

Ecological Risk Assessment

Action Plan for the Southwest Mixed Fishery

Introduction

In data limited situations, an Ecological Risk Assessment (ERA) framework can be used to assess the risks that fishing poses to an ecosystem within a defined area. Specifically, an ERA focuses on the exploited (the commercial fish species targeted) and the non-exploited components (non-commercial fish bycatch, seabirds, marine mammals, and benthic habitats).

Some of the risks highlighted are likely to be generated by a lack of data and information so improving monitoring and collecting additional data can, over time, lead to a lower risk score.

Seafish has been using ERAs in the Southwest mixed fishery for almost 10 years to help understand the state of these fisheries and to drive improvements. In 2022 we updated the ERA; this Action Plan details the steps that will be taken over the next five-year period to address the identified higher risks.

The overarching purpose of the ERA is to drive demonstrable improvements in the management and status of key species in the Southwest (SW) mixed fishery. The successful delivery of this five-year Action Plan is key to meeting this overarching purpose.

Action Plan

The Action Plan has been developed by the SW Ecological Risk Assessment (ERA) Client Group based on the key findings of the 2022 ERA report. It details the actions that will be taken to address the following high-risk issues identified by the ERA Expert Panel when it met in late 2021.

- Species sustainability: cuttlefish, pouting, dabs and mixed ray species were assessed as being at the highest risk.
- Benthic habitats: higher risk interactions were primarily caused by demersal trawls, but beam trawls and dredges also contribute to this risk.
- Endangered, Threatened and Protected Species: fixed nets pose the greatest risk to protected species

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The Client Group considered the findings from the ERA report and wider supply chain requirements, and identified the following seven priority actions:

1. Establish an open/accessible source of metadata on SW fisheries, that is updated annually.
2. Enable the transition to evidence-based management by addressing data gaps across key SW mixed fisheries.
3. Provide more accurate assessments of the impact that fishing gear deployed in the SW mixed fishery, has on benthic habitats.
4. Improve monitoring of seabird interactions with fixed gill nets to enable more accurate assessment of the risk gill net fishing poses to seabird populations in the area.
5. Progress options to enable full stock assessments to be completed for cuttlefish, squid, skates and rays.
6. Investigate, and if necessary, carry out work to address the high-risk scores for the stock status of dabs and pouting with respect to beam and demersal trawling (the principal catching gears).
7. Deliver relevant and accessible information updates on the status of, and improvements to, the long-term sustainability of key commercial species and the associated environmental interactions from commercial fishing in the SW mixed fishery.

The focus of these seven actions is to improve knowledge and understanding on the nature and extent of commercial fishing interactions on target and bycatch species, benthic habitats, and endangered, threatened and protected species. Delivering these actions will:

- Enable the current risk scores to be reviewed to assess if the risk requires direct action.
- Inform the development and implementation of options to mitigate the risk.
- Improve understanding of the areas that were identified as medium and low risk during the ERA assessment.

Priority Action 1: Establish an open/accessible source of metadata on SW fisheries, that is updated annually.

Key to improving the management, and in time the collective status of SW fisheries, is improving the information base for each species. While in some situations this will require new data to be collected, in many cases there are data that have already been collected by industry across a range of initiatives including observer data, Fisheries Science Partnerships (FSP's), stock surveys, and Fisheries Improvement Plans (FIPs). Alongside this there is also further data available on, CPUE, landings, discards, PO catch data, vessel tracks (plotters, AIS, VMS, iVMS) and logbook information. Some but not all of these datasets were collated

and used in the current ERA assessment. Before further work is undertaken to address data gaps, we need to understand the data that we already have.

The purpose of this action is to compile a definitive guide that:

- Captures the metadata for all datasets relevant to the management of fishing interactions in the SW mixed fishery.
- Reviews the appropriateness/robustness of each dataset to confirm which are valid and suitable to use in supporting research and management.
- Details the location and access arrangements for valid datasets.
- Provides an overview of how these data could be used.
- Is updated annually and is available via Seafish.

Priority Action 2: Enable the transition to evidence-based management by addressing data gaps across key SW mixed fisheries.

Once the SW Metadata Guide is finalised (Priority Action 1), work will commence on producing a comprehensive assessment of the outstanding data gaps that exist across the SW mixed fisheries. The focus will be on:

- Assessing the full extent of the data gaps
- Producing a comprehensive five-year research and monitoring plan to address the priority gaps.

The data gaps within scope include:

- Data to support improved stock assessments (such as catch, effort, length and age frequency, natural mortality, distribution, stock structure, etc.).
- Data required to support improved assessment of the environmental impacts of fishing across the SW mixed fishery.

The five-year research and monitoring plan will also align with the data requirements to support the Channel Demersal Non-Quota Species Fisheries Management Plan.

Priority Action 3: Improve the assessment of benthic interactions from fishing activity across the SW mixed fisheries.

Current data on the location of fishing activity across the SW mixed fishery are not available at a scale or frequency to accurately assess the risk that fishing poses to benthic habitats.

Technology continues to improve in this area, and it is possible to collect appropriate data on the spatial and temporal distribution of fishing effort. To fully assess the extent of fishing gear interactions on benthic habitats, more accurate spatial and temporal information will need to be collected across the SW. This Priority Action is focused on addressing these gaps and will:

- Review the quality and extent of available location data, and the suitability of current monitoring systems and onboard wheelhouse GPS technologies
- Define the footprint of different towed gear types (gear spread, speed, tow duration, direction, location)
- Collate available data and assess gaps
- Investigate and trial technologies to provide the data to fill these gaps.
- Assess the overlap between the improved trawl footprint with the most frequently fished, rarest and most sensitive habitats to determine the extent of the risk and the need for further mitigation.

Priority Action 4: Improve the monitoring of seabird interactions with fixed gill nets to enable more accurate assessment of the risk gill net fishing poses to seabird populations in the area.

The results of the ERA showed that fixed nets pose a significant risk to several seabird species. To address this risk, we will:

- Review the available data, including the data identified under Priority Action 1, to assess if there are sufficient data available to better understand the extent of the risk and potential need for management intervention.
- Assess levels of observer coverage, across the fixed gill net fleet, to establish if this can provide appropriate monitoring of interactions.
- Where existing information is still insufficient, a monitoring programme, in collaboration with fishermen, of appropriate frequency and intensity will be designed and implemented. We expect that this monitoring programme will run for five years initially.

Priority Action 5: Progress options to enable full stock assessments to be completed for cuttlefish, squid, skates and rays.

Cuttlefish, squid, and skates and rays were identified as at high risk by the ERA Panel. These are also species that the Client Group has identified as commercially important. Under this action, the current information on each stock will be reviewed to determine whether there are sufficient data (quality and quantity) available to conduct a stock assessment and the steps required (linked to Priority Action 2) to address the gaps to enable this happen. This is a technical evaluation and will require outsourcing to a competent

agency. Alongside this we will review how similar species are assessed in other jurisdictions so that we can take advantage of previous research into stock assessment methodologies.

Priority Action 6: Investigate, and if necessary, carry out work to address the high-risk scores for the stock status of dabs and pouting with respect to beam and demersal trawling (the principal catching gears).

The high-risk scores associated with dabs and pouting are due to their susceptibility to capture by beam and demersal trawl fisheries in the Southwest. The commercial importance of dabs and pouting to the Client Group was seen as limited at the current time, though both dabs and pouting may have the potential to increase in commercial importance if the sustainability issues could be addressed. As high-risk species in a mixed fishery, their risk ratings also need to be addressed to improve the overall sustainability credentials of the mixed demersal trawl fishery.

To address the high-risk scores work will include:

- Review currently available information on dab and pouting.
- Review risk ratings using updated information
- If required, instigate data collection work to fill knowledge gaps on these species

Priority Action 7: Deliver relevant and accessible information updates

Key to the successful delivery of this Action Plan is transparency in terms of the work that is being undertaken, the results generated, how the findings will be used, and the key decisions that will be taken. To ensure this happens an annual review report will be produced that details progress against each of the actions and key findings. This essentially has the same function as the annual reporting in MSC certified fisheries with conditions, and in fisheries with FIPs. This information will be important in delivering on our longer-term ambition to demonstrate to the wider seafood supply chain that the ERA is an effective tool to inform responsible sourcing decisions.

Alongside this, as our knowledge and understanding improves we will ensure this information is used to inform related initiatives such as the delivery of FMPs under the Joint Fisheries Statement, MSC FIPs, and third-party sourcing tools. As a first step we will review the current Marine Conservation Society Good Fish Guide scoring to determine if the ERA risk scores, and information collected during the ERA process, warrant MCS scores being updated.



Duration:

This Action Plan is expected to run for five years from 2023 to 2028. Some of the Priority Actions will be relatively straight forward 'task and finish' type activities while others will involve multiyear work streams, some of which may extend beyond the duration of this Action Plan. At the end of the five-year period, it is intended that we will complete a new ERA to assess the overall status of these fisheries. The expectation is that we will see further improvements to the risk status of the SW mixed fishery.

Delivery:

The Client Group will have direct oversight of the delivery of this ERA Action Plan. Given that the scope of the Action Plan is closely aligned to the work priorities of the Finfish Industry Advisory Group (FIAG), the Client Group will report on progress to FIAG. Seafish intends to appoint a dedicated project manager, to work alongside the Client Group and the wider seafood supply chain, to deliver this Action Plan. The project manager will also be responsible for:

- Engaging on other related work streams taking place across the Southwest to ensure opportunities for collaboration or leveraging existing work are realised.
- Facilitating Client Group involvement in steering the programme of work, monitoring progress and deliverables, and managing project risks.
- Engaging with the wider supply chain to demonstrate how the ERA work supports responsible sourcing requirements.