



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

**1) Brief description of existing MSFs**

**EU-Finland**

The salmon fishery in the main stem of the large River Teno, including both various netting methods and angling, exploits approximately 30 genetically different salmon populations from different tributaries and areas of the main stem.

Conservation limits have been established for 24 populations of the Teno stock complex. Annual target attainment evaluations have recently been available for 10-14 populations in tributaries (partly including and combining lower order tributaries), in the main stem, and for the Teno system as a whole. The exploitation of these populations in the MSF of the Teno main stem has been assessed through catch information and genetic stock identification.

**EU-Ireland**

Since 2021, there are four managed mixed-stock fisheries in Ireland: Castlemaine Harbour, Killary Harbour, Owenmore Estuary and Tullaghan Ferry. The Owenmore Estuary and relatively minor Tullaghan Ferry mixed-stock fisheries formerly comprised the Tullaghan Bay mixed-stock fishery which operated until 2013. Each year, in advance of the fishing season, the scientific advisory group, the Technical Expert Group on Salmon (TEGOS) undertake a specific risk assessment for each common estuary mixed-stock fishery. This results in a higher requirement for spawners in contributing rivers than simply combining their individual river-specific conservation limits (CLs) to ensure simultaneous attainment of CL. If the common estuary CL is sufficiently exceeded then a surplus for exploitation is advised.

**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, namely, the Caragh, Laune 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.

**Killary Harbour**

In the case of the Killary Harbour fishery, there are two contributing river stocks (Bundorragha (Delphi) and Erriff) both of which are exceeding their CLs. The TEGOS 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. The mixed-stock Killary Harbour fishery and the rod angling fishery on both rivers exploit salmon from this reduced surplus calculation, although the River Erriff rod fishery is managed as a catch and release-only fishery by local agreement.

**The Owenmore Estuary and Tullaghan Ferry**

The Owenmore Estuary and the relatively minor Tullaghan Ferry mixed-stock fisheries formerly comprised the Tullaghan Bay mixed-stock fishery which operated until 2013. The operation of the Tullaghan Bay mixed-stock fishery was reviewed in 2012 and it was noted that the fisheries are mostly confined to the immediate vicinity of the Carrowmore/Owenmore and Owenduff river mouths with only a relatively small mixed-stock fishery in the bay (Ferry). Therefore, it was advised that it was more appropriate to apply a specific risk analysis for Owenmore Estuary (which exploits stocks from the Carrowmore and Owenmore rivers). This results in a higher requirement for spawners for this mixed-stock fishery than simply combining the CLs for the two contributory rivers which ensures a simultaneous attainment of CLs is required to permit this fishery to operate. As such the draft net and rod angling fisheries for the Owenmore and Carrowmore 1SW must be taken from this reduced surplus if available. In addition, a small TAC is assigned to the relatively minor Tullaghan Ferry mixed-stock fishery (which potentially exploits stocks from the Carrowmore/Owenmore and Ownduff rivers). This TAC is allocated from a percentage of the Owenmore Estuary surplus and the Owenduff surplus when available. Neither the Owenmore Estuary or Tullaghan Ferry mixed-stock fishery was permitted to operate until 2021 as one of the three contributory stocks, the Owenmore River, was below CL. However, as all three rivers were assessed as exceeding CL since 2021, both mixed-stock fisheries have since been permitted to operate.

### **EU-Sweden**

Sweden has taken following management measures to phase out mixed stock fisheries on wild salmon stocks.

#### *Trap net fisheries at the coast*

- There have, due to national regulation, not been any trap net fisheries during the years of 2013–2024.

#### *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 to avoid catches of salmon. Marine protected areas are located nearby wild salmon rivers. In these 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 have not been any reported MSF or illegal gill net fisheries for salmon during 2016-2024 in coastal waters with a depth > 3m.

#### *MSF on salmon at the coast*

No catch was recorded from coastal commercial fishing in 2024 (10th year in a row).

Sweden considers that there is no mixed stock fisheries in marine waters on Atlantic salmon in Sweden.

## **2) Recent catch data**

### **EU-Finland**

Salmon catch in the River Teno in 2024 was 0 tonnes, due to an overall ban on salmon fishing in the catchment area. Exceptions were granted in individual cases to transfer and maintain traditional fishing culture knowledge of the Sámi, resulting in minimal salmon catches in the main stem, with fewer than 10 salmon reported.

### **EU-Ireland**

- Castlemaine Harbour mixed-stock fishery (Laune, Caragh and Maine rivers)
  - 2024 catch = 583 salmon (1.57 t)

- mean five-year catch = 605 salmon (1.63 t)
- Killary Harbour mixed-stock fishery (Erriff and Bundorragha rivers)
  - 2024 catch = 103 salmon (0.28 t)
  - mean five-year catch = 189 salmon (0.51 t)
- Owenmore Estuary mixed-stock fishery (Carrowmore and Owenmore rivers)
  - 2024 catch = 120 salmon (0.32 t)
  - mean four-year catch = 125 salmon (0.34 t)
- Tullaghan Ferry mixed-stock fishery (Carrowmore, Owenduff and Owenmore rivers)
  - 2024 catch = 52 salmon (0.14 t)
  - mean four-year catch = 47 salmon (0.13 t)

### **EU-Sweden**

The total reported catch in rivers during 2024 was 7,9 tonnes and the estimated unreported catch in rivers 0,8 tonnes.

The reported and estimated catch in estuarine and coastal waters was 0 tonnes during 2024.

Fig.1 Information on catches for the Calendar Year 2024.

<b>Provide the following information on catches: (nominal catch equals reported quantity of salmon caught and retained in tonnes 'round fresh weight' (i.e. weight of whole, ungutted, unfrozen fish) or 'round fresh weight equivalent').</b>				
	In-river	Estuarine	Coastal	Total
(a) provisional nominal catch (which may be subject to revision) for 2024 (tonnes)	7.9	0	0	7.9
(b) confirmed nominal catch of salmon for 2023 (tonnes)	10.5	0	0	10.5
(c) estimated unreported catch for 2024 (tonnes)	0.8	0	0	0.8
(d) number and percentage of salmon caught and released in recreational fisheries in 2024	1038 salmon were caught and released, which accounts to 34 % of total catches (wild and reared origin). For wild salmon only, 810 salmon were caught and released (59 % of the wild salmon catches).			

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

#### **EU-Finland**

The Parliaments of Finland and Norway have a bilateral fishery agreement for the River Teno. This agreement covers river fisheries, including MSF in the main stem, while coastal MSF is the responsibility of Norwegian national management. The agreement includes a fixed-term fishing rule for the border river section between Finland and Norway. From the 2024 fishing season onwards the fishing regulations, to a greater extent than previously, are based on each stock's harvestable surplus.

#### **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**

The 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 approximately 30%, as defined in the new bilateral agreement of 2017. This reduction of exploitation focused particularly on salmon stocks with the weakest status in the Teno stock complex through tailored fishery regulations in time and space, and specific fishing methods.

Despite reduced exploitation rates verified by monitoring programs since 2017, salmon stocks showed worse status in 2019-2024 compared to previous years. Likely explanations for this development include increased natural mortality factors at different life stages of salmon, especially at sea. Data from monitoring programs, such as counts of ascending grilse in relation to estimated abundance of smolts one year prior, indicate a decreased marine survival rate in recent years, resulting in lowered pre-fishery abundance in 2024. Further investigations on such possible factors are ongoing. Finland and Norway jointly decided to close salmon fishing in the Teno river for 2024, as was the case for the 2021 - 2023 seasons. The salmon fishing ban has significantly increased the number of spawners in various populations compared to the all-time lows of 2019-2020. However, the stock status and especially PFA estimates remain poor for all populations in the Teno system, and the exceptionally poor marine survival in 2024 resulting in exceptionally low numbers of grilse, ceased the positive development.

An updated fishing rule, better adapted to the current status of salmon stocks in the Teno, entered into force for the 2024 fishing season. According to the new rule, fishing opportunities will be reviewed annually based on the status of the salmon stocks in the previous fishing season and the potential exploitable surplus in salmon populations.

#### **EU-Ireland**

2021 was the first year that the Owenmore Estuary and Tullaghan Ferry mixed-stock fisheries were each permitted to operate. Their operation continued since that time including in 2024.

#### **EU-Sweden**

There are no changes in the management of MSF in this IP period. EU Sweden consider that it is practical no MSF in coastal waters due to the regulations that was decided during the period 2013 – 2014.