Title of Proposal

The Sea Fish (Prohibition on Fishing) (Firth of Clyde) (No. 2) Order 2022

Purpose and intended effect

Background

In response to the International Council for Exploration of the Sea (ICES) advice on the poor state of cod stocks in ICES area 6a (west of Scotland), the European Union (EU) introduced a number of temporary closures in 2000 and 2001 to protect adult cod during the spawning season in both the Irish Sea and the Firth of Clyde.

Since 2002, the decision to implement the closure in the Firth of Clyde has rested with the Scottish Government and during this time a closure has been in place every year by means of either an annual or biennial Scottish Statutory Instrument (SSI).

More recently, the Scottish Government has been supporting an industry-led survey which aims to study the population of cod in the Firth of Clyde and inform future fisheries management decisions. This study began in March 2016. The Scottish Government will review the outputs of the survey on completion, and we currently expect the report to be released in early 2022.

Objective

To protect cod in two specified areas of the Firth of Clyde from being fished or disturbed during the spawning period on a recognised spawning ground.

Rationale for Government intervention

Since 2001, a specific area (consisting of two areas) in the Firth of Clyde has been closed to fishing each year between 14 February and 30 April (the closure period) in order to protect spawning cod. Since 2002, the Scottish Government has had responsibility for the closure which has been implemented on an annual or biennial basis via a Scottish Statutory Instrument (SSI). Given the available evidence, the Scottish Government maintains the view that the closure offers some necessary increased protection to spawning cod at a crucial time in their life cycle.

By adopting this SSI the Scottish Government helps safeguard cod stocks for the future and contributes towards objectives under the National Performance Framework, in particular the National Outcome "We value, enjoy, protect and enhance our environment" and the National Indicator measuring the "Sustainability of fish stocks".

Consultation

Within Government

Colleagues from Marine Scotland Science, Marine Scotland Planning and Policy, Marine Scotland Sea Fisheries and Marine Scotland Compliance have been consulted.

Public Consultation

The Scottish Government consulted with key stakeholders regarding this proposal. Stakeholders were initially given four weeks to provide comments between 15 September and 13 October 2021. Stakeholders were asked to consider three questions:

- Do you agree with the Scottish Government's view that it is appropriate to renew the seasonal closure in the Clyde, as in previous years, to protect spawning cod, for 2022/23?
- 2. Do you have any views on the proposed continuation of exemptions, which have previously applied, for fishing boats fishing with scallop dredges, creels or trawls used for fishing for Norway lobsters?
- 3. Do you have any views on alternative or complementary measures that could be considered for the protection of cod spawning in the Firth of Clyde for 2024 and beyond?

18 responses were received. 16 of the 18 respondents agreed that the seasonal closure should continue in 2022 and 2023. 1 respondent disagreed with the closure completely, whilst another response recommended that additional evidence was considered before a decision was made. 8 of the respondents wished to maintain the existing exemptions. 10 responses called for some, if not all, of the exemptions to be removed. There was also a call for a wider review of the closure and consideration of a wider package of measures to be used.

Following calls from some stakeholders to widen the consultation, it was decided to extend the process and launch a second phase of online consultation.

The wider public consultation ran from 20 October 2021 to 4 November 2021. There were 189 responses to the wider consultation of which 177 were from individuals rather than organisations. 95.7% of the total 189 responses agreed that the spawning closure should continue. When asked about the existing exemptions, a significant majority of responses called for some or all exemptions to be removed.

A further stakeholder meeting was held on 24 January 2022, to consult on the possibility of making the closure more targeted and focused.

Business

The circulation list for the first phase of the consultation process included representatives of the fishermen who would primarily be affected by the closure. Apart from one individual, they all agreed that the Firth of Clyde closure should remain in place for 2022 and 2023.

Options

It is difficult to quantify the costs or benefits in this case because the closure has been in effect every year since 2001. Prior to this time fishing conditions were very different. As a result it becomes difficult to compare and contrast the time before the closure and the present day to quantify the cost or benefit of not having the closure in place now. We are clear, however, that we have a responsibility to protect cod populations as suggested by the evidence.

Option A: Do not maintain a closure

Costs

Under this option there is a potential environmental loss of an iconic fish species.

Not introducing a closure in the Firth of Clyde could be deleterious to the cod stock, particularly given the likelihood of increased fishing pressure displaced by conservation measures in the Irish Sea. The most recent scientific advice from ICES for cod in ICES area 6a (west of Scotland)¹ – which includes the Firth of Clyde - states that recruitment of cod has been very low since 2001. The current spawning stock biomass is extremely low and when the Maximum Sustainable Yield (MSY) approach is applied there should be zero catches during 2022.

If the cod stocks become depleted further this would have long term financial costs. Fishermen would be at high risk of losing this valuable resource altogether, as would the marine ecosystem. West of Scotland cod landed by Scottish vessels in 2018 had a value of $\mathfrak{L}1.8\text{m}.^2$

A closure in respect of cod is likely to benefit other, healthier stocks such as haddock, which can be difficult to catch without also catching cod. Measures to help recover cod stocks, such as the proposed Firth of Clyde closure, are therefore important — as with other measures - to ensure fishermen are afforded adequate opportunities to fish other demersal species in the long term.

Benefits

Specifically demersal fishermen would be able to fish unhindered in the specified area all year round, avoiding any potential short-term cash-flow problems that might be caused by temporarily prohibiting activity in the Firth of Clyde.

Option B: Implementing a prohibition on fishing during the closure period in 2022 and 2023, subject to the same exemptions available in previous years

Costs

There are no additional short-term financial costs associated with implementing the closure on the same basis as previous years (i.e. with exemptions to the closure for vessels fishing with a scallop dredge, a creel, or a trawl used for fishing for Norway lobsters) for a further 2 years.

The proposed closure area is within the wider ICES area 6a, which for 2022 has a total allowable catch (TAC) of 1,279 tonnes and currently a 2% bycatch limit for cod.

There are ecological costs – activity within the spawning grounds is understood to have an impact on the spawning cod, by making spawning more difficult. This is likely to lead to a further depletion of the cod stock, which could negatively impact the fishing industry in the medium- to long-term.

Benefits

The closure protects spawning areas to some extent, and as such provides a higher chance

¹ https://www.ices.dk/sites/pub/Publication%20Reports/Advice/2020/2020/cod.27.6a.pdf

² Scottish Sea Fisheries Statistics 2020 - gov.scot (www.gov.scot)

of stock recovery and future fishing opportunities.

Implementing the closure subject to the same exemptions as those implemented in previous years provides a degree of consistency that will help to avoid disruption to fishing patterns established since 2001, and will help ensure fishermen comply with the restrictions. This is evident in that there is almost 100% compliance with the closure.

During the closure, activity levels have varied and these depend on a number of factors such as weather and a preference for other available fishing grounds. In 2020 we estimate the landed value caught from within the relevant area to be just over £76,000 spread over 16 vessels. In 2021 over 30 vessels had activity recorded in the area, with a value of just over £368,000.

Option C: Prohibition of all fishing activity during the closure period in 2022 and 2023

Costs

There are potential costs for fishermen in prohibiting all fishing activity during the closure period in 2022 and 2023. Based on the data we have, a number of fleet segments have historically fished in the closed area. Between 2017 and 2021, a total of between 18 (2019) and 32 (2021) Nephrops vessels fished within the closed area each year during the closure period. Meanwhile between 1 (2021) and 7 (2018) scallop vessels fished within the same area during the same period. In terms of creel vessels, Marine Analytical Unit data suggests that only 2 vessels have benefited from the exemption in 2020 and 2021, although anecdotal evidence suggests a range of higher numbers.

As noted above, we estimate that, in 2020, landed value caught from within the relevant area was just over £76,000 spread over 16 vessels, while in 2021 over 30 vessels had activity recorded in the area with a landed value of just over £368,000. Given the severe disruption caused by the Covid-19 pandemic in 2020, figures for 2021 likely provide a more accurate indication of landed value. The vast majority of this landed value comes from Nephrops vessels.

While some vessels may be able to move into other grounds, smaller vessels may struggle to do so and would compete for space with other established users on new grounds. More details are given in the impact section below.

The proposed closure area is within the wider ICES area 6a, which for 2022 has a total allowable catch (TAC) of 1,279 tonnes and currently a 2% bycatch limit for cod.

Benefits

Prohibition of all fishing activity provides comprehensive protection to spawning areas, and therefore provides a much higher chance of stock recovery and future fishing opportunities. While spawning, cod are extremely vulnerable to fishing activity. They are focussed on mating, and the males are unwilling to leave their hard-won leks, so both sexes are less likely to try and evade oncoming fishing gear. Physical disturbance during mating will disrupt the activity and potentially destroy the lek areas, and cod so disturbed may not return (and therefore may not spawn that year). Prohibition of all fishing activity should significantly mitigate this risk.

Prohibition of all fishing activity without exemption would create consistency with the management of other areas of Scottish waters, namely the UK National North Sea Cod Avoidance Plan, which includes closure areas for all gear types (excluding pelagic), and the recent emergency Marine Protected Area (MPA) designation in certain areas of the Inner

Sound, where there is now a prohibition on creeling and diving in order to protect the critically endangered flapper skate nursery area.

More generally, the closure will provide a breathing space for the local eco-system, reducing pressure on all stocks in the closure area.

Option D: Prohibition of all fishing activity over a more targeted closure area during the closure period in 2022 and 2023

Costs

The costs of this option would be significantly mitigated by the fact that the closure areas are more targeted (i.e. 28% smaller than the overall closure areas to date), focusing on those sediment areas which spawning cod are known to prefer. Nonetheless, there are potential costs for some segments of the fleet in prohibiting all fishing activity during the closure period in 2022 and 2023. Based on the data we have, a number of fleet segments have historically fished in these (more targeted) closed areas. Between 2017 and 2021, a total of between 18 (2019) and 32 (2021) Nephrops vessels fished within these closed area each year during the closure period. Meanwhile between 1 (2021) and 7 (2018) scallop vessels fished within the same areas during the same period. In terms of creel vessels, Marine Analytical Unit data suggests that only 2 vessels have benefited from the exemption in 2020 and 2021, although anecdotal evidence places the number closer to 10.

As noted above, we estimate that, in 2020, landed value caught from within the relevant areas was just over £76,000 spread over 16 vessels, while in 2021 over 30 vessels had activity recorded in these area with a landed value of just over £368,000. Given the severe disruption caused by the Covid-19 pandemic in 2020, figures for 2021 likely provide a more accurate indication of landed value. The vast majority of this landed value comes from Nephrops vessels.

With a more targeted closure, the effect on some of these fleet segments (e.g. Nephrops vessels) will be significantly mitigated, with many of them able to continue their activities. Moreover, many vessels may be able to move into other grounds (although smaller vessels are likely to struggle to do so). More details are given in the impact section below.

The proposed closure area is within the wider ICES area 6a, which for 2022 has a total allowable catch (TAC) of 1,279 tonnes and currently a 2% bycatch limit for cod.

Benefits

Prohibition of all fishing activity within targeted areas where the science suggests cod are most likely to spawn provides comprehensive protection to spawning areas, and therefore provides a much higher chance of stock recovery and future fishing opportunities. While spawning, cod are extremely vulnerable to fishing activity. They are focussed on mating, and the males are unwilling to leave their hard-won leks, so both sexes are less likely to try and evade oncoming fishing gear. Physical disturbance during mating will disrupt the activity and potentially destroy the lek areas, and cod so disturbed may not return (and therefore may not spawn that year). Prohibition of all fishing activity should significantly mitigate this risk.

Prohibition of all fishing activity without exemption would create consistency with the management of other areas of Scottish waters, namely the UK National North Sea Cod Avoidance Plan, which includes closure areas for all gear types (excluding pelagic), and the recent emergency Marine Protected Area (MPA) designation in certain areas of the Inner

Sound, and related Marine Conservation Order, which includes prohibition on creeling in order to protect the critically endangered flapper skate nursery area.

More generally, the closure will provide a breathing space for the local eco-system, reducing pressure on all stocks in the closure area.

Scottish Firms Impact Test

All fishing vessels affected can be considered small businesses. These businesses have been consulted in the development of the proposed legislation via their fisheries associations. In particular The Clyde Fishermen's Association, whose fishermen predominantly work in and around the area affected, were consulted.

The SSI will not affect quota levels and should not prevent fishermen catching their full quota over the course of the year, although there may be some short term effect on cash flow during the closure. Nearby areas, such as the North Channel and the remainder of the Firth of Clyde will remain open, with the aim of enabling fishermen to work elsewhere during the closure. However, Option D will continue to have an impact on fishing vessels used to working in the more targeted closed areas, particularly small creel vessels who may struggle to move on, due to increased fuel costs and the existing high levels of activity in static ground in surrounding areas.

Competition Assessment

There will be no negative competitive impact arising from this regulation. The regulation will not lead to a differentiation in costs between new and existing fishermen. The regulation is unlikely to affect the market structure. The measures will apply to all British vessels in the specified areas of Scottish waters. In effect the closure will apply to all vessels because the area falls within territorial waters.

Legal Aid Impact Test

Maintaining a closure in 2022 and 2023 would not give rise to increased use of legal processes or create new rights or responsibilities and should therefore have no new impact on the legal aid fund.

Enforcement, sanctions and monitoring

Enforcement and sanctions

Enforcement would be undertaken predominantly by Marine Scotland Compliance, operating under Scottish legislation. If the measures are found to have been contravened, a fine not exceeding £50,000 may be levied on summary conviction and an unlimited fine on indictment. The court can also order the forfeiture of any fish in respect of which the offence was committed and of any net or gear used in the commission of the offence. On summary conviction, if the court does not order the forfeiture of fish, it may impose an additional fine not exceeding the value of the fish.

Monitoring and review

Marine Scotland Science is responsible for monitoring levels of fishing activity and the

effect of particular fishing methods on stocks in Scottish waters, within the framework of a strategic work programme determined by the Scottish Government. It will be possible to review the effect of these measures by assessing landings data from before and after their introduction.

Given that Option D is a new approach Marine Scotland Compliance will undertake increased monitoring of the closure.

In addition, Clyde Fishermen's Association has been involved with a programme of work delivering a biannual survey of cod in the closed areas. The survey began in March 2016 and we currently expect the results to be published in early 2022. Interim reports have confirmed that cod still spawn in the closed areas and during the closed period reaffirming that the closure is in the correct place and time to protect spawning cod.

Implementation and delivery plan

The Order received Ministerial agreement after reconsideration of the responses from the stakeholder consultation, the scientific evidence, the policies set out in the SGP agreement and the advantages of having a uniformed approach with other management measures. Following further discussion with local stakeholders on 24 January Marine Scotland took onboard feedback to revise the closed areas (Option D). It is proposed to lay the Order on 1 February 2022 and it is expected to come into force on 12 February 2022, with the closure coming into effect on 14 February 2022.

Post Implementation Review

Marine Scotland will continue to engage with local stakeholders on the implementation of this closure (option D). Following the 2022 spawning season closure Marine Scotland will meet with stakeholders to understand their experience and reflections of its efficacy.

Any complementary or relevant ongoing government initiatives will be considered by the Scottish Government, along with further scientific advice and the views of stakeholders, while deciding if any alternative or complementary fisheries management measures could be considered longer-term following the Order.

Summary and recommendation

Given the continued poor state of the cod stock in ICES area 6a (ICES advises no directed fishing) even a small potential benefit justifies the removal of exemptions, in line with cod spawning measures elsewhere. Although there may be a reduction in demersal catches during the closure, the overall quota remains unchanged. The total amount of cod or other species that fishermen are able to land during 2022 and 2023 is unaffected by the more targeted closure areas. The Scottish Government therefore intends to legislate for a more targeted spawning season closure without exemptions as per option D. This is a pragmatic and evidence-based solution to ensure that the spawning cod and associated habitat are protected whilst also mitigating the socio-economic impacts on our vulnerable coastal communities.

Compared to the original closure with exemptions this provides for increased protection for spawning cod.

• Summary costs and benefits table

| Option | Total benefit per annum: - economic, environmental, social | Total cost per annum: - economic, environmental, social - policy and administrative |
|--------|---|--|
| A | Demersal fishing (albeit a small proportion of boats in the West of Scotland) would be able to fish unhindered all year long. | Potential environmental loss of an iconic fish species. If the cod stock is further depleted it may have longer term financial impacts. |
| В | Promoting West of Scotland cod stock recovery, for future stock conservation and potential fishing opportunities. | Short-term revenue loss but no loss over the course of a year. |
| С | Increased likelihood of West of Scotland cod stock recovery, for future stock conservation and potential fishing opportunities. | Short-term revenue loss and additional short-term costs to fishermen who have previously fished in the area. |
| D | Increased likelihood of West of Scotland cod stock recovery, for future stock conservation and potential fishing opportunities. | Short-term revenue loss and additional short-term costs to fishermen who have previously fished in the area. Given the closure is a smaller, more targeted area, the number of fishermen impacted will be smaller than Option C. |

Declaration and publication

I have read the Business and Regulatory Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs. I am satisfied that business impact has been assessed with the support of businesses in Scotland.

Signed: Mairi Gougeon

Date: 01/02/2022

Mairi Gougeon

Cabinet Secretary for Rural Affairs and Islands

Scottish Government Contact point:

Allan Gibb

Marine Scotland, Sea Fisheries

07920477514