



***Mixed-Stock Fisheries
(Tabled by the European Union)***

1) Brief description of existing MSFs**EU-Finland**

Salmon fishery in the main stem of the large River Teno, including both various netting methods and angling, is exploiting c. 30 genetically different salmon populations from different tributaries and areas of the main stem.

Conservation limits are established for 24 populations of the Teno stock complex. Target attainment evaluations are currently available for 14 tributaries (partly including and combining lower order tributaries), the main stem, and for the Teno system as a whole.

EU-Ireland

As of 2020, there are two managed mixed-stock fisheries in Ireland, Killary Harbour and Castlemaine Harbour. A third mixed-stock fishery, Tullaghan Bay, operated until 2013.

Killary Harbour

In the case of the Killary Harbour fishery, there are two contributing river stocks (Bundorragha (Delphi) and Erriff) both of which are meeting and exceeding their conservation limits (CL). The Technical Expert Group on Salmon (TEGOS; formerly the Standing Scientific Committee on Salmon (SSCS)) undertake a risk assessment for the common estuary which results in a higher requirement for spawners in both rivers than simply combining the CLs for the rivers to ensure simultaneous attainment of CL in both rivers.

Castlemaine Harbour

The mixed-stock fishery in Castlemaine Harbour, Co. Kerry was closed over the 2007 to 2010 period as the fishery was perceived to exploit salmon from a range of rivers entering Castlemaine Harbour. A pilot fishery was conducted in the mixed-stock area of Castlemaine in 2010 to provide genetic samples for analysis of the rivers contributing to the fishery. Results revealed that the Castlemaine fishery almost exclusively exploited salmon from three rivers entering Castlemaine Harbour, the Laune, Caragh and Maine, all of which were meeting and exceeding CL. The Castlemaine fishery has operated since 2011 from the total available surplus of the three contributing rivers. For the mixed-stock Castlemaine fishery to operate, the total available surplus for the three rivers combined was reduced in a common estuary analysis to ensure that each river would meet CL simultaneously. The mixed-stock Castlemaine fishery and the draft net and rod angling fishery on the three rivers all exploit salmon from this reduced surplus calculation.

Tullaghan Bay

A draft net fishery operated in Tullaghan Bay up to 2013 predominantly exploiting stocks from the Owenmore, Carrowmore and the Owenduff rivers which were exceeding their CLs. A common estuary risk assessment was also undertaken for Tullaghan Bay, resulting in a higher requirement for spawners than simply combining the CLs for the rivers to ensure simultaneous attainment of CLs.

The SSCS reviewed the operation of the Tullaghan Bay draft net fishery in 2012 and noted that the fisheries are mostly confined to the immediate vicinity of the Owenmore/Carrowmore and Owenduff river mouths and there was only a relatively small mixed-stock fishery in the bay. The SSCS advised that it was therefore not appropriate to apply risk analysis for a mixed-stock fishery

in Tullaghan Bay. In its advice provided for the 2013 & 2014 seasons, the SSCS therefore did not advise a common estuary surplus for Tullaghan Bay. With regard to the SSCS 2015 scientific advice, the Owenmore River was only meeting 90% of CL (209 salmon deficit) and management advised that no commercial fishery should take place in the upper part of Tullaghan Bay in the vicinity of the Owenmore River. The Owenmore River has not exceeded CL over the period 2016-2020 based on scientific advice and therefore no mixed-stock commercial fishery took place in Tullaghan Bay in 2020 as one of the contributing stocks (Owenmore) failed to meet its CL.

EU-Sweden

Sweden has only what can be considered as residual mixed stocks fisheries for Atlantic salmon, under the form of recreational fisheries in two river systems. Sweden has taken following management measures to phase out mixed stock fisheries on wild salmon stocks.

Trap net fisheries at the coast

- No longer in activity

Gill net fisheries at the coast

- Gill net fishing in the sea at depths <3 m is not expected to be a MSF. Since 2013 it is strictly regulated with respect to effort, period and mesh size. Marine protected areas are located nearby wild salmon rivers. In this areas no gill net fishery is allowed irrespective of the depth.
- A ban on gill net fishing for salmon in remaining coastal waters with a depth >3m has been implemented from 2014 to phase out mixed stock fisheries targeting salmon stocks. There has not been any reported MSF or illegal gill net fisheries during 2016-2020 in coastal waters with a depth > 3m.

Sport fishing

- Mixed stock fisheries is to a low degree existing in the two rivers (River Lagan and Göta älv) with releases of reared salmon smolt in the main watercourse and natural smolt production in tributaries. New fishing rules are to be implemented in 2021 or 2022 in order to phase out mixed stock fisheries in these two rivers.

2) Recent catch data

EU-Finland

Salmon catch in the River Teno in 2020: Total catch 32 t (Finland 15 t, Norway 17 t), c. 85% caught in the main stem (MSF), 15% in tributaries (little or no MSF).

EU-Ireland

- Killary Harbour mixed-stock fishery (Erriff and Bundorragha rivers)
 - mean 5 year catch = 133 salmon (0.4t)
- Castlemaine Harbour mixed-stock fishery (Laune, Caragh and Maine rivers)
 - mean 5 year catch = 615 salmon (1.7t)
- Tullaghan Bay mixed-stock fishery (Owenmore, Carrowmore and Owenduff rivers)
 - mean 5 year catch = 0 salmon (0t)

EU-Sweden

The provisional nominal catch (which may be subject to revision) for 2020 in Swedish rivers is 14,2t, a decrease compared to the 2019 confirmed nominal catch (16,9t).

3) Updates to the Implementation Plan (IP) related to MSF

EU-Finland

Parliaments in Finland and Norway have accepted the new bilateral fishery agreement, which came into force for the fishing season 2017. The agreement concerns river fisheries, including MSF in the main stem, but the coastal MSF is the responsibility of Norwegian national management.

Conservation limits are established for 24 populations of the Teno stock complex, and attainment has been assessed for 15 individual populations. Exploitation of these populations in MSF of the Teno main stem can be assessed through catch information and genetic stock identification. Annual monitoring programme has also been updated as a part of the implementation work of the new agreement.

EU-Ireland

There are no changes related to MSF in the Implementation Plan for the period 2019-2024.

EU-Sweden

There are no changes related to MSF in the Implementation Plan for the period 2019-2024.

4) Changes or developments in the management of MSFs in this IP period to implement NASCO's agreements

EU-Finland

New management regime for salmon fishing is based on biological reference points and scientific assessments of their attainment, including a targeted reduction of fishing pressure by c. 30%. The reduction of exploitation is especially focusing on salmon stocks with the weakest status in the Teno stock complex by tailored fishery regulations in time and space, and on specific fishing methods. According to the new agreement, a recovery plan is in preparation to ensure the recovery of the weakest stocks in a time frame of 2-3 salmon generations. Stock assessment in 2019 revealed the continued decrease in exploitation (since 2017) for all individual salmon stocks in the mixed-stock fishery in the Teno mainstem.

Despite the reduced exploitation rates since 2017, salmon stocks showed worse status in 2020 than in recent years. Likely explanations for this development include increased natural mortality factors in different life stages of salmon. Data from salmon stock monitoring programmes, e.g. counts of ascending grilse in relation to estimated abundance of smolts one year before, indicate that the marine survival rate has decreased in recent years, resulting in low pre-fishery abundance. Further investigations on such possible factors are underway. Finland has made decisions that close salmon fishing in Tana river and its Finnish tributaries for year 2021 and similar decisions have been made in Norway.

EU-Ireland

Closure of the Tullaghan Bay mixed-stock fishery due to one contributing stock failing to meet CL.

EU-Sweden

Sweden aims to phase out the remaining recreational “mixed stocks” fisheries by 2022.