60	<60	60-79
		1.2.3 Information and monitoring	≥80	≥80	≥80	≥80
		1.2.4 Assessment of stock status	≥80	≥80	≥80	≥80
2	Primary species	2.1.1 Outcome	≥80	≥80	≥80	≥80
		2.1.2 Management	≥80	≥80	≥80	≥80
		2.1.3 Information	≥80	≥80	≥80	≥80
	Secondary species	2.2.1 Outcome	≥80	≥80	≥80	≥80
		2.2.2 Management	≥80	≥80	≥80	≥80
		2.2.3 Information	≥80	≥80	≥80	≥80
	ETP species	2.3.1 Outcome	60-79	60-79	60-79	≥80
		2.3.2 Management	60-79	60-79	≥80	≥80
		2.3.3 Information	60-79	60-79	≥80	≥80
	Habitats	2.4.1 Outcome	60-79	60-79	60-79	≥80
		2.4.2 Management	60-79	60-79	60-79	≥80
		2.4.3 Information	≥80	≥80	≥80	≥80
	Ecosystem	2.5.1 Outcome	60-79	60-79	60-79	≥80
		2.5.2 Management	≥80	≥80	≥80	≥80
		2.5.3 Information	≥80	≥80	≥80	≥80
3	Governance and Policy	3.1.1 Legal and customary framework	≥80	≥80	≥80	≥80
		3.1.2 Consultation, roles and responsibiliti	60-79	60-79	≥80	≥80
		3.1.3 Long term objectives	≥80	≥80	≥80	≥80
	Fishery specific management system	3.2.1 Fishery specific objectives	60-79	60-79	≥80	≥80
		3.2.2 Decision making processes	60-79	60-79	60-79	≥80
		3.2.3 Compliance and enforcement	≥80	≥80	≥80	≥80
		3.2.4 Management performance evaluation	≥80	≥80	≥80	≥80
Total number of PIs equal to or greater than 80			15	16	20	25
Total number of PIs 60-79			10	9	5	2
Total number of PIs less than 60			2	2	2	
Overall BMT Index			**0.74**	**0.76**	**0.83**	**0.96**

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