Report of the Technical Expert Group on Salmon to the North-South Standing Scientific Committee for Inland Fisheries

The Status of Irish Salmon Stocks in 2025 with Catch Advice for 2026

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1 Executive summary

River-specific scientific catch advice on our salmon fisheries is provided for the forthcoming season by the Technical Expert Group on Salmon (TEGOS) principally based on a forecast of the abundance of salmon which will return to each river in that year, comparison of the estimated returns to the river-specific conservation limit (CL), and determination of harvest of salmon which could be made while allowing a high chance that the CL will be met. In simple terms, the CL is the minimum number of returning salmon a river stock requires to ensure its stock is healthy and above which a surplus may be identified for sustainable harvest. TEGOS provide this advice to the North-South Standing Scientific Committee for Inland Fisheries (NSSSCIF) who in turn advise Inland Fisheries Ireland (IFI) in this regard. IFI then formulate this advice for the Department of Climate, Energy and the Environment who publish the relevant draft regulations for public consultation. Once this process concludes, the regulations are finalised and enacted in advance of the upcoming fishing season.

The TEGOS advice thresholds are as follows. Where stocks are exceeding their CL a sustainable surplus (i.e. Total Allowable Catch) is advised for harvest. Where stocks are assessed as being somewhat below their CL, or if surveys indicate fry numbers are good, catch & release-only (C&R-only) angling is advised. Where a stock is well below its CL and /or fry numbers are poor or there is insufficient data to assess stock status, then a stock is advised to be closed to all fishing activity. TEGOS provide standard catch advice at a 75% chance that a specific stock is likely to meet CL. For the 2026 advice, the NSSSCIF has requested that TEGOS also provide catch advice at more conservative probabilities (chance) that the CL will be attained (i.e. at 80%, 85%, 90%, 95% and 99%). As the chance of meeting CL increases, the number of salmon that are advised for sustainable harvest lowers. This is because more certainty is required that the CL will be met at the catch harvest advised. A further effect of increasing the certainty that the CL will be met is that particular stocks may not have a sustainable surplus for harvest than would otherwise be the case.

Overall, catch advice for the 2026 season is provided by TEGOS for 144 salmon stocks. For 16 of these river stocks, separate one-sea-winter (1SW) and two-sea-winter (2SW) stock assessments are made and associated respective catch advice also issued. This is because these river stocks have a relatively high proportion of multi-sea-winter (MSW). The number of stocks in each catch advice category (i.e. surplus advised for harvest; advised for C&R-only fishing; or advised closed to all fishing) including those assessed for CL attainment at various probabilities of meeting CL is summarised in the following tables.

Number of total or one-sea-winter stocks in each catch advice category at various probabilities of meeting CL.

Advice	75%	80%	85%	90%	95%	99%
Surplus	41	35	29	23	15	11
C&R-only	29	31	33	36	38	36
Closed	74	78	82	85	91	97

Number of two-sea-winter stocks in each catch advice category at various probabilities of meeting CL.

Advice	75%	80%	85%	90%	95%	99%
Surplus	8	7	6	6	5	3
C&R-only	5	5	5	5	5	7
Closed	3	4	5	5	6	6

This report also outlines recent trends in Irish wild Atlantic salmon stocks and provides an overview of the principal pressures that affect their continued sustainability.

2 Introduction

The North-South Standing Scientific Committee for Inland Fisheries (NSSSCIF) was formed in early 2018 to support the provision of scientific advice relating to the conservation and sustainable exploitation of the inland fisheries resource with advice provided in response to requests from the Department of Climate, Energy and the Environment (DCEE) and its agency Inland Fisheries Ireland (IFI), the Department of Agriculture, Environment and Rural Affairs (DAERA) from Northern Ireland and the Loughs Agency a North-South Implementation Body. This group was also tasked with considering the co-ordination and effective use of scientific resources for data collection and research projects linked to the above. The NSSSCIF Terms of Reference (ToRs) facilitates the formation of Expert Groups drawn from within the membership of the Committee, or additional invitees as required, to advise and contribute on any particular species, aquatic habitat or biosecurity issues. To this end, the NSSSCIF has established the Technical Expert Group on Salmon (TEGOS) to provide scientific advice to guide the NSSSCIF and IFI management in decisions and policy development relating to salmon. Members of the TEGOS 2025/2026 are provided in Appendix I.

2.1 Terms of reference for the operation of the Technical Expert Group on Salmon

This section outlines the ToRs for the operation of a Technical Expert Group on Salmon to support the NSSSCIF with scientific advice on salmon stock status to support IFI with the management of salmon stocks.

Purpose

The NSSSCIF requests the TEGOS to provide an annual report on the status of salmon stocks, as outlined in Appendix A, for the purpose of advising the NSSSCIF on the sustainable management of Irish salmon stocks. The NSSSCIF may also request the TEGOS to offer scientific advice on the implications of proposed management decisions or policies on salmon or seek advice on scientific matters in relation to salmon. All scientific advice provided by TEGOS will be reviewed by the NSSSCIF and presented as independent advice.

Appendix A:

For the purpose of advising the NSSSCIF, the TEGOS shall estimate the overall abundance of salmon returning to rivers in the State under the remit of IFI with reference to river-specific conservations limits (CLs). The TEGOS shall carry out an assessment of salmon stocks using internationally accepted best scientific practice which should demonstrate whether:

a. conservation limits are being or likely to be attained on an individual river basis; and

b. favourable conservation status is being attained within Special Areas of Conservation (SACs) and nationally as required under the Habitats Directive or otherwise.

The assessment shall take account of mixed-stock fishing on salmon stocks including the potential effects on freshwater salmon populations from rivers other than those targeted. In cases where stocks are determined to be below CLs, the TEGOS shall advise the level to which catches should be reduced or other measures adopted on a fishery basis in order to ensure a high degree of probability of meeting the CLs. The TEGOS shall respond to the NSSSCIF relating to specific requests for scientific advice using best international practice. The TEGOS shall provide the NSSSCIF with an independent annual report, which contains the following information:

a. an annual overview of the status of Irish salmon stocks on an individual river basis;
b. catch advice with an assessment of risks associated with the objective of meeting conservation limits in all rivers;
c. upon request an evaluation of the effects on salmon stocks and fisheries of management measures or policies; and
d. upon request from the NSSSCIF, report on specific scientific advice relating to salmon conservation.

2.2 Advice process

TEGOS provide this advice to the NSSSCIF who in turn advise IFI in this regard. IFI then formulate this advice for the DCEE who publish the relevant draft regulations for public consultation. Once this process concludes, the regulations are finalised and enacted in advance of the upcoming fishing season.

2.3 NSSSCIF request for additional advice for 2026

TEGOS provide standard catch advice at a 75% probability that a specific stock is likely to meet CL. For the 2026 advice, the NSSSCIF has requested that TEGOS also provide catch advice at more conservative probabilities that the CL will be attained (i.e. at 80%, 85%, 90%, 95% and 99%). In effect, the more conservative the probability is of meeting CL, the lower the catch option advised and the less likely a stock is deemed to achieve CL.

2.4 Overview of status and trends in Irish salmon stocks

The International Council of the Sea Working Group on North Atlantic Salmon (ICES WGNAS) estimate that numbers of wild salmon returning to Ireland have progressively declined from well over 1 million per annum for much of the 1970s to under 200,000 in recent years. Such

declining trends are also evident in many jurisdictions across the North Atlantic basin (ICES 2025). This declining trend is also reflected in adult returns in Irish rivers monitored by fish counters. The current stock assessment shows that only 28% of the 144 salmon designated river stocks in Ireland are exceeding conservation limits at the 75% probability level. This includes 53% (n=41) of the 77 salmon stocks where direct assessments could be made.

3. Assessment methodology for 2026 catch advice

3.1 Background

River-specific scientific catch advice on our salmon fisheries is provided for the forthcoming season principally based on a forecast of the abundance of salmon which will return to each river in that year, comparison of the estimated returns to the river-specific conservation limit (CL), and determination of harvest of salmon which could be made while allowing a high probability that the CL will be met. There are 144 salmon-designated river stocks in Ireland which are considered in this regard. For 16 of these river stocks separate one-sea-winter (1SW) and two-sea-winter (2SW) stock assessments are made and associated respective catch advice also issued. This is because these river stocks have a relatively high proportion of multi-sea-winter (MSW). In addition to this, there are also a small number of mixed-stock fisheries where common embayment catch advice is also provided.

Among the 144 designated salmon rivers are 67 river stocks where no or insufficient fish counter or rod catch data are available in the most recent five-year period, making a direct assessment difficult. Although the vast majority of these are insignificant fisheries, their stocks are important as distinctive spawning populations, which must be maintained as constituent elements of biodiversity, particularly when designated as a qualifying interest in an SAC under the EU Habitats Directive. Because there are no recent means of direct salmon stock assessment on these rivers, the TEGOS have not provided an assessment of CL attainment on these rivers for the 2026 advice. The TEGOS advise that these rivers remain closed until additional information is made available to assess stock status relative to their CLs or catchment-wide electrofishing data indicates they can be opened for catch & release-only fishing. In effect, this means that stocks in 77 salmon rivers are assessed for the 2026 advice.

The conservation limit (CL) applied by the TEGOS to establish the status of individual stocks is the "maximum sustainable yield" (MSY) also known as the stock level that maximises the long-term average surplus, as defined and used by the International Council for the Exploration of the Sea (ICES). For the standard TEGOS advice, harvest options are identified which provide a 0.75 probability (75% chance) of meeting and exceeding the CL. This follows the approach used by ICES for the provision of salmon catch advice for West Greenland (ICES 2022). Where no option provides a 75% chance of meeting the CL, there is no surplus of fish forecast to support a fishing harvest.

It is important to note that CLs alone are not necessarily the minimum decision threshold that can be applied as regards the sustainable management of salmon stocks (White *et al*. 2023). This is highlighted in the NASCO Guidelines for the Management of Salmon Fisheries (NASCO

2009) in the context of management targets (MTs) which should also be established at a level above the CL to assist fishery managers in ensuring that there is a high probability of stocks exceeding their CLs…; this probability level should be defined by managers (Section 2.4e); and The MT will therefore be greater than the CL with the margin between them at least reflecting the risks, decided by managers, of stocks falling below the CL". In this context, for the 2026 advice, the NSSSCIF has requested that TEGOS also provide catch advice at more conservative probabilities that the CL will be attained (i.e. at 80%, 85%, 90%, 95% and 99%). In any case, the use of the 75% probability as a threshold measure to assess river-specific stock status remains an important baseline for national reporting to international bodies such as ICES and NASCO.

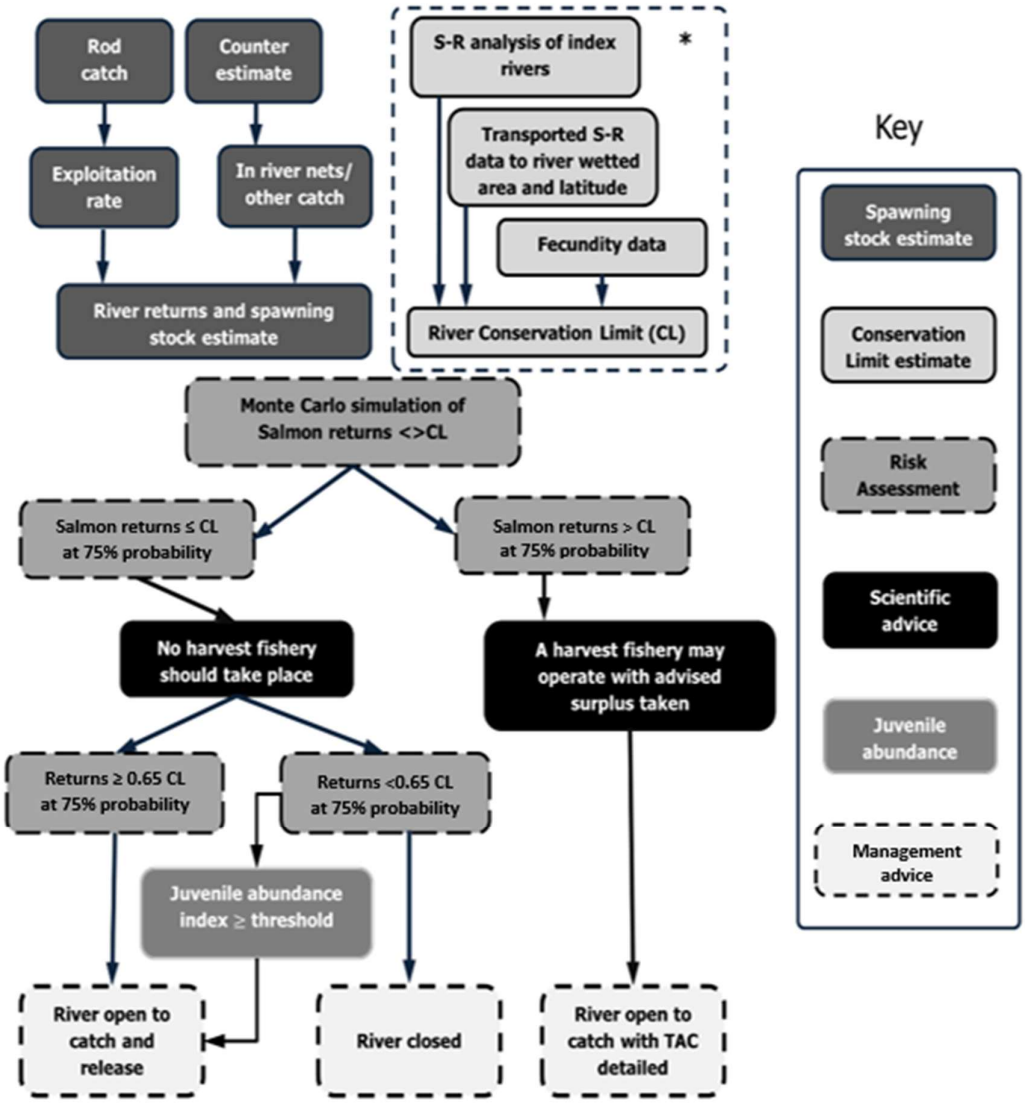


Figure 1 Standard TEGOS scientific process from 2007 to present (note: for the 2026 advice, additional catch options have been provided at more conservative probabilities than 75% (i.e. at 80%, 85%, 90%, 95% and 99%) that the CL will be attained.

There was no change in principle to the methodological framework used to provide catch advice for the 2026 season. A summary of the approach is shown in Figure 1. In-river or estuarine measures of abundance are used (*i.e.* fish counter data and rod/net catch data) to provide a primary measure of spawning stocks and attainment of CLs. With the operation of fisheries restricted to estuaries and rivers since 2007, the assessment is focused primarily on estimating individual river returns from counter data (if available), and catch data and ranges of rod catch exploitation rates derived from observed values in Irish rivers.

3.2 Data inputs

A description of the data used for the stock assessment and associated catch advice for the 2026 fishery is provided in the relevant sections below. Every effort is made to obtain relevant data and monitor the performance of stocks (attainment of CL) at the river level and consequently to assess the status of individual riverine stocks. Several sources of information are used to estimate stock size, evaluate stock status and formulate associated catch advice for the upcoming year. These are outlined in the following sections.

3.2.1 Fish counter and trap data

Fish counter and trap data are provided by IFI, the Marine Institute (for Shramore/Burrishoole) and some private fishery owners. In total, counts from 25 fish counters and traps were available to assess stocks for the 2026 catch advice (Figure 2; Table 1). The following approach has been adopted in interpreting the fish counter data and utilising these to measure the attainment of CL:

- Fish are initially separated into salmon and sea trout by signal strength generated by the fish passing the counting electrodes and video images.
- A process of validation of the numbers of salmon and sea trout is carried out during the year whereby a proportion of the counter data (usually a minimum of 15%) is examined in relation to contemporaneous video footage (resistivity counters) or self-generated infra-red images (infra-red counters).
- The initial numbers of salmon and sea trout are corrected after video verification and this correction factor is applied to the remainder of the data.
- It is assumed that all of the downstream counts up to the end of May represent out-migrating kelts *i.e.* fish ascending the river in the previous year (except for the Corrib, Erriff, Lee, Shannon and Erne counters where downstream counts are not available).
- The downstream count from June to December is then subtracted from the upstream count in the same period, correcting for fish counted upstream but which may then come back downstream.

- The counter-estimated upstream run of fish is corrected to include salmon caught and killed downstream of the counter and excludes salmon caught and killed above the counter.
- Raising factors may be applied to those counters where the possibility of fish moving over the weir without being counted has been reported. The recorded count is raised by a further percentage depending on observations. However, it is essential that these raising factors are based on observations / assessments carried out by local fisheries authorities or the agencies involved in salmon stock assessment. In general, the Boyne, Corrib and Dee counts are raised by a factor of two to allow for the partial nature of these counts.
- Consideration is given to any missing data from intermittent periods of counter downtime. In such cases, to account for this, data from partial monthly counts can be raised accordingly or the monthly value can be assigned by using a mean value taken from the respective month over the preceding five years of valid counts.
- For the 2026 advice, sufficient information was not available for the Owenmore counter in 2023 and Ballysadare counter in 2025. Therefore, the most recent preceding five-year time series available were used in the assessment.
- A comprehensive five-year counter time series is also not currently available for the hydroelectric dam rivers to use in the stock assessment but it is anticipated to be available in the coming years.

Table 1 Fish counters and traps used in the 2025 assessments for the 2026 catch advice.

Fisheries District	**River stock**
Dundalk	Dee
Drogheda	Boyne
Dublin	Lower Liffey
Kerry	Blackwater
Limerick	Feale
Limerick	Fergus
Limerick	Maigue
Limerick	Mulkear
Galway	Corrib
Galway	Owenboliska
Connemara	Ballynahinch
Connemara	Cashla
Ballinakill	Bunowen
Ballinakill	Culfin
Ballinakill	Dawros
Ballinakill	Erriff (trap)
Ballinakill	Owenglin/Clifden
Bangor	Burrishoole (trap)
Bangor	Carrowmore
Bangor	Owenduff
Bangor	Owenmore
Sligo	Ballysadare
Ballyshannon	Eany
Ballyshannon	Eske
Letterkenny	Lackagh

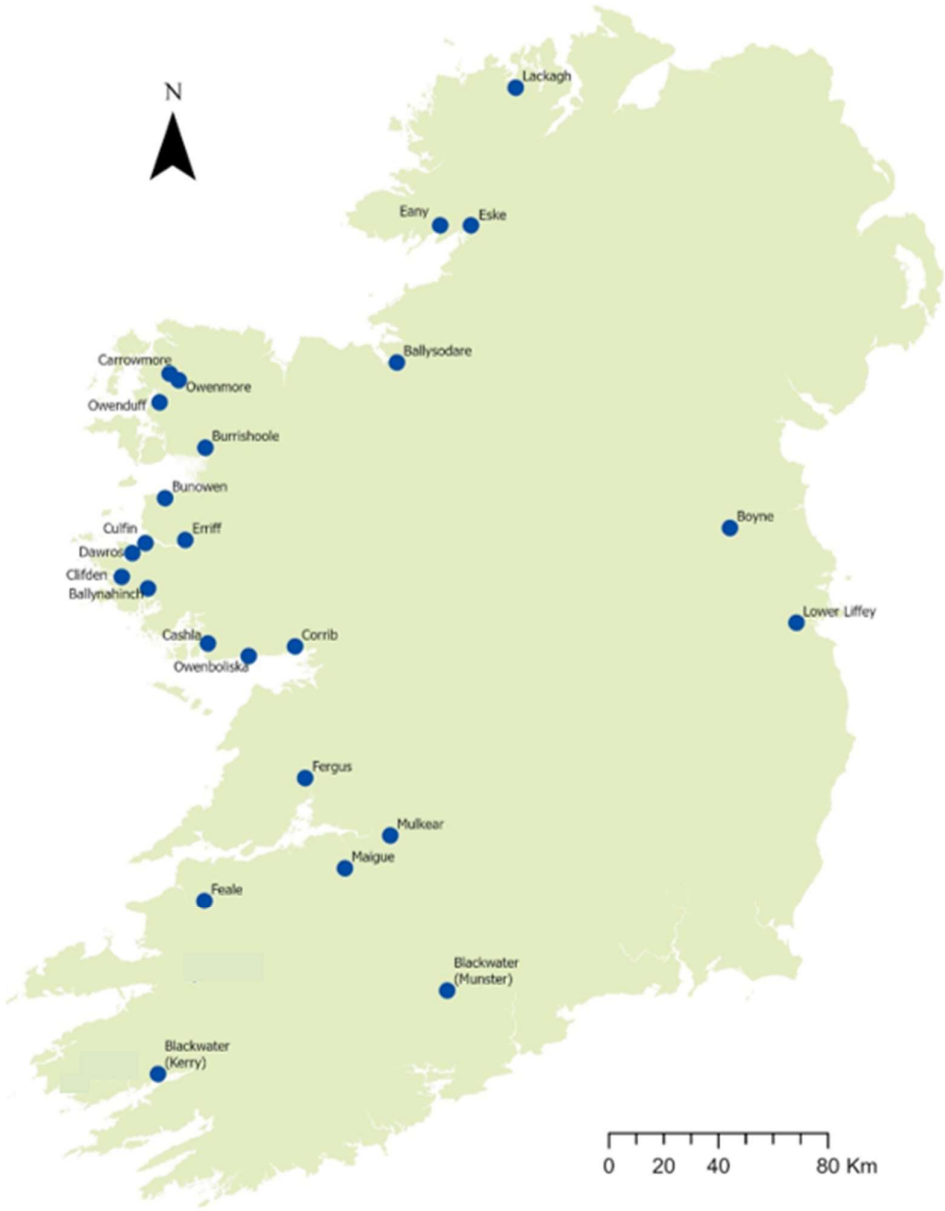


Figure 2 Fish counter / trap data used in the stock assessment for the 2026 catch advice.

3.2.2 Rod catch data

Rod catch data used in the TEGOS stock assessment is primarily sourced from the Wild Salmon and Sea Trout Tagging Scheme administered by IFI. The reported logbook rod catches are adjusted to take into account the numbers of fish that have been caught by anglers who have not returned their logbook. The adjustment follows Small (1991). In some instances, directly reported rod catches from IFI Regional Fisheries officers or rod catch data from managed fisheries (private owners who maintain reliable records), provided these have been vouched for by IFI officers, are also used. Angling logbook returns had seen a steady return rate of c. 70% up until 2017. However, there is a declining trend in logbook returns since

2018 and these are just under 50% since 2023. Although accounted for by raising factors, poor angling data can increase the uncertainty in the assessments made and advice provided and ultimately may result in more conservative catch advice being provided to fisheries managers to account for this. The angling catch in the most recent year of the stock assessment is based on a Fisheries Inspector estimate.

3.2.3 Rod exploitation rates

A rod exploitation rate is applied to the rod catch to provide a stock abundance estimate in a particular year. Rod exploitation rates derive from observed exploitation rate values from fish counters or traps on Irish rivers and are supported by information from the scientific literature and the National Coded-wire Tagging and Tag Recovery Programme. Exploitation by angling on 1SW grilse stocks varies but is generally between 10% and 30% of the total river stock available (Milner *et al.*, 2001). These authors quote mean values of 19% for rivers in England and Wales, while values for specific Irish 1SW salmon fisheries have been estimated for the River Erriff at 19% between 1986 and 2000 (Gargan *et al.* 2001), and 15% for the Burrishoole between 1970 and 2000 (Whelan *et al.* 2001). Estimates of angling exploitation on multi-sea-winter stocks are generally higher than those reported for 1SW salmon (Solomon and Potter 1992) and this has also been observed from Irish rivers with associated fish counter data (Millane *et al*. 2017). In 2008, the Standing Scientific Committee on Salmon (SSCS) evaluated all existing information on individual rod fisheries made available by IFI, including field observations of fisheries which have known high or low fishing intensity, to derive more precise estimates of the likely rod exploitation rate on a river-by-river basis. An extensive review of salmon exploitation rates in Irish rivers (Millane *et al*., 2017) using rod catch and fish counter data was published in 2017 but has not yet been incorporated into estimates of adult salmon returns and further work in this regard is underway as more data is now available to analyse.

Provided the catch in a river is known, in simple terms, the total stock can be estimated by extrapolation using an appropriate exploitation rate in the fishery *e.g.*:

> *If the rod catch of salmon was 150 fish and the exploitation rate in the fishery was 10%, then the total stock of salmon available to generate this catch would be estimated as the catch raised by the exploitation rate:*
>
> *(Catch / Exploitation rate) * 100*
>
> *In this case (150 / 10) * 100 = 1,500 salmon.*

For most rivers, the specific exploitation rates are not known and therefore a range of values is applied within which the true value is expected to be. Furthermore, as specific rod exploitation data for Irish rivers with fish counters is available, it has been possible to allocate all rivers into specific groups representing heavily fished (higher exploitation rate) and medium fished (medium exploitation rate) to lightly fished rivers (low exploitation rate) based on field observations (Table 2). This restricts the overall range of values being used to a more likely range rather than applying the entire range of values observed.

Table 2 Standard exploitation rates applied in the stock assessment.

Fishing intensity	Total and 1SW (%)	MSW (%)
Low	5 (1–12)	12 (6–27)
Medium	15 (7–35)	
High	33 (10–50)	31(15–46)

Appendix II presents the exploitation rates used for each river for the 2026 advice. Angling exploitation rates in general were reduced by 20% for year 2021 to account for a reduced exploitation rate because of COVID-19 restrictions on movement unless Fisheries Inspector reports indicated otherwise or if the rod catch was greater than twice the five-year average then no such reductions were applied. In addition, the following decision framework was used to assign angling exploitation rates to account for periods of drought affecting angling in summer 2022:

- No further reduction was made to rivers that already had a low exploitation rate assigned.
- No change to the MSW exploitation rates where MSW stocks were separately assessed as these comprise the spring period pre-drought.
- No changes were made where no indication was given by the Fisheries Inspectors that angling catches were affected.
- For rivers with a medium exploitation rate and where the Fisheries Inspectors indicated that low water levels significantly affected angling, the rate was reduced to either low or drought medium to reflect lower angling activity due to low water levels as follows:
    - Munster Blackwater medium reduced to 80% of its standard value;
    - Easky and Drowes reduced to drought medium; and
    - Fane, Gweebarra, Leannan, Owenea & Owentocker, Suir and Tullaghobegly reduced to low.

Further to this, the following decision framework was used to assign angling exploitation rates to account for periods of drought affecting angling in early summer 2023 and for the

subsequent prolonged flood conditions experienced in rivers throughout Ireland in July and August 2023:

- No change to the spring salmon exploitation rates where this stock component is separately assessed as this comprised the spring period pre-summer drought and prolonged flood conditions (unless specific information from Fisheries Inspectors on very low angling effort was reported).
- On total assessed stocks the standard medium and low exploitation rates were generally reduced by 25% to account both for summer drought and exceptionally high water throughout July and August which affected angling catchability (unless specific information suggested otherwise).
- For rivers 'jointly assessed' for 1SW and MSW components, a 25% reduction in exploitation rates was generally applied as a significant proportion of the MSW can return to such rivers throughout the season (unless specific information from Fisheries Inspectors suggested that angling was not significantly impacted).

For 2024 angling catches, the standard exploitation rates were generally applied unless Fisheries Inspectors provided specific information which suggested otherwise.

In general, the standard band of exploitation rates were applied to the 2025 catches as the climatic conditions were not exceptional to warrant gross changes to the rates, unless Fisheries Inspectors reported significant reductions in angling effort (e.g. Rivers Easky and Moy). Although some periods of warm weather reduced angling effort (e.g. fishery closures) these periods were generally brief (5-7 day periods). Official fishery closures mostly affected counter rivers and a reduced exploitation rate was applied to the 1SW stock on the River Moy to reflect lower angling pressure because of this. Bespoke exploitation rates were derived for the Maine & Currane (switched from using counter data to rod catch data for stock assessment purposes for this year) as adequate counter information was not available to base stock assessments on. These were derived from the existing time series of rod catch and counter data.

TEGOS gave detailed consideration to the potential effect of the fish kill on the Munster Blackwater as regards assessment of its stock status and related provision of catch advice. Information was received from IFI South Western River Basin District and IFI R&D officials on the impacts to juvenile and adult salmon stocks. In relation to adult salmon, it was reported that much of the returns are likely to have remained below the directly impacted stretch as water conditions in advance of the fish kill were not conducive to large numbers of salmon moving further up the river. In general, adult salmon mortalities reported were very low. Surveys post

the fish kill observed juvenile salmon at sites in the affected stretch. Salmon angling was largely suspended in the period immediately after the fish kill. Subsequent angling activity with reasonably good catches of salmon was reported in the catchment in general in late August and September. It was noted that adult salmon returns in 2026 will not be directly affected by the fish kill as they are currently at sea but there may be consequences in future years for adult returns as the impacted juvenile cohorts complete their lifecycle. In any case, lower future return estimates can already be incorporated into the standard stock assessment process and associated provision of catch advice. Taking all this into account it was decided not to make any adjustments to the standard approach used to assess this river stock for the 2026 catch advice.

In general, it is important to note that 2025 angling catches are estimates and the corresponding exploitation rates will further be reviewed for the 2027 advice once official catches for 2025 are received.

3.2.4 Commercial catch data

Commercial catch data used in the TEGOS stock assessment is sourced from the Wild Salmon and Sea Trout Tagging Scheme administered by IFI. Reporting rates are typically at 100% from this fishery. These commercial fisheries typically operate in river estuaries using draft or snap-nets. Commercial catches from the most recent five years of available data are used.

3.2.5 Catchment-wide electro-fishing data

Information on juvenile salmon fry abundance is sourced from the IFI catchment-wide electro-fishing (CWEF) annual programme. Where no fish counter or angling catch data are available to assess stock status in a river, this information is used as a stock status indicator. The CWEF multi-annual mean used is calculated on the results of the most recent five annual surveys (with a minimum requirement of three). A summary of the 2025 programme is provided in Appendix III.

3.3 Conservation limits

A conservation limit (CL) is a reference point set at a spawning stock level that achieves long-term maximum sustainable yield as regard harvest. In other words, CLs identify the number of adult returns a river should have above which fish can be sustainably harvested without affecting the long-term viability of that stock. For Irish river stocks, CLs have been established using known stock-recruitment relationships from monitored index rivers and applying this knowledge to data poor river stocks where this information is not available. When assigning CLs to such rivers, the relative proportion of male to female salmon and 1SW to MSW salmon; egg-weight relationships; the latitude of the river and the river habitat

wetted area accessible to salmon are taken into account. Full details on how CLs have been established for Irish river stocks can be found in White *et al*. (2016) and in Appendices IV, V and VI of SSCS (2017) and relevant literature referenced therein.

3.4 Stock assessment and catch advice approach

In line with international advice on salmon stocks, the TEGOS advise that the best way to meet national and international objectives of conserving salmon stocks in all salmon rivers is to primarily allow fisheries only in rivers or the estuary of that river, where there is a greater probability of targeting only the stocks originating from these rivers (*i.e.* single stock fisheries). The TEGOS also advise that fisheries should take place only on stocks that are shown to be meeting their CL with the catch restricted to the estimated surplus above CL. This advice follows from international best practice as advised by ICES and NASCO.

The main objective of the scientific advice therefore, is to ensure that there are sufficient spawning salmon remaining after commercial and recreational fisheries to meet the required CL for that river. In order to do this, the number of salmon which will be available before the fishery takes place must be "forecast" for each river annually, based on the average returns in recent years (usually the most recent five years provided sufficient information is available). The information required for this forecast is derived from commercial catch data and from extrapolation of rod catch information using exploitation rates or from estimates based on fish counter information.

3.4.1 Stock assessment and catch advice based on fish counters and traps

For rivers where fish counter information is available, the most recent preceding five-year period with available data is considered along with any commercial catch and angling harvest below the counter if relevant. So for the 2026 advice, this information is collated from the period 2021 to 2025. Angling harvest caught below the fish counter and commercial catches are added to the counter returns in each corresponding year where there are such fisheries. For the most recent year of the stock assessment, each of the last three months of the fish counter data are estimated based on the mean run in that respective month for the preceding five years of available counter data. In addition, the angling harvest in the most recent year of the stock assessment is based on a Fisheries Inspector estimate. These estimates are made because the assessment takes place in October each year for the following year's advice. However, these estimates are updated with actual data for that year in following assessments. Where reliable estimates were available for both a counter or trap and a rod catch, the values for the counter or trap are used.

3.4.2 Stock assessment and catch advice based on angling catches and associated exploitation rates

For salmon rivers without fish counters TEGOS use the reported raised salmon rod catch on each river in conjunction with a range of rod exploitation rates (i.e. the percentage of the salmon run captured by anglers) and commercial catches if available to provide an estimate of the total salmon run on each river. Rod catch for the most recent five years of available data is used. So for the 2026 advice, this information is collated from the period 2021 to 2025. The angling catch in the most recent year of the stock assessment is based on a Fisheries Inspector estimate. These estimates are made because the assessment takes place in October each year for the following year's advice, therefore, official catch data are not yet available. However, these estimates are updated with actual data for that year in following assessments.

For the assessment to be appropriate, a reasonably consistent level of fishing activity in the river is necessary to provide a reliable data stream. For many small rivers, this is not the case, and this approach is not used where the average reported raised rod catch over the previous five years is ten salmon or less. In order to ensure a precautionary approach and for biodiversity objectives, it is advised that such rivers remain closed until additional information is made available to assess or indicate stock status.

3.4.3 Stock assessment model

The average number of salmon likely to return in the following year is forecast from the fish counter and/or catch information described above using a Monte Carlo analysis with 75,000 iterations. For assessments based on fish counter data, uncertainty is incorporated by forecasting such returns from a normal distribution with mean and standard deviation equal to the average returns and standard deviation of returns from the most recent five years. For assessments based on angling catches, the annual returns for each of the most recent five years are forecast by raising the respective annual angling catch using an assigned annual exploitation rate, with uncertainty incorporated by drawing the annual exploitation rates from triangular distributions for each Monte Carlo iteration, and subsequently averaging the resulting annual returns over the five years. Both approaches produces risk plots of the predicted recruits, CL and resulting surplus/ deficits in relation to a range of catch options for the river stock assessed. The estimated recruits (i.e. returns) must exceed the CL if there is to be an allowable catch advised. If returns are likely to be less than the CL then harvest fishing is not advised.

TEGOS provide standard catch advice at a 75% probability that a specific stock is likely to meet CL. This follows the recommended procedure used by ICES for the provision of catch

advice for West Greenland (ICES 2022). Where there is no harvest option which will provide a 75% chance of meeting the CL, then there is no surplus of fish to support a harvest (commercial or rod fishery). For the 2026 advice, the NSSSCIF has requested that TEGOS also provide catch advice at more conservative probabilities that the CL will be attained (i.e. at 80%, 85%, 90%, 95% and 99%). In effect, the more conservative the probability is of meeting CL, the lower the catch option advised and the less likely a stock is deemed to achieve CL. A further effect of increasing the certainty that the CL will be met is that particular stocks may not have a sustainable surplus for harvest than would otherwise be the case. Full details on the stock assessment and catch advice process can be found in White *et al*. 2023.

White *et al*. (2023). Incorporating conservation limit variability and stock risk assessment in precautionary salmon catch advice at the river scale. *ICES of Marine Science*, 80(4): 803–822 https://academic.oup.com/icesjms/article/80/4/803/7034404

River-specific data inputs and model outputs including information on the proportion of CL attained and associated catch advice at the various probabilities of attaining CL are provided in Appendix IV which accompanies this report.

3.4.4 Catch advice based on catchment-wide electrofishing (CWEF)

Where no fish counter or angling catch data are available to assess the stock status in a river, catch advice is provided based on catchment-wide electrofishing (CWEF). If the mean abundance of salmon fry is ≥ 17 fry per five-minute fishing, catch & release-only (C&R-only) angling is advised by TEGOS. The CWEF mean is calculated on the results of the most recent five such surveys (with a minimum of three). In general, river stocks under 65% of CL, may also be advised to open for C&R-only angling based on the CWEF.

3.4.5 Catch advice thresholds for fisheries management advice

In summary, the TEGOS advice thresholds are as follows:

- Where a stock is exceeding its CL a sustainable surplus[1] is advised for harvest.
- Where a stock is assessed as meeting between 65% to 99% of the CL, or if the CWEF mean abundance of salmon fry is ≥ 17 fry per five-minute fishing, C&R-only angling is advised.
- Where a stock is meeting < 65% of CL and the CWEF mean abundance is < 17 or there is insufficient data to assess stock status, then a stock is advised to be closed to all fishing activity.

[1] as regards fisheries management, this is typically termed 'total allowable catch (TAC)' or 'quota'.

Where the proportion of estimated returning salmon relative to the CL > 3, estimates are deemed to be above the threshold of estimate accuracy, and estimated returns are capped at three times the (median) CL, giving twice the CL as the surplus.

3.5 Additional considerations

An objective of the catch advice is to ensure that harvest fisheries only take place on river stocks meeting and exceeding CLs. The means to achieve this objective is to primarily allow only harvest fisheries, which can specifically target single stocks, which are meeting their CLs. Where a fishery comprises more than one stock, the risk analysis is based on the simultaneous attainment of CL for all contributing stocks. For the 2026 advice, Killary Harbour (Bundorragha and Erriff river stocks), the Owenmore Estuary (Carrowmore Lake and Owenmore River stocks), Castlemaine Harbour area (Maine, Laune and Caragh river stocks) and the relatively insignificant Tullaghan Ferry fishery (Carrowmore Lake, and Owenduff and Owenmore river stocks) were considered as true potential mixed-stock fisheries.

Mixed-stock fisheries will always present greater risks towards achieving sustainable exploitation compared to stocks that are exploited separately however, because of uncertainties or variability in the proportion of the catch originating from the weaker of the stocks. This is particularly true when there are large differences in the relative numbers of fish in each stock as it may be difficult to estimate the impacts on the smaller stocks. Therefore, to avoid intercepting fish from other rivers, particularly those which are not meeting CLs, the general advice is to operate all fisheries within the estuarine zone of the river stock for which the catch advice is being given and not a common bay where several river stocks may be present. Careful consideration must be made of local topography, fishing practices, number of contributing stocks and their status and the ability to discriminate the contributing stocks and manage the fishery effectively.

In a number of rivers the CL will be achieved by the contributions of both 1SW (grilse) and 2SW (two-sea-winter) / multi-sea-winter (MSW) fish. There is conservation of biodiversity and fisheries development value in identifying and protecting both life history types. It is important for fisheries management to be able to determine how much of the CL is likely to be met by either 1SW or 2SW/MSW fish and to regulate fisheries for both components separately. As such, advice has been provided on 1SW and 2SW separately where a significant early run component has been identified and can be managed separately on the assumption that all fish counted or caught before 31st May are considered to be 2SW/MSW fish (except for the Slaney where data are available on the typical proportions of 1SW and 2SW/MSW salmon encountered through the run).

4. Status of stocks and precautionary catch advice for 2026

4.1 River-specific catch advice

In general, the TEGOS advises that:

- harvest of salmon should only be allowed on stocks from rivers where a surplus above their CL is identified and that no more than this surplus should be harvested. In some rivers where the available surplus is minor and impractical to manage, management may decide to operate such fisheries as C&R-only.
- harvest fisheries should not take place on stocks from rivers without an identifiable surplus above the CL. C&R-only angling is advised on rivers where stocks under CL are meeting at least 65% of CL or the juvenile fry index is at least 17.
- no harvest fisheries should take place on those stocks from 67 rivers where insufficient fish counter or rod catch data is available to assess salmon stock status. The TEGOS advise that these rivers remain closed to harvest until such time as additional information becomes available to assess the status of these stocks relative to their CLs.

Overall, catch advice for the 2026 season is provided for 144 salmon stocks. In addition, separate assessments are made for 16 rivers which are considered to have a significant 2SW stock component. A summary of the number of stocks in each catch advice category is presented below for:

- total or one-sea-winter (1SW) stocks including those assessed for CL attainment at various probabilities of exceeding CL (Table 3 and Figure 3); and
- for two-sea-winter (2SW) stocks including those assessed for CL attainment at various probabilities of exceeding CL (Table 4 and Figure 4).

Table 3 Number of total or one-sea-winter stocks in each catch advice category including those assessed for CL attainment at various probabilities of exceeding CL.

Advice	75%	80%	85%	90%	95%	99%
Surplus	41	35	29	23	15	11
C&R	29	31	33	36	38	36
Close	74	78	82	85	91	97

Table 4 Number of two-sea-winter stocks in each catch advice category including those assessed for CL attainment at various probabilities of exceeding CL.

Advice	75%	80%	85%	90%	95%	99%
Surplus	8	7	6	6	5	3
C&R	5	5	5	5	5	7
Close	3	4	5	5	6	6

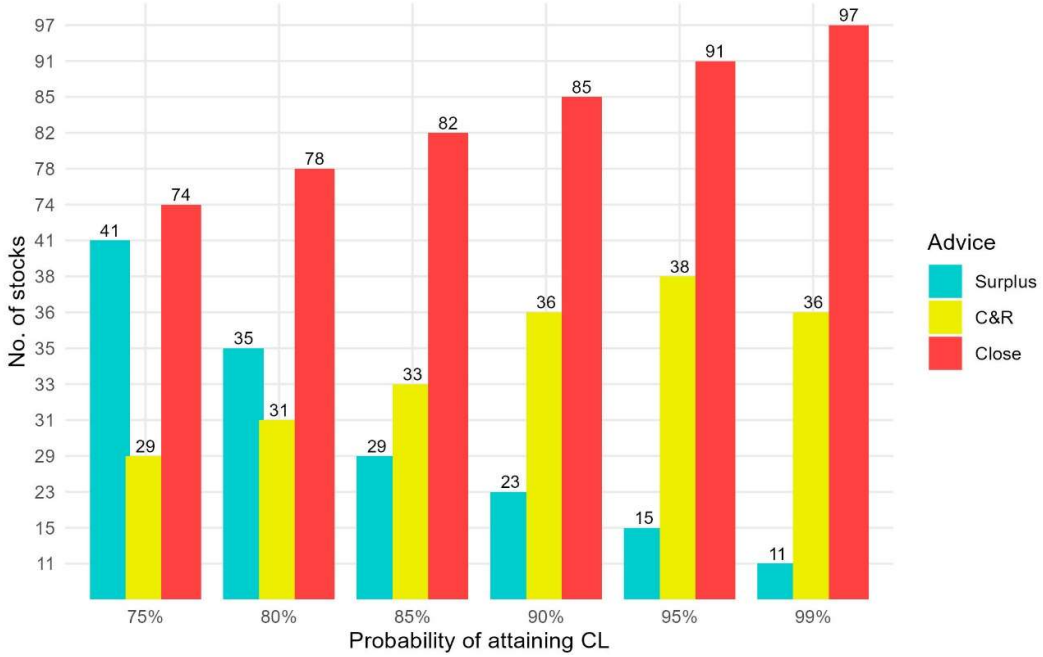


Figure 3 Number of total or one-sea-winter stocks in each catch advice category including those assessed for CL attainment at various probabilities of exceeding CL.

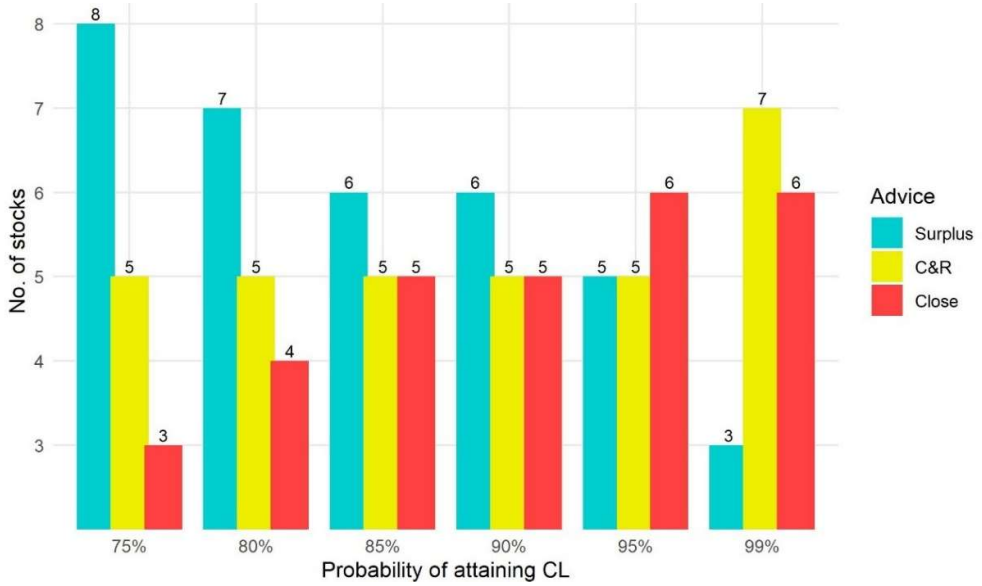


Figure 4 Number of two-sea-winter stocks in each catch advice category including those assessed for CL attainment at various probabilities of exceeding CL.

A summary of the total or one-sea-winter (1SW) stock catch advice provided between 2007 and 2026 at the 75% probability of achieving CL is provided in Figure 5. Since 2022, this shows a moderate decline in the number of river stocks above CL with an advised surplus as well as those stocks closed to all fishing; and a moderate increase in the number of river stocks under CL that are meeting at least 65% of CL which are advised open for C&R-only fishing.

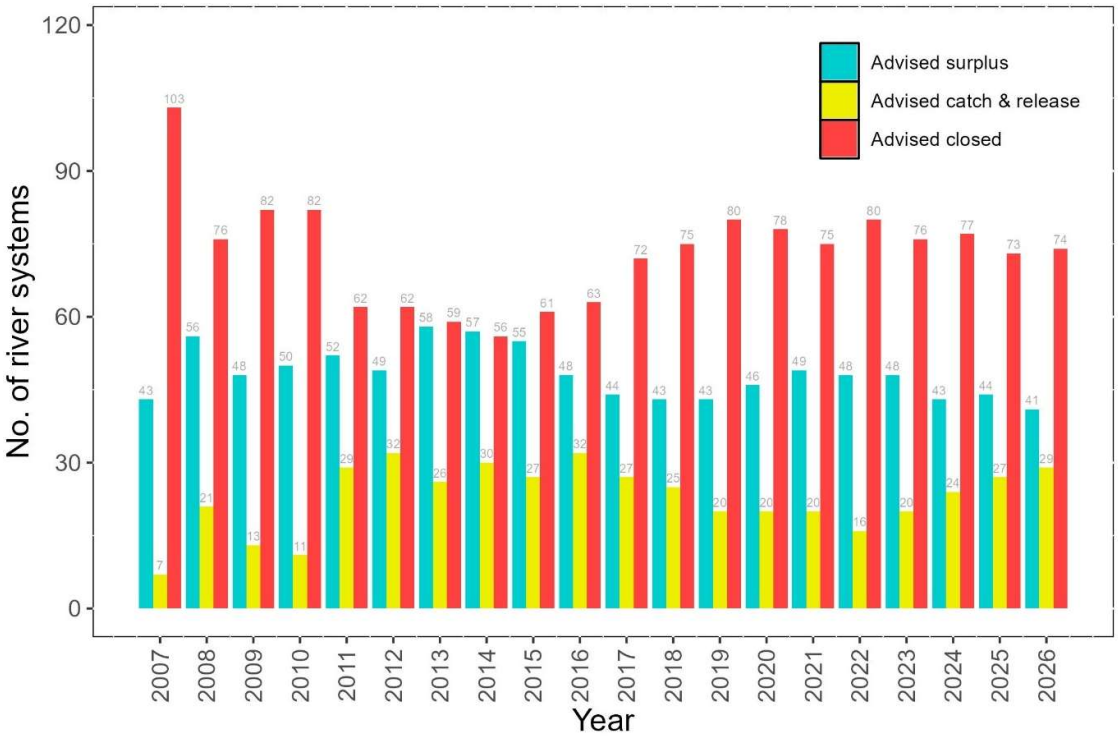


Figure 5 Summary of status of total or one-sea-winter stocks and scientific catch advice provided between 2007 and 2026 including those stocks assessed at the 75% probability of achieving conservation limit.

In general, it is clear that the overall proportion of Irish rivers with a good population status is moderate. Of the 144 salmon designated rivers, there are currently 62 which are in or partially intersect with SACs where salmon have a qualifying interest under the EU Habitats Directive, 48 of which are assessed for CL attainment. Of these, only 26 are attaining CL at the 75% probability (Appendix V). In addition, there are stocks in four major rivers used for hydro-power which are highly likely to be well below their CLs above the impoundments *i.e.* Upper Liffey (Dublin), Upper Lee (Cork), Upper Shannon (Limerick) and the River Erne. However, insufficient data is available to directly assess their stock status. Following the scientific advice already provided for other rivers, there should be no harvest fisheries on wild salmon in these specific rivers until such time as significant improvements to the generation of self-sustaining runs of salmon above these impoundments has been made within the context of agreed restoration plans.

A summary of the river-specific catch advice for the 2026 season at various probabilities of attaining CL is presented in Table 5. More detailed catch advice data including catch options at various probabilities of attaining CL where relevant are provided in Appendix IV which accompanies this report.

Table 5 River-specific catch advice for the 2026 season including for assessed stocks at various probability categories of attaining CL. Mean CWEF value is also provided.

District	River	Stock	Assessed	CWEF	75%	80%	85%	90%	95%	99%
Dundalk	Castletown	Total	N	11	Close	Close	Close	Close	Close	Close
Dundalk	Dee	1SW	Y	12.9	Close	Close	Close	Close	Close	Close
Dundalk	Dee	2SW	Y	12.9	Close	Close	Close	Close	Close	Close
Dundalk	Fane	Total	Y	14.1	C&R	C&R	Close	Close	Close	Close
Dundalk	Flurry	Total	N	9.32	Close	Close	Close	Close	Close	Close
Dundalk	Glyde	Total	Y	13.4	C&R	Close	Close	Close	Close	Close
Drogheda	Boyne	Total	Y	13.49	Close	Close	Close	Close	Close	Close
Dublin	Dargle	Total	N	4.37	Close	Close	Close	Close	Close	Close
Dublin	Lower Liffey Inc Rye	Total	Y	13.91	Close	Close	Close	Close	Close	Close
Dublin	Upper Liffey US Lexlip	Total	N	8.45	Close	Close	Close	Close	Close	Close
Dublin	Vartry	Total	N	4.91	Close	Close	Close	Close	Close	Close
Wexford	Avoca	Total	N	5.27	Close	Close	Close	Close	Close	Close
Wexford	Owenavorragh	Total	N	3.62	Close	Close	Close	Close	Close	Close
Wexford	Slaney	1SW	Y	14.94	C&R	C&R	Close	Close	Close	Close
Wexford	Slaney	2SW	Y	14.94	Close	Close	Close	Close	Close	Close
Waterford	Barrow and Pollmounty	Total	Y	22.3	C&R	C&R	C&R	C&R	C&R	C&R
Waterford	Colligan	Total	N	10.47	Close	Close	Close	Close	Close	Close
Waterford	Corock R	Total	N	9.24	Close	Close	Close	Close	Close	Close
Waterford	Mahon	Total	N	6.31	Close	Close	Close	Close	Close	Close
Waterford	Nore	Total	Y	15.35	C&R	C&R	Close	Close	Close	Close
Waterford	Owenduff	Total	N	6.57	Close	Close	Close	Close	Close	Close
Waterford	Suir, Clodiagh, Lingaun, Blackwater	Total	Y	14.63	C&R	Close	Close	Close	Close	Close
Waterford	Tay	Total	N	6.81	Close	Close	Close	Close	Close	Close
Lismore	Blackwater, Glenshelane, Finisk	Total	Y	14.9	Surplus	Surplus	C&R	C&R	C&R	C&R
Lismore	Bride	Total	Y	19.4	C&R	C&R	C&R	C&R	C&R	C&R
Lismore	Lickey	Total	N	13.38	Close	Close	Close	Close	Close	Close
Lismore	Tourig	Total	N	14.14	Close	Close	Close	Close	Close	Close
Lismore	Womanagh	Total	N	5.77	Close	Close	Close	Close	Close	Close
Cork	Adrigole	Total	N	15.4	Close	Close	Close	Close	Close	Close
Cork	Argideen	Total	Y	20.2	C&R	C&R	C&R	C&R	C&R	C&R

District	River	Stock	Assessed	CWEF	75%	80%	85%	90%	95%	99%
Cork	Bandon	Total	Y	21.25	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Cork	Coomhola	Total	Y	33.1	Surplus	C&R	C&R	C&R	C&R	C&R
Cork	Glengarriff	Total	Y	7.9	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Cork	Ilen	1SW	Y	NA	Surplus	Surplus	Surplus	Surplus	C&R	C&R
Cork	Ilen	2SW	Y	NA	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Cork	Lower Lee	Total	Y	15.8	Surplus	Surplus	Surplus	Surplus	Surplus	C&R
Cork	Mealagh	Total	Y	18.25	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Cork	Owenacurra	Total	N	17.7	C&R	C&R	C&R	C&R	C&R	C&R
Cork	Owvane	Total	Y	NA	Surplus	Surplus	Surplus	C&R	C&R	Close
Cork	Upper Lee	Total	N	0.5	Close	Close	Close	Close	Close	Close
Kerry	Behy	Total	N	7.17	Close	Close	Close	Close	Close	Close
Kerry	Blackwater	Total	Y	20.9	Surplus	Surplus	Surplus	C&R	C&R	C&R
Kerry	Caragh	1SW	Y	NA	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Kerry	Caragh	2SW	Y	NA	Surplus	Surplus	Surplus	Surplus	C&R	C&R
Kerry	Carhan	Total	N	9.91	Close	Close	Close	Close	Close	Close
Kerry	Cloonee	Total	N	29.5	C&R	C&R	C&R	C&R	C&R	C&R
Kerry	Croanshagh	Total	Y	31	C&R	C&R	C&R	C&R	C&R	C&R
Kerry	Emlagh	Total	N	5.1	Close	Close	Close	Close	Close	Close
Kerry	Emlaghmore	Total	N	7.12	Close	Close	Close	Close	Close	Close
Kerry	Feohanagh	Total	N	11.46	Close	Close	Close	Close	Close	Close
Kerry	Ferta	Total	Y	13.06	Surplus	Surplus	Surplus	Surplus	C&R	C&R
Kerry	Finnihy	Total	N	3	Close	Close	Close	Close	Close	Close
Kerry	Inney	Total	Y	22.1	C&R	C&R	C&R	C&R	C&R	C&R
Kerry	Kealincha	Total	N	0	Close	Close	Close	Close	Close	Close
Kerry	Laune and Cottoners	1SW	Y	21.6	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Kerry	Laune and Cottoners	2SW	Y	21.6	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Kerry	Lee	Total	N	0.52	Close	Close	Close	Close	Close	Close
Kerry	Lough Fada	Total	N	1.23	Close	Close	Close	Close	Close	Close
Kerry	Maine	Total	Y	34.1	Surplus	Surplus	Surplus	C&R	C&R	C&R
Kerry	Milltown	Total	N	14.2	Close	Close	Close	Close	Close	Close
Kerry	Owenascaul	Total	N	13.9	Close	Close	Close	Close	Close	Close

District	River	Stock	Assessed	CWEF	75%	80%	85%	90%	95%	99%
Kerry	Owenmore	Total	Y	26.9	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Kerry	Owenreagh	Total	N	7.98	Close	Close	Close	Close	Close	Close
Kerry	Owenshagh	Total	N	13.4	Close	Close	Close	Close	Close	Close
Kerry	Roughty	Total	Y	22.5	Surplus	Surplus	Surplus	C&R	C&R	C&R
Kerry	Sheen	Total	Y	34.07	Surplus	Surplus	C&R	C&R	C&R	C&R
Kerry	Sneem	Total	Y	NA	Surplus	Surplus	Surplus	Surplus	C&R	C&R
Kerry	Waterville	1SW	Y	24.5	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Kerry	Waterville	2SW	Y	24.5	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Limerick	Annageeragh	Total	N	3.41	Close	Close	Close	Close	Close	Close
Limerick	Aughyvackeen	Total	N	1.75	Close	Close	Close	Close	Close	Close
Limerick	Deel	Total	N	1.14	Close	Close	Close	Close	Close	Close
Limerick	Doonbeg	Total	Y	14.79	C&R	C&R	C&R	Close	Close	Close
Limerick	Feale, Galey and Brick	1SW	Y	24.1	Surplus	C&R	C&R	C&R	C&R	C&R
Limerick	Feale, Galey and Brick	2SW	Y	24.1	Surplus	C&R	C&R	C&R	C&R	C&R
Limerick	Fergus	Total	Y	6.9	Close	Close	Close	Close	Close	Close
Limerick	Inagh	Total	N	4.87	Close	Close	Close	Close	Close	Close
Limerick	Maigue	Total	Y	11.4	Close	Close	Close	Close	Close	Close
Limerick	Mulkear	Total	Y	23.4	C&R	C&R	C&R	C&R	C&R	C&R
Limerick	Owenagarney	Total	N	8.42	Close	Close	Close	Close	Close	Close
Limerick	Shannon (Lower)	Total	N	32.3	C&R	C&R	C&R	C&R	C&R	C&R
Limerick	Shannon (Upper)	Total	N	NA	Close	Close	Close	Close	Close	Close
Limerick	Skivaleen	Total	N	9.95	Close	Close	Close	Close	Close	Close
Galway	Aille (Galway)	Total	N	0	Close	Close	Close	Close	Close	Close
Galway	Clarinbridge	Total	N	6.67	Close	Close	Close	Close	Close	Close
Galway	Corrib	Total	Y	NA	Surplus	Surplus	C&R	C&R	C&R	Close
Galway	Kilcolgan/Dunkellin	Total	N	6.99	Close	Close	Close	Close	Close	Close
Galway	Knock	Total	N	14.73	Close	Close	Close	Close	Close	Close
Galway	Owenboliska R (Spiddal)	Total	Y	5.6	Close	Close	Close	Close	Close	Close
Connemara	Ballynahinch	Total	Y	14.8	Surplus	C&R	C&R	C&R	Close	Close
Connemara	Cashla	Total	Y	10.8	Surplus	Surplus	Surplus	Surplus	C&R	Close
Connemara	L. Na Furnace	Total	N	0	Close	Close	Close	Close	Close	Close

District	River	Stock	Assessed	CWEF	75%	80%	85%	90%	95%	99%
Connemara	Screebe	Total	Y	11.5	C&R	C&R	Close	Close	Close	Close
Ballinakill	Bundorragha	1SW	Y	21.99	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Ballinakill	Bundorragha	2SW	Y	21.99	C&R	C&R	C&R	C&R	C&R	C&R
Ballinakill	Bunowen	Total	Y	13.6	Surplus	Surplus	C&R	C&R	Close	Close
Ballinakill	Carrownisky	Total	Y	20.2	Surplus	Surplus	Surplus	C&R	C&R	C&R
Ballinakill	Culfin	Total	Y	30.8	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Ballinakill	Dawros	Total	Y	NA	Surplus	Surplus	Surplus	Surplus	Surplus	Close
Ballinakill	Erriff	Total	Y	29.86	C&R	C&R	C&R	C&R	C&R	C&R
Ballinakill	Owenglin	Total	Y	20.9	Surplus	Surplus	Surplus	Surplus	C&R	C&R
Ballinakill	Owenwee (Belclare)	Total	Y	9.3	C&R	C&R	C&R	C&R	Close	Close
Bangor	Carrowmore	1SW	Y	25.8	Surplus	Surplus	Surplus	Surplus	Surplus	C&R
Bangor	Carrowmore	2SW	Y	25.8	Surplus	Surplus	Surplus	Surplus	Surplus	C&R
Bangor	Glenamoy	Total	Y	16.48	C&R	Close	Close	Close	Close	Close
Bangor	Muingnabo	Total	N	1.15	Close	Close	Close	Close	Close	Close
Bangor	Newport	1SW	Y	14.1	Close	Close	Close	Close	Close	Close
Bangor	Newport	2SW	Y	14.1	C&R	C&R	Close	Close	Close	Close
Bangor	Owenduff (Glenamong)	1SW	Y	10.2	Surplus	C&R	C&R	C&R	Close	Close
Bangor	Owenduff (Glenamong)	2SW	Y	10.2	Surplus	Surplus	C&R	C&R	Close	Close
Bangor	Owengarve	Total	N	5.98	Close	Close	Close	Close	Close	Close
Bangor	Owenmore	Total	Y	27.7	Surplus	Surplus	C&R	C&R	C&R	C&R
Bangor	Srahmore (Burrishoole)	Total	Y	4.3	Close	Close	Close	Close	Close	Close
Ballina	Ballinglen	Total	N	7.55	Close	Close	Close	Close	Close	Close
Ballina	Brusna	Total	N	9.79	Close	Close	Close	Close	Close	Close
Ballina	Cloonaghmore	Total	N	12.3	Close	Close	Close	Close	Close	Close
Ballina	Easky	Total	Y	7.13	C&R	C&R	C&R	C&R	Close	Close
Ballina	Leaffony	Total	N	3.86	Close	Close	Close	Close	Close	Close
Ballina	Moy	Total	Y	NA	Surplus	Surplus	Surplus	Surplus	C&R	C&R
Sligo	Ballysadare	Total	Y	NA	Surplus	Surplus	Surplus	C&R	C&R	C&R
Sligo	Drumcliff	Total	Y	17.7	Surplus	Surplus	Surplus	Surplus	C&R	C&R
Sligo	Garvogue (Bonnet)	1SW	Y	15.53	C&R	Close	Close	Close	Close	Close
Sligo	Garvogue (Bonnet)	2SW	Y	15.53	C&R	Close	Close	Close	Close	Close

District	River	Stock	Assessed	CWEF	75%	80%	85%	90%	95%	99%
Sligo	Grange	Total	N	4.42	Close	Close	Close	Close	Close	Close
Ballyshannon	Abbey	Total	N	NA	Close	Close	Close	Close	Close	Close
Ballyshannon	Ballintra (Murvagh R).	Total	N	12.72	Close	Close	Close	Close	Close	Close
Ballyshannon	Bungosteen	Total	Y	10.6	Close	Close	Close	Close	Close	Close
Ballyshannon	Drowes	1SW	Y	NA	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Ballyshannon	Drowes	2SW	Y	NA	Surplus	Surplus	Surplus	Surplus	Surplus	C&R
Ballyshannon	Duff	Total	Y	16.3	Close	Close	Close	Close	Close	Close
Ballyshannon	Eany	Total	Y	19.6	C&R	C&R	C&R	C&R	C&R	C&R
Ballyshannon	Erne	Total	N	0.2	Close	Close	Close	Close	Close	Close
Ballyshannon	Eske	Total	Y	14	C&R	C&R	C&R	Close	Close	Close
Ballyshannon	Glen	Total	Y	15.82	Surplus	C&R	C&R	C&R	C&R	Close
Ballyshannon	Laghy	Total	N	9.8	Close	Close	Close	Close	Close	Close
Ballyshannon	Oily	Total	Y	21.1	C&R	C&R	C&R	C&R	C&R	C&R
Ballyshannon	Owenwee (Yellow R)	Total	Y	13.24	Surplus	Surplus	Surplus	Surplus	Surplus	Surplus
Letterkenny	Bracky	Total	N	11.24	Close	Close	Close	Close	Close	Close
Letterkenny	Clady	Total	Y	24.5	C&R	C&R	C&R	C&R	C&R	C&R
Letterkenny	Clonmany	Total	N	9.81	Close	Close	Close	Close	Close	Close
Letterkenny	Crana	Total	Y	22.12	C&R	C&R	C&R	C&R	C&R	C&R
Letterkenny	Culoort	Total	N	0	Close	Close	Close	Close	Close	Close
Letterkenny	Donagh	Total	N	3.13	Close	Close	Close	Close	Close	Close
Letterkenny	Glenagannon	Total	N	5.82	Close	Close	Close	Close	Close	Close
Letterkenny	Glenna	Total	N	5.6	Close	Close	Close	Close	Close	Close
Letterkenny	Gweebarra	1SW	Y	17.8	Surplus	Surplus	Surplus	Surplus	Surplus	C&R
Letterkenny	Gweebarra	2SW	Y	17.8	C&R	C&R	C&R	C&R	C&R	C&R
Letterkenny	Gweedore (Crolly R.)	Total	Y	13.7	Surplus	Surplus	Surplus	Surplus	C&R	C&R
Letterkenny	Isle (Burn)	Total	N	1.06	Close	Close	Close	Close	Close	Close
Letterkenny	Lackagh	1SW	Y	21.1	C&R	C&R	C&R	C&R	C&R	C&R
Letterkenny	Lackagh	2SW	Y	21.1	C&R	C&R	C&R	C&R	C&R	C&R
Letterkenny	Leannan	1SW	Y	15.57	C&R	C&R	C&R	Close	Close	Close
Letterkenny	Leannan	2SW	Y	15.57	Close	Close	Close	Close	Close	Close
Letterkenny	Mill	Total	N	0	Close	Close	Close	Close	Close	Close

District	River	Stock	Assessed	CWEF	75%	80%	85%	90%	95%	99%
Letterkenny	Owenamarve	Total	N	6.67	Close	Close	Close	Close	Close	Close
Letterkenny	Owenea and Owentocker	Total	Y	38.6	Surplus	Surplus	C&R	C&R	C&R	C&R
Letterkenny	Ray	Total	Y	11.9	C&R	C&R	C&R	C&R	Close	Close
Letterkenny	Straid	Total	N	0.05	Close	Close	Close	Close	Close	Close
Letterkenny	Swilly	Total	N	11.74	Close	Close	Close	Close	Close	Close
Letterkenny	Tullaghobegly	Total	Y	7.94	Surplus	C&R	C&R	C&R	C&R	Close

NA= no data available.

4.2 Mixed-stock catch advice

Owing to the different status of individual stocks within the stock complex, mixed-stock fisheries present particular threats to stock status (ICES 2019). The TEGOS strongly advise that all fisheries should operate only on the target stock as close to the river mouth as possible or within the river to achieve this. Even where all exploited stocks in a common estuary are meeting their CLs, mixed-stock fisheries introduce greater uncertainty into predicting the effects of management measures and pose a greater threat to small stocks or populations, especially if these are of low relative productivity and/or subject to high exploitation. As the number of stocks (or populations) increases, the number of fish that must escape from such fisheries in order to meet CLs must also increase. When the number of populations is too large, it may be impossible to ensure a high probability of the simultaneous achievement of spawner requirements in each individual unit.

The objective of the catch advice is to ensure that harvest fisheries operate only in estuaries where stocks in contributing systems meet and exceed CLs. There are potentially three primary mixed-stock commercial fisheries operating in estuaries, namely, Castlemaine (Kerry); Killary (Ballinakill); and Owenmore Estuary (Bangor). In addition, a minor mixed-stock fishery may potentially operate in Tullaghan Ferry (Bangor).

Overall, catch advice for the 2026 season is provided for three primary potential mixed-stock salmon fisheries. This is presented in Table 6 and Table 7 below.

Table 6 Catch advice for each of the three primary potential mixed-stock fisheries at various probabilities of attaining CL.

Advice	75%	80%	85%	90%	95%	99%
Castlemaine Harbour	Surplus	Surplus	Surplus*	Close**	Close**	Close**
Killary	Close***	Close***	Close	Close	Close	Close
Owenmore Estuary	Surplus	Close	Close	Close	Close	Close

* contributary River Maine only has a surplus of 8.

**contributary River Maine is under CL;

***contributary River Erriff is under CL;

Table 7 Advised harvest surplus for the three primary potential mixed-stock fisheries at various probabilities of attaining CL for distribution amongst the relevant contributory commercial and angling fisheries.

Advice	75%	80%	85%	90%	95%	99%
Castlemaine Harbour	3034	2847	2627	-	-	-
Killary	-	-	-	-	-	-
Owenmore Estuary	185	-	-	-	-	-

In general, the TEGOS advises that:

- harvest of salmon should only be allowed where a surplus above their CL is identified and that no more than this surplus should be harvested. In some rivers where the available surplus is minor and impractical to manage, management may decide to operate such fisheries as C&R-only.
- If a contributory river stock has no advised surplus, then the mixed-stock fisheries should not operate.
- If the mixed-stock common embayment fishery is operated then the advised surpluses for the individual contributary river stocks are disregarded and the following should apply:
    - The Common Embayment Castlemaine advised surplus (if available) is applied to the Maine, Caragh 1SW and Laune 1SW fisheries and Castlemaine when the Castlemaine commercial fishery is operated. It can be distributed among the following fisheries: Castlemaine, Laune, Caragh and Maine commercial fisheries; total rods on the Maine; and 1SW rods on the Laune and Caragh. The MSW advice for rod fisheries in the Caragh and Laune is provided separately.
    - The Common Embayment Killary advised surplus (if available) is applied to the Killary, Bundorragha 1SW and Erriff fisheries when the Killary commercial fishery is operated. It can be distributed among the following fisheries: Killary commercial fishery; total rods on the Erriff; and 1SW rods on the Bundorragha. The MSW advice for the rod fishery in the Bundorragha is provided separately.
    - The Common Estuary Owenmore advised surplus (if available) is applied to the Owenmore Estuary, Tullaghan Ferry (in part if also operating), Carrowmore 1SW and Owenmore fisheries when the Owenmore Estuary commercial fishery is operated. It can be distributed among the following fisheries: Owenmore Estuary commercial fishery; Tullaghan Ferry commercial fishery (in part, with additional surplus allocated from the Owenduff 1SW surplus); Owenmore and Carrowmore commercial fisheries; total rods on the Owenmore; and 1SW rods on the Carrowmore. The MSW advice for the rod fishery in the Carrowmore is provided separately.
- Detailed consideration should be given by Fisheries Managers to the operation of mixed-stock fisheries where an individual river surplus in a contributary river to the mixed-stock is low. This is because the TEGOS has limited knowledge on the specific allocation of the advised surplus amongst the various angling and commercial

fisheries that may occur there. For example, for the Castlemaine Harbour common embayment a surplus of 2,627 is available at the 85% probability of attaining CL. However, the individual advised harvest surplus for the River Maine stock at the 85% probability of attaining CL is eight salmon. Therefore, the proportion of River Maine salmon likely to be intercepted in the Castlemaine mixed-stock fishery, if operated, should not exceed eight salmon and the quota set should be distributed appropriately between the contributory fisheries with precaution to ensure this.

5. Recent trends in salmon stock status

Since 2007, scientific advice has been provided on an individual river basis regarding salmon stock status. While scientific advice will continue to be presented on an individual river basis, data from fish counters, where reliable long-term data is available, has been combined (Figure 6) in order to provide an overview of trends in salmon stock status nationally.

5.1 Fish counter time series

The number of counters installed and used in stock assessments has increased since river-specific advice began in 2007. The analysis is based on data obtained from a minimum of 9 to a maximum of 31 fish counters with a reasonable time series of data. The counter time series runs from 2002 to the most recent full year. Corrected average yearly fish counts can be calculated using a generalised linear model (GLM) to show the overall annual trend across the available counters. This provides a benchmarked comparison of how annual salmon returns have varied over this time period. Figure 6 shows variation in the mean values for numbers of salmon counted through counters from 2002 to 2025, peaking in 2007 which coincided with the cessation of offshore drift netting.

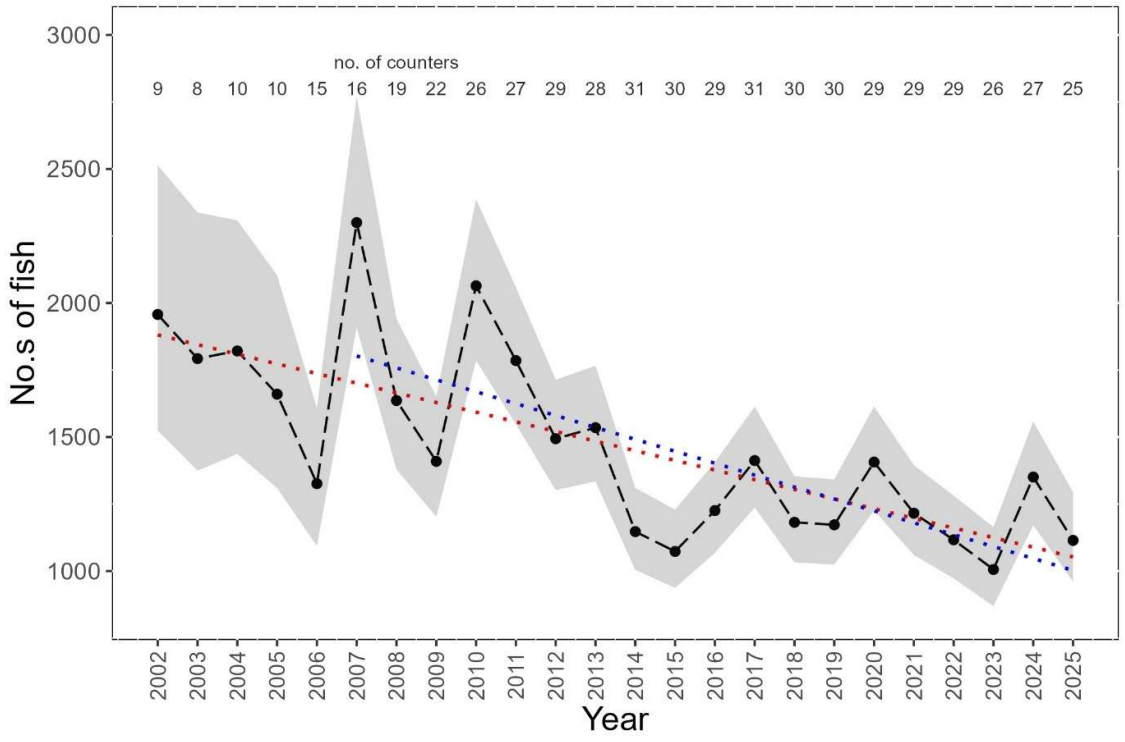
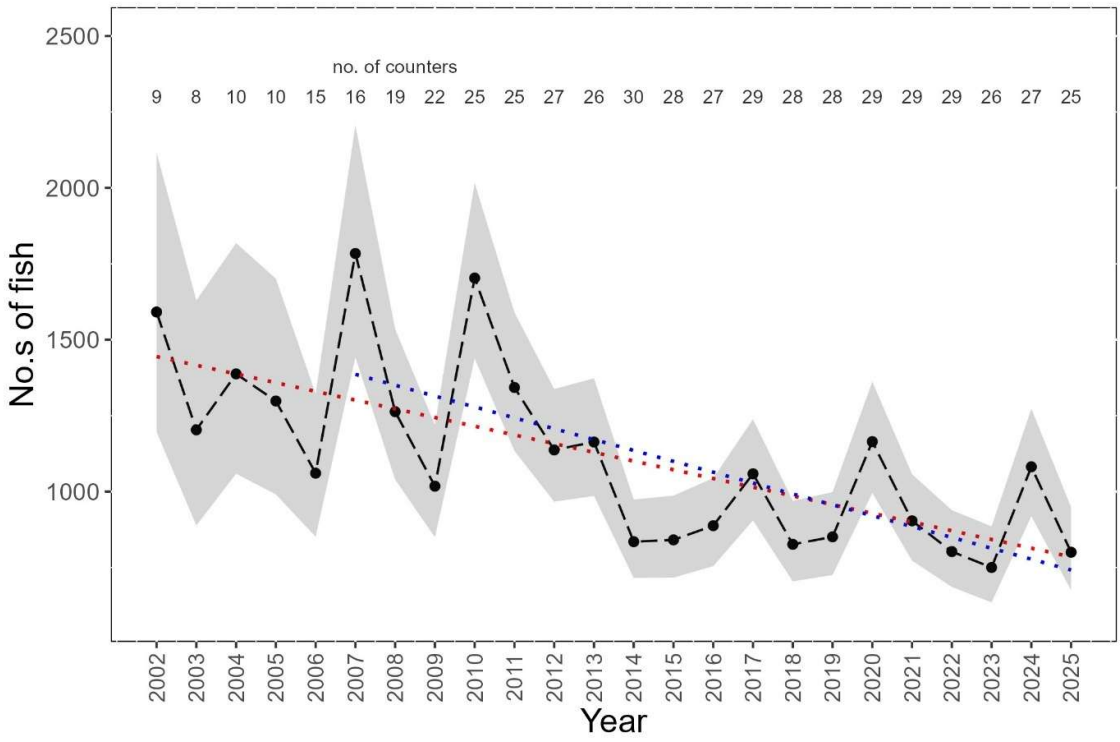


Figure 6 Marginal GLM Least Squares-mean standardised number of salmon counted through counters operated between 2002 and 2025 (± 95% confidence intervals – grey band). The number of counters is shown at the top. The linear trend over the full time period (red dashed line), and between 2007 and the present (blue dashed line) are also indicated. Note that the drift net fishery ceased at the end of the 2006 season.

a



b

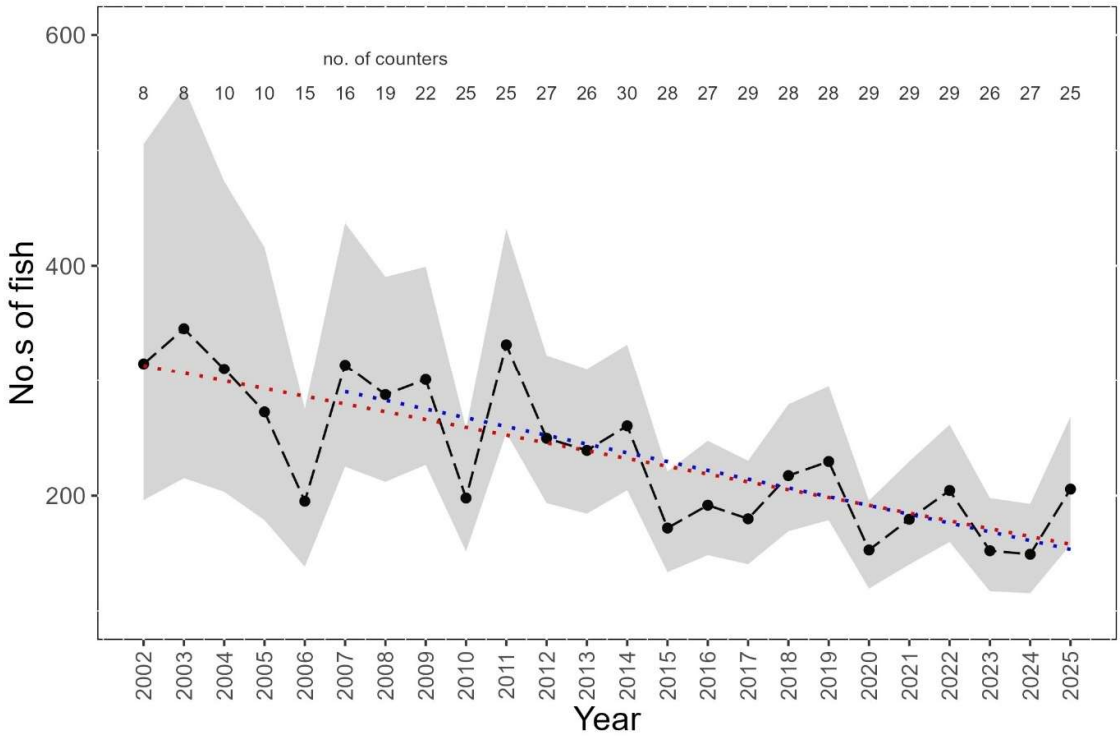


Figure 7 Marginal GLM LS-mean standardised number of (a) 1SW grilse and (b) MSW counted through counters operated between 2002 and 2025 (± 95% confidence intervals – grey band). The linear trend over the full time period (red dashed line), and between 2007 and the present (blue dashed line) are also indicated.

The overall linear trend of the fish counter time series indicates a decline in mean abundance which has become more marked since 2007. A minor upturn was evident from the low of 2015 until 2017. Since 2020, a declining trend is generally evident with 2023 representing the lowest value in the whole time series. However, 2024 shows a minor increase relative to the preceding two years followed by a decline in 2025 which is the third lowest estimate in the timeseries. Figure 7a shows trends in returns of one-sea-winter (1SW) grilse. As 1SW grilse constitute the majority of the overall salmon stock in Ireland, it is unsurprising that the overall trend and year to year variations in mean stock abundance are similar as was observed for the total salmon stock (Figure 6). Figure 7b presents trends in returning multi-sea-winter (MSW) salmon, including spring salmon which predominantly return from January to May inclusive. A moderately declining trend is evident in this stock component over the time series. However, the estimate for 2025 represents an improvement over 2023 and 2024.

Overall, 18 of the 25 fish counter returns estimates in the most recent year are below their mean counts from preceding years (Figure 8).

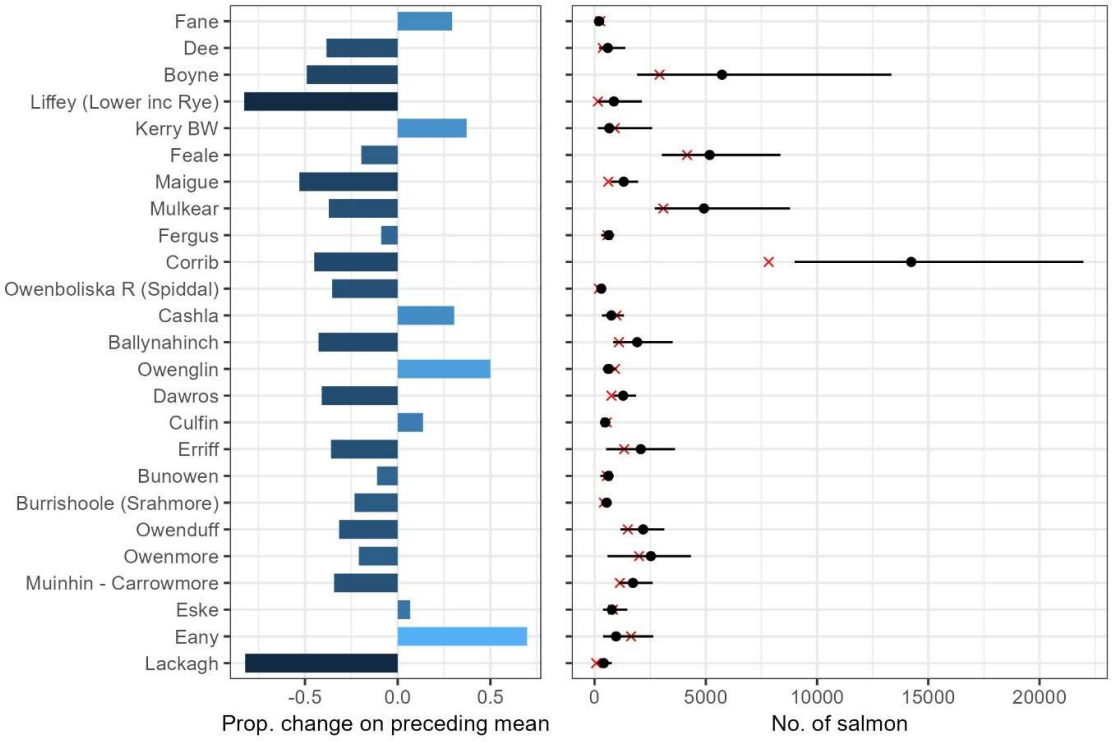


Figure 8 The proportional change in the salmon count in 2025 compared to the preceding multi-annual mean count per fish counter (left panel); Mean salmon count and associated range (min, max) of the preceding time series (indicated by black circle and bar, respectively) in comparison to the most recent year's count (indicated by red X) (right panel).

5.2 National returns and estimates of spawners relative to CL attainment

The ICES Working Group on North Atlantic Salmon (WGNAS) provides annual scientific advice to the inter-governmental body NASCO for the management of fisheries in the North Atlantic. In this advice, Irish wild salmon stocks are included as part of the southern complex in the North-east Atlantic region, along with French, south-west Icelandic and UK stocks. As part of the ICES advice process, for the southern stock complex and its constituent jurisdictions, annual stock assessments and periodic stock forecasts (every one to three years) are undertaken (ICES 2025).

For the ICES WGNAS assessments, stocks are divided into *maturing 1SW* i.e. grilse fish who spend a single winter at sea before returning to Ireland; and *non-maturing 1SW* i.e. multi-sea winter fish who spend, typically two, or more years at sea before returning to Ireland. The following stock statuses are considered:

- PFA (*Pre-fisheries abundance*): Abundance of maturing 1SW and non-maturing 1SW in the ocean before any fisheries or natural mortality on their return migration takes place.
- CL (*conservation limit*). This is the sum of the conservation limits of all Irish salmon rivers.
- SER (*Spawner escapement reserve*). This level on the graph indicates the minimum amount of fish that are required in the PFA phase to meet the national CL set for each stock component. The SER accounts for the natural mortality that occurs between the PFA stage and the return of fish to home-waters. It is derived from the national CL by accounting for the natural mortality and distant water fisheries that occur during the fish's residence at sea.
- 1SW / MSW returns: number of fish returning to the Irish coast after high seas fisheries and taking account natural mortality rates while at sea.
- 1SW / MSW spawners: number of spawning fish in Irish rivers.

5.2.1 One-sea-winter returns and spawners

The ICES advice shows that 1SW returns to Ireland before fisheries take place were above CL from 1971 to 2008 and 2010 to 2012, and below CL in 2009 and 2011 and since 2013. (Figure 9). Indeed, reflecting this, following exploitation, spawners have been at or below CL for 31 of the 52 years in the time series and have not exceeded CL since 2004 (ICES 2025).

5.2.2 Multi-sea-winter returns and spawners

National MSW returns to Ireland exceeded CL until 1990 after which values fluctuated around the CL until 2004. Since then, returns of MSW fish have been generally well below CL (Figure 9). While the management aim is to ensure that MSW spawners are above CL after any

fishery takes place, this has only been achieved once since 1988 and not since 2003 (ICES 2025).

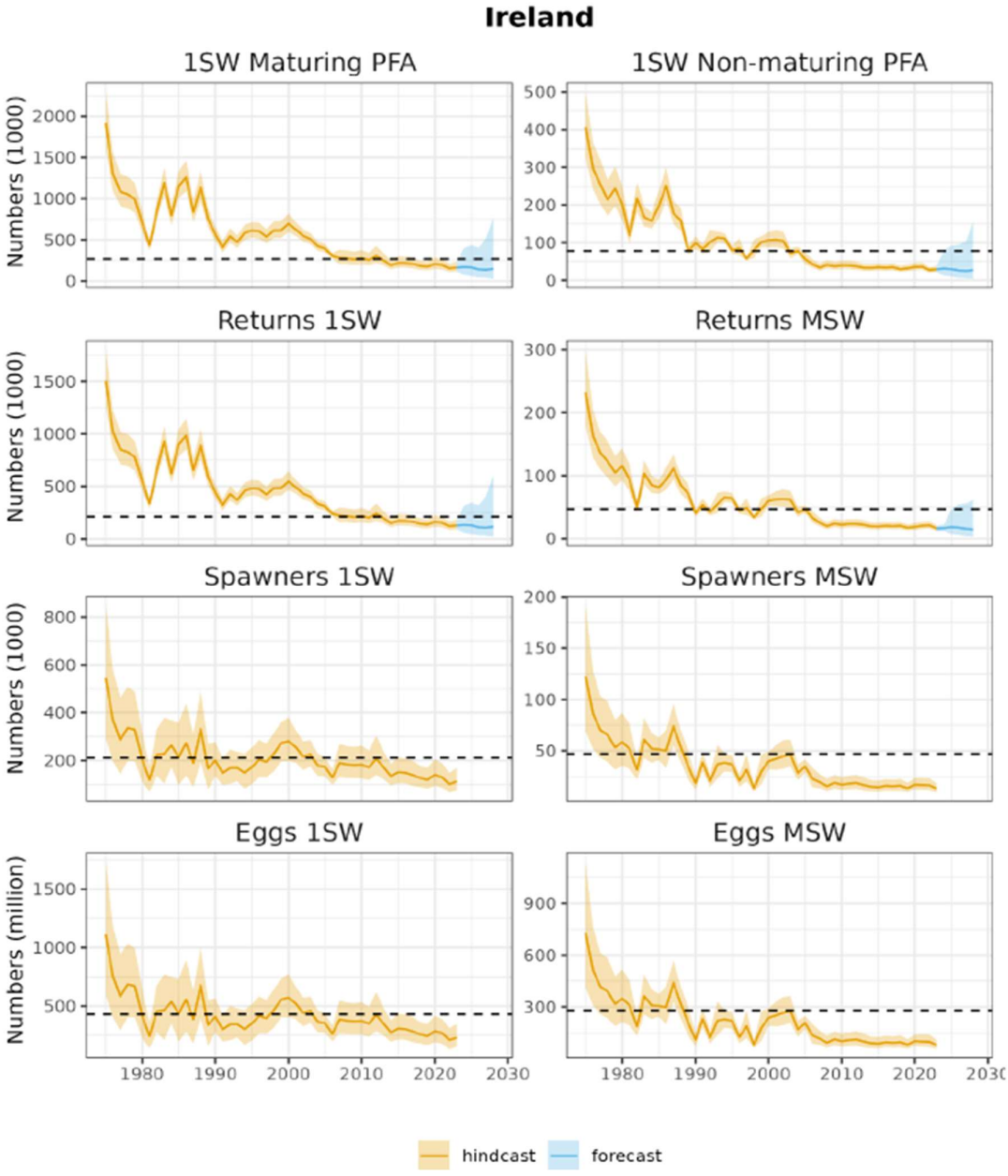


Figure 9 Top panel: Pre-Fisheries Abundance of Irish 1SW and MSW salmon stocks (solid line) with respective Spawner Escapement Reserve indicated (dashed line). Mid panels: Estimated return of 1SW and MSW salmon to Ireland prior to homewater fisheries and spawners (solid line) relative to national CL (dashed line). Bottom panels: Egg deposition from 1SW and MSW spawners (solid line) relative to CL in eggs (dashed line). Orange line and shaded area represent hindcasting of the historical timeseries; blue line and shaded area represent forecasting obtained under a scenario with zero catches in all fisheries (for PFA and returns). Solid line is the median value and shaded areas are 90% credibility intervals. (source: ICES 2025).

5.2.3 Stock forecast (2025 to 2028)

For the southern North-east Atlantic stock complex (2025 to 2028), of which Ireland is a constituent jurisdiction, *the median estimates of maturing and non-maturing PFA are forecast to remain relatively stable for the years 2025 to 2028, though they remain amongst the lowest estimates in the time-series. For the maturing PFA, the median is forecast to be below the SER for the years 2025 to 2028. For the non-maturing PFA, the median is also forecast to remain generally below the SER*. As regard the Irish national stock, *for both maturing and non-maturing stocks, the median estimate of PFA is forecast to decline to the lowest estimates in the time-series and be below the SER for the years 2025 to 2028* (ICES 2025). This modelled projection essentially predicts that there will not be enough Irish one-sea-winter or multi-sea-winter salmon present in the ocean to meet our national CL during this period.

5.2.4 Additional considerations

It is important to note that overall trends in our salmon stocks summarised at the national or international scale do not necessarily reflect those observed in specific individual rivers where inconsistent trends can be evident in a comparable time period. Indeed, ICES have emphasised that national stock CLs are not appropriate for the management of homewater fisheries. This is because of the relative imprecision of the national CLs and because they do not consider differences in the status of different river stocks or sub-river populations. They recommend that management at finer scales should consider individual river stock status. This highlights the importance of evaluating the status of our stocks at a river-specific level as a primary basis to inform sustainable fisheries management decisions.

6 Advice for stock rebuilding

6.1 International guidance on stock rebuilding

The terms of reference of the TEGOS are outlined earlier in this report. One of these relates to salmon stocks below CL.

> *"In cases where stocks are determined to be below CLs, the TEGOS shall advise the level to which catches should be reduced or other measures adopted on a fishery basis in order to ensure a high degree of probability of meeting the CLs".*

Other measures to be adopted can relate to stock rebuilding programmes for salmon stocks below CL. In 1998, NASCO adopted the "precautionary approach" to fisheries management. The NASCO *Agreement on the Adoption of the Precautionary Approach* states, that:

'*an objective for the management of salmon fisheries is to provide the diversity and abundance of salmon stocks*'

or in other words to maintain both the productive capacity and diversity of salmon stocks. NASCO provides an interpretation of how this is to be achieved. Management measures should be aimed at maintaining all stocks above their CLs by the use of management targets (MTs). This is highlighted in the NASCO Guidelines for the Management of Salmon Fisheries (NASCO 2009) where they should be established at a level above the CL to assist fishery managers in ensuring that there is a high probability of stocks exceeding their CLs. The precautionary approach is an integrated approach that requires, *inter alia*, that stock rebuilding programmes (SRPs) be developed for stocks that are below CLs. Indeed, NASCO have developed *Guidelines on the Use of Stock Rebuilding Programmes (SRP) in the Context of the Precautionary Management of Salmon Stocks* in 2025, CNL(25)50. *An SRP is likely to be a suite of management measures designed to restore a wild Atlantic salmon stock to a sustainable level as measured using a defined river-specific target. The nature and extent of the programme will depend upon the status of the stock and the pressures that it is facing. While the short-term response to a stock failing to achieve its river-specific target may be to reduce or eliminate exploitation, there will generally be a need to identify and address the causes of the stock decline along with other actions.* NASCO recommend that SRPs should be developed for all stocks that are failing to exceed their CLs and also consider SRPs where the long-term viability of the stock is at risk of failing to exceed its CL.

NASCO's SRP guidelines were developed to *inter alia* provide a link between several other guidance documents developed by NASCO in relation to the application of the Precautionary Approach, including the *Decision Structure for the Management of Salmon Fisheries*, and the *Plan of Action for the Protection and Restoration of Atlantic Salmon Habitats*. Supporting this, NASCO has adopted *Guidelines for the Management of Salmon Fisheries*, CNL(09)43, *Guidelines for the Protection, Restoration and Enhancement of Salmon Habitat*, CNL(10)51, and *Guidance on Best Management Practices to Address Impacts of Sea Lice and Escaped Farmed Salmon on Wild Salmon Stocks*, SLG(09)5, which contain elements relevant to stock rebuilding.

In 2024 NASCO agreed a Ten-Year Strategy and Action Plan which forms the basis for its fourth reporting cycle, starting in 2026, in which Performance Indicators and Conservation Commitment Reports will be used to measure progress towards the achievement of NASCO's Resolutions, Agreements and Guidelines. As such, Ireland now has obligations under these measures to develop and implement *urgent and transformative actions* to slow the decline of wild Atlantic salmon populations over the next 10 years. This should be done by targeting priority pressures on our stocks as identified in our national assessment of human stressors impacting Irish Atlantic salmon populations (Figure 10). The top stressor identified was climate change in the North Atlantic Ocean. However, given the formidable scale of this stressor and little ability to directly address this pressure, the three priority pressures identified by Ireland are pollution, habitat degradation and aquaculture (NASCO 2025a; NASCO 2025b). For each of these priority pressures, actions are required to mitigate for and address these threats. It is important to note that over-exploitation as a pressure scored reasonably low in the assessment mainly due to a reduction in exploitation in Irish salmon fisheries in recent decades, annual provision of catch advice based on scientific stock assessment to ensure river fisheries are sustainably exploited and the considerable extent of the protection work carried out by IFI against illegal fishing, both at sea and in rivers. This does not of course preclude Ireland addressing measures outside of the three priority pressures identified but highlights the general importance to salmon for Ireland to undertake *urgent and transformative actions* to address the priority pressures identified.

Jurisdictions must submit their draft Conservation Commitments Reports to NASCO by 5th February 2026 which outline actions that will be taken under the priority pressures identified in their national stressors assessment.

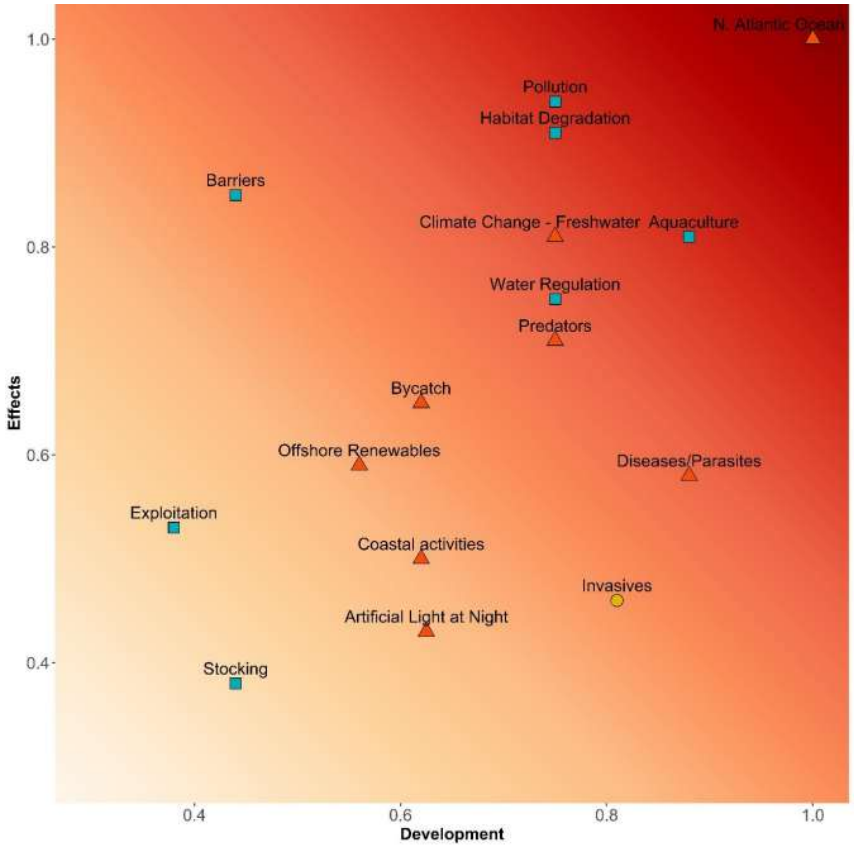


Figure 10 National assessment of human stressors impacting Irish Atlantic salmon populations (adapted from NASCO 2025b).

6.2 Factors affecting stock rebuilding programmes for Irish salmon stocks

Closure of marine mixed-stock fisheries for salmon and even complete closure of some salmon rivers to harvest fisheries may not ensure that all rivers will meet or exceed CLs in the short term. There are several identifiable problems militating against immediate recovery and this must be taken into account for future management over and above management of fisheries (Thorstad *et al*. 2021). In some instances, such as large-scale changes in the North Atlantic Ocean-atmosphere system that could contribute to poorer marine survival of salmon, it may not be possible to reverse the specific problems directly. Some of these specific problems related to marine survival are outlined below.

6.2.1 Marine survival

Decreased survival rate in the marine environment, rather than in natal rivers, seems to explain the current poor state of many salmon populations (ICES 2016). Marine survival of Irish salmon has declined from 15% to 20% of juveniles returning as adults to Irish rivers in the 1970s and 1980s to a current level which fluctuates around the 5% level. Current estimates of marine survival are amongst the lowest in the time series and

suggest that based on recent years, under 5% of the wild smolts that go to sea from Irish rivers are surviving (i.e. under 5 adults returning for every 100 out-migrating smolts). This data is based on coded-wire and PIT tagging programmes run by IFI and the Marine Institute. These programmes tag smolts going to sea in index rivers and assess the subsequent proportion that return to the river and coastal environment as adults. However, rivers that monitor marine return rates of Atlantic salmon frequently show variable return rates between salmon populations in separate and in overlapping geographic regions, denoting that a variety of factors at local, regional and continental scales control the success rate of out-migrating smolt to adult returns (ICES 2023; Figure 11). Marine survival can be partitioned into coastal (transitional and inshore waters) and oceanic (offshore and open ocean) components. The coastal component operates during the first migration of juvenile salmon (smolts) out of their natal river. Events during such early life stages in the freshwater and estuarine environment can have an impact on the subsequent marine survival of salmon. Coastal pressures include local pollution, predation, and increased rates of sea lice infestation associated with salmon aquaculture.

The North Atlantic Ocean undergoes cyclical changes, showing multi-decadal variability in sea surface temperatures, ocean circulation currents and ecosystem productivity. Well described sources of this long-term internal (natural) variability include the Atlantic Multidecadal Oscillation (AMO) and the North Atlantic Oscillation (NAO). The AMO is particularly relevant to the marine ecology of Atlantic salmon and generates a long-term oscillation of North Atlantic conditions resulting in "warm" and "cool" phases. In general, Atlantic salmon marine survival and growth rates correlate with shifts in the AMO phase (Condron *et al*. 2005; Friedland *et al*. 2014). The AMO exhibited a pronounced cool phase during the 1970s toward the late 1980s, a period of high salmon returns, and a warming phase since ~1995, when declining trends in the abundance of salmon were observed across the North Atlantic basin. Furthermore, externally forced trends related to anthropogenically-driven climate change can interact with and modify the multi-decadal variability of the North Atlantic Ocean, including the AMO (Terray, 2012). The combination of the current "warm" phase of the AMO and the underlying warming trend due to climate change is strongly implicated in the current North Atlantic-wide record low abundance of salmon, with multiple regions, including Ireland, recording all-time low salmon returns in 2023 or 2024 (ICES 2025). In this general context it is important to note that the relatively high returns of salmon observed in the decades prior to the 1990s (ICES time series) may represent a high point for the stock internationally and not necessarily reflect the baseline state to be expected for the species.

Ocean warming can negatively impact oceanic growth and survival of Atlantic salmon (Todd *et al*. 2008; McCarthy *et al*. 2008; Friedland *et al*. 2009; Friedland *et al*. 2003). Whilst the marine ecology of Atlantic salmon is still poorly understood, the mechanism for reduced survival under such oceanic conditions may be linked to observed changes in marine trophic regimes in the North Atlantic, with declines in salmon survival and growth related to shifts in primary production and zooplankton abundance (Beaugrand and Reid, 2012; Mills *et al*. 2013; Defriez *et al*. 2016). Of particular significance was the detection of an abrupt shift in growth conditions for Atlantic salmon around 2005 (Vollset *et al*. 2022), which coincides with accelerated declines in numbers of Irish fish returning to natal rivers. However, the exact mechanisms at play leading to reduced marine survival are still not fully understood and further evidence relating to changes in primary production at sea leading to changes in prey distribution, abundance and energetic content require further investigation. Other areas of investigation include direct mortality impacts related to predator abundance and distribution (fish/seabirds/mammals) and by-catch in pelagic fisheries.

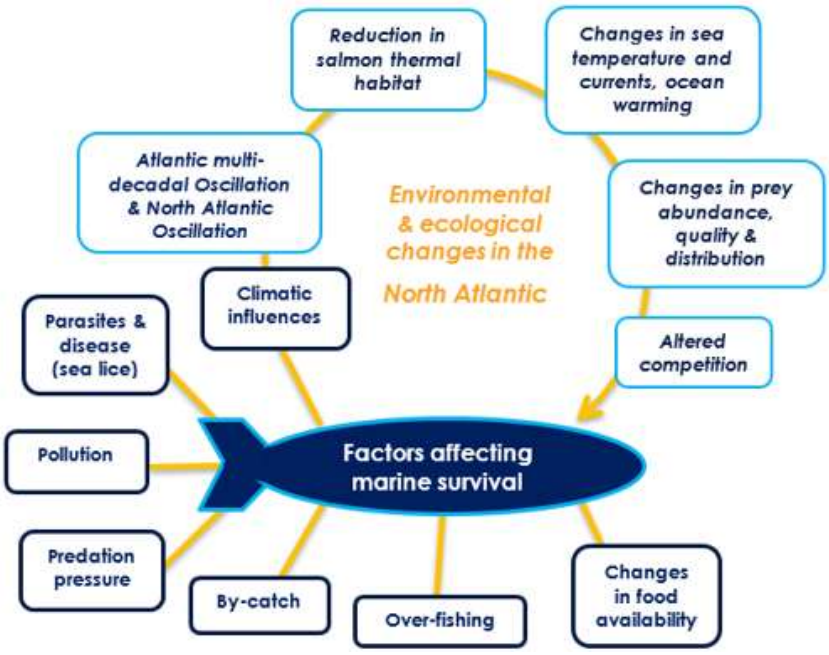


Figure 11 The factors which individually and synergistically affect the marine survival of salmon and which cause significant changes to life history responses such as population structure, fitness and size.

A particular challenge toward understanding the future fate of Atlantic salmon relates to the challenge of forecasting the AMO at decadal timescales with a high degree of confidence, owing to the complex interaction between natural internal variability and long-term anthropogenically-driven climate forcing (e.g. Hao *et al*. 2025). A shift

towards a cooler AMO phase, which ostensibly may improve marine survival rates of Atlantic salmon, could emerge in future decades but high uncertainty remains. Given such uncertainty, and current concerns that large-scale marine stressors at the North Atlantic scale are impacting salmon, management actions to improve survival in, and production from, the freshwater and coastal phase of the life cycle are critical in the attempt to safeguard the species through this period of record low marine survival. Maximising the number of healthy, resilient wild smolts migrating from rivers is currently the most effective strategy toward achieving this (e.g. Thorstad *et al*. 2021).

6.2.2 Freshwater

Within river systems and transitional coastal waters, the principal threats to the sustainability of salmon stocks include:

- water quality issues from agriculture, domestic waste-water treatment and forestry; and urban waste-water pressures;
- hydromorphological pressures that debilitate spawning and juvenile rearing habitat;
- marine salmon aquaculture;
- climate change stressors;
- migration barriers;
- invasive alien species;
- heightened predation pressures and disease; and
- over-exploitation of stocks and illegal fishing.

These may act at local and regional scales and individual stocks may be synergistically affected by multiple such stressors. Addressing such anthropogenic pressures is key to facilitating the natural recovery of vulnerable stocks through increasing freshwater production potential to ultimately maximise adult returns.

Water quality and hydromorphological issues (including channelisation, drainage works and modification of the river corridor through catchment land use practices) continue to remain as major pressures affecting the continued sustainability of our salmon stocks at a national scale. Despite increasing awareness surrounding these pressures in recent years and attempts to address them, in general there has not been significant improvement in either hydromorphology or water quality to date at a scale that would have measurable conservation benefits to salmon stocks. It should be noted that locally-focused initiatives to improve habitat or address water quality pressures do however, demonstrate that improvements are possible and TEGOS are aware of many such actions that are underway.

The latest EPA assessment for water quality in Ireland (period 2019-2024) showed that, rather than any significant overall improvement, that there has been a small decline in water quality compared to the previous reporting assessments with only 52% of our surface waters now considered to have at least good ecological status. The number of estuarine waters classed as having satisfactory water quality also declined with 70% now in unsatisfactory condition, a reduction of 5% compared to the previous assessment period (2016-2021). For both, this has largely been attributed to diffuse inputs, with elevated nutrient concentrations (nitrogen and phosphorus), continuing to be the most widespread issue along with habitat loss associated with hydromorphology pressures such as barriers and land drainage.

Additional pressures and threats impacting salmon in Irish freshwater and transitional waters include marine salmon aquaculture, water regulation and abstraction and changes in thermal and hydrological regimes associated with climate change. Impacts from salmon aquaculture include increased sea lice infestation pressure which can lead to reduced marine survival in afflicted wild salmon smolts and potential genetic introgression from farm escapes. Whilst completely impassable barriers have the gravest impact on the conservation status of Irish salmon (as they limit the freshwater production capacity of the national stock), mitigating minor or moderate barriers will also decrease migration stress for adult and juvenile salmon. Regulation of river flows through hydropower extraction dams, reservoirs and abstraction points for human and agricultural water consumption may also affect salmon stocks by disturbing migration routes and creating unnaturalised flow regimes and compounding stress during dry periods. This is likely to become a more pressing concern in future years through climate-mediated droughts and increased water demands. Climate change affecting estuaries, rivers and lakes is already impacting salmon, with sublethal thermal stress conditions increasingly observed each summer in Ireland in the past 10-20 years, adverse winter conditions (mild, wet winters with extreme flooding events) having the potential to affect spawning recruitment and warm, dry spells during spring potentially impacting smolt migration success. The primary concern related to the stressors listed here is the capacity for a multi-stressor scenario, where individual pressures combine to create a compounded situation for salmon, which will decrease resilience and capacity to adapt to the low marine survival salmon are currently experiencing. Removing or mitigating individual stressors listed here that are operating in freshwater or transitional waters currently represents the most pragmatic approach to stabilise overall declining population trends.

7 Changes to assessments in future years

Until such time as new methods become available, the existing forecast model based on fisheries data or count data will be applied using the currently derived CLs. Data will continue to be updated and where appropriate, improved to provide catch advice.

7.1 Exploitation rates

The SSCS examined rod exploitation rates on rivers with counters in 2008 to derive estimates of the likely range of exploitation by anglers on salmon stocks. Since then, new counters have been installed on many rivers and a time series of rod exploitation has been generated on a range of rivers nationally. An extensive review of salmon exploitation rates in Irish rivers (Millane *et al*., 2017) using rod catch and fish counter data was published in 2017 but has not yet been incorporated into estimates of adult salmon return. It is envisaged that this work will be revised to include more recent data as well as investigating if climatic influences and river characteristics can be incorporated into exploitation rates. As such, TEGOS intend to further develop this data to refine the rod exploitation rates currently being used to provide estimates of salmon stock status.

7.2 River Lee, River Owenacurra and Cork Harbour

TEGOS advice was sought by IFI Management in 2023 on a stakeholder query concerning the Lower River Lee and Owenacurra stocks in relation to the Cork Harbour commercial fishery. Since the move to river-specific conservation limits (CLs) in 2007, the Lower Lee has been deemed to exceed its conservation limit and a sustainable surplus for exploitation has been advised. This surplus has been divided between the angling and commercial fisheries. To date, the commercial fishery in Cork Harbour has been managed as a single stock (as part of the Lower Lee stock) and scientific advice has been given in this regard with no consideration given to status of the Owenacurra stock. As such, as a future basis for providing revised scientific catch advice for the commercial fishery in Cork Harbour, a study was commissioned to establish the river origin of the salmon caught in this commercial fishery.

In summer 2024, an extensive sampling programme was undertaken in the Cork Harbour commercial fishery and in rivers that potentially contribute salmon to this fishery. Some supplementary sampling was undertaken in autumn 2025. It is envisaged that a report will be produced for consideration well in advance of the 2027 catch advice.

8 Conclusions

Overall, only 28% of the 144 salmon designated river stocks are assessed to be exceeding biologically-based CLs at the 75% probability level. This includes 53% (n=41) of the 77 salmon stocks where direct assessments could be made. In addition, 29 more river stocks are advised to open for C&R-only angling as assessments indicate relatively high juvenile densities or the stocks are deemed to be under CL but meeting ≥65% of CL. A further 74 stocks are advised to be closed to all fishing. As such, it is clear that the overall proportion of rivers with good population status is moderate. Fish counters and traps provide the most direct assessment of salmon stock status in rivers. The number installed and used in stock assessments has increased from 9 in 2002 to a maximum of 31 in recent years. There has been variation in the mean count since 2002, with highest numbers recorded in 2007 coinciding with the cessation of offshore drift netting. However, there has been a marked decline in salmon counts subsequently. These counter data can be considered as an index for other rivers nationally and likely reflect the national trend. Indeed, the Fish Counter Programme provides a quantitative measure of salmon returns in Irish rivers where they operate. As such it is considered to be a strategically important asset in regard to the assessment of salmon stocks and the associated sustainable catch advice provided annually by TEGOS.

Marine survival values in recent years are amongst the lowest recorded. Changes in oceanic conditions leading to poor recruitment of salmon have been implicated by NASCO following international investigations into the decline of salmon stocks (e.g. SALSEA Merge). Recent stock forecasts from ICES for Irish stocks in the southern range of the North-east Atlantic, indicate that this low stock situation will prevail at least until 2028. Given the current poor survival, the expectation of large catches is unrealistic at present and priority should be given to conservation objectives rather than catch increases until there is a noticeable improvement in stock abundance.

In this regard, the ongoing management policy of adopting the scientific advice to only allow exploitation on stocks above CL is central to support the recovery of salmon stocks nationally. With this policy in place, any improvement in marine survival rates and /or in the total abundance of out-migrating smolts would likely be reflected in greater numbers of rivers achieving CL. This will contribute to complying with ICES and NASCO advice of providing for the diversity and abundance of salmon stocks.

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10 Appendices

Appendix I. Members of the Technical Expert Group on Salmon (TEGOS) 2025/2026

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Appendix II. River rod catch exploitation rates applied for 2026 catch advice

Table 8 River rod catch exploitation rates applied for the 2026 catch advice.

District	River	Year	Total or 1SW exploitation rate			MSW exploitation rate		
			Min.	Likely	Max.	Min.	Likely	Max.
Dundalk	Fane	2024-2025	0.01	0.05	0.12	0.06	0.12	0.27
Dundalk	Fane	2023	0.07	0.11	0.26	0.06	0.09	0.2
Dundalk	Fane	2022	0.01	0.05	0.12	0.06	0.12	0.27
Dundalk	Fane	2021	0.01	0.04	0.1	0.06	0.1	0.22
Dundalk	Glyde	2024-2025	0.01	0.05	0.12	0.06	0.12	0.27
Dundalk	Glyde	2023	0.01	0.0375	0.09	0.06	0.09	0.2
Dundalk	Glyde	2021-2022	0.01	0.05	0.12	0.06	0.1	0.22
Wexford	Slaney	2024-2025	0.01	0.05	0.12	0.06	0.12	0.27
Wexford	Slaney	2023	0.01	0.0375	0.09	0.06	0.09	0.2
Wexford	Slaney	2022	0.01	0.05	0.12	0.06	0.12	0.27
Wexford	Slaney	2021	0.01	0.04	0.1	0.06	0.1	0.22
Waterford	Barrow and Pollmounty	2024-2025	0.01	0.05	0.12	0.06	0.12	0.27
Waterford	Barrow and Pollmounty	2023	0.01	0.0375	0.09	0.06	0.09	0.2
Waterford	Barrow and Pollmounty	2022	0.01	0.05	0.12	0.06	0.12	0.27
Waterford	Barrow and Pollmounty	2021	0.01	0.04	0.1	0.06	0.12	0.27
Waterford	Nore	2022-2025	0.01	0.05	0.12	0.06	0.12	0.27
Waterford	Nore	2021	0.01	0.04	0.1	0.06	0.12	0.27
Waterford	Suir, Clodiagh, Lingaun	2024-2025	0.01	0.05	0.12	0.06	0.12	0.27
Waterford	Suir, Clodiagh, Lingaun	2023	0.01	0.0375	0.09	0.06	0.09	0.2
Waterford	Suir, Clodiagh, Lingaun	2022	0.01	0.05	0.12	0.06	0.12	0.27
Waterford	Suir, Clodiagh, Lingaun	2021	0.07	0.15	0.35	0.06	0.12	0.27
Lismore	Blackwater, Glenshelane, Finisk	2022-2025	0.1	0.15	0.2			
Lismore	Blackwater, Glenshelane, Finisk	2021	0.067	0.1	0.14			
Lismore	Bride	2023-2025	0.01	0.05	0.12			
Lismore	Bride	2021-2022	0.07	0.15	0.35			
Cork	Argideen	2023-2025	0.01	0.05	0.12			
Cork	Argideen	2022	0.07	0.15	0.35			
Cork	Argideen	2021	0.01	0.04	0.1			
Cork	Bandon	2022-2025	0.07	0.15	0.35	0.06	0.12	0.27

District	River	Year	Total or 1SW exploitation rate			MSW exploitation rate		
			Min.	Likely	Max.	Min.	Likely	Max.
Cork	Bandon	2021	0.07	0.12	0.28	0.06	0.1	0.22
Cork	Coomhola	2024-2025	0.07	0.15	0.35			
Cork	Coomhola	2021-2023	0.07	0.11	0.26			
Cork	Glengarriff	2022-2025	0.01	0.05	0.12			
Cork	Glengarriff	2021	0.01	0.04	0.1			
Cork	Ilen	2021-2025	0.07	0.15	0.35	0.06	0.12	0.27
Cork	Lower Lee (Cork)	2024-2025	0.07	0.15	0.35	0.06	0.12	0.27
Cork	Lower Lee (Cork)	2023	0.07	0.11	0.26	0.06	0.09	0.2
Cork	Lower Lee (Cork)	2022	0.07	0.15	0.35	0.06	0.12	0.27
Cork	Lower Lee (Cork)	2021	0.07	0.12	0.28	0.06	0.1	0.22
Cork	Mealagh	2025	0.07	0.15	0.35			
Cork	Mealagh	2021-2024	0.01	0.05	0.12			
Cork	Owvane	2022-2025	0.01	0.05	0.12			
Cork	Owvane	2021	0.01	0.04	0.1			
Kerry	Caragh	2024-2025	0.07	0.15	0.35	0.15	0.31	0.46
Kerry	Caragh	2023	0.07	0.11	0.26	0.15	0.31	0.46
Kerry	Caragh	2022	0.07	0.15	0.35	0.15	0.31	0.46
Kerry	Caragh	2021	0.07	0.12	0.28	0.15	0.31	0.46
Kerry	Croanshagh	2024-2025	0.01	0.05	0.12			
Kerry	Croanshagh	2023	0.01	0.0375	0.09			
Kerry	Croanshagh	2021-2022	0.01	0.05	0.12			
Kerry	Ferta	2025	0.01	0.05	0.12			
Kerry	Ferta	2021-2024	0.07	0.15	0.35			
Kerry	Inney	2024-2025	0.07	0.15	0.35			
Kerry	Inney	2023	0.07	0.11	0.26			
Kerry	Inney	2021-2022	0.07	0.15	0.35			
Kerry	Laune and Cottoners	2024-2025	0.07	0.15	0.35	0.15	0.31	0.46
Kerry	Laune and Cottoners	2023	0.07	0.11	0.26	0.15	0.31	0.46
Kerry	Laune and Cottoners	2022	0.07	0.15	0.35	0.15	0.31	0.46
Kerry	Laune and Cottoners	2021	0.07	0.12	0.28	0.15	0.25	0.37
Kerry	Maine	2022-2025	0.05	0.08	0.11			
Kerry	Maine	2021	0.05	0.064	0.08			
Kerry	Owenmore	2024-2025	0.07	0.15	0.35			

District	River	Year	Total or 1SW exploitation rate			MSW exploitation rate		
			Min.	Likely	Max.	Min.	Likely	Max.
Kerry	Owenmore	2023	0.07	0.11	0.26			
Kerry	Owenmore	2022	0.07	0.15	0.35			
Kerry	Owenmore	2021	0.01	0.04	0.1			
Kerry	Roughty	2024-2025	0.05	0.1	0.15			
Kerry	Roughty	2023	0.07	0.11	0.26			
Kerry	Roughty	2022	0.07	0.15	0.35			
Kerry	Roughty	2021	0.07	0.12	0.28			
Kerry	Sheen	2024-2025	0.01	0.05	0.12			
Kerry	Sheen	2023	0.07	0.11	0.26			
Kerry	Sheen	2022	0.07	0.15	0.35			
Kerry	Sheen	2021	0.01	0.05	0.12			
Kerry	Sneem	2024-2025	0.01	0.05	0.12			
Kerry	Sneem	2023	0.07	0.11	0.26			
Kerry	Sneem	2021-2022	0.07	0.15	0.35			
Kerry	Waterville	2022-2025	0.175	0.225	0.385	0.15	0.31	0.46
Kerry	Waterville	2021	0.175	0.18	0.308	0.15	0.25	0.37
Limerick	Doonbeg	2024-2025	0.01	0.05	0.12			
Limerick	Doonbeg	2023	0.07	0.11	0.26			
Limerick	Doonbeg	2022	0.07	0.15	0.35			
Limerick	Doonbeg	2021	0.01	0.05	0.12			
Connemara	Screebe	2024-2025	0.01	0.05	0.12			
Connemara	Screebe	2023	0.07	0.11	0.26			
Connemara	Screebe	2022	0.07	0.15	0.35			
Connemara	Screebe	2021	0.07	0.15	0.35			
Ballinakill	Bundorragha	2024-2025	0.07	0.15	0.35	0.15	0.31	0.46
Ballinakill	Bundorragha	2023	0.07	0.11	0.26	0.15	0.31	0.46
Ballinakill	Bundorragha	2022	0.07	0.15	0.35	0.15	0.31	0.46
Ballinakill	Bundorragha	2021	0.07	0.12	0.28	0.06	0.12	0.27
Ballinakill	Carrownisky	2024-2025	0.01	0.05	0.12			
Ballinakill	Carrownisky	2023	0.01	0.0375	0.09			
Ballinakill	Carrownisky	2021-2022	0.01	0.05	0.12			
Ballinakill	Owenwee (Belclare)	2024-2025	0.01	0.05	0.12			

District	River	Year	Total or 1SW exploitation rate			MSW exploitation rate		
			Min.	Likely	Max.	Min.	Likely	Max.
Ballinakill	Owenwee (Belclare)	2023	0.01	0.0375	0.09			
Ballinakill	Owenwee (Belclare)	2021-2022	0.01	0.05	0.12			
Bangor	Glenamoy	2023-2025	0.01	0.05	0.12			
Bangor	Glenamoy	2022	0.07	0.15	0.35			
Bangor	Glenamoy	2021	0.01	0.05	0.12			
Bangor	Newport R. (Lough Beltra)	2025	0.01	0.025	0.06	0.06	0.10	0.22
Bangor	Newport R. (Lough Beltra)	2024	0.01	0.025	0.06	0.06	0.12	0.27
Bangor	Newport R. (Lough Beltra)	2023	0.05	0.075	0.11	0.06	0.12	0.27
Bangor	Newport R. (Lough Beltra)	2022	0.05	0.1	0.15	0.06	0.12	0.27
Bangor	Newport R. (Lough Beltra)	2021	0.05	0.08	0.12	0.06	0.1	0.22
Ballina	Easky	2025	0.035	0.075	0.175			
Ballina	Easky	2024	0.07	0.15	0.35			
Ballina	Easky	2022-2023	0.07	0.11	0.26			
Ballina	Easky	2021	0.07	0.12	0.28			
Ballina	Moy	2025	0.07	0.11	0.26	0.15	0.23	0.35
Ballina	Moy	2024	0.07	0.15	0.35	0.15	0.31	0.46
Ballina	Moy	2023	0.07	0.11	0.26	0.15	0.23	0.35
Ballina	Moy	2022	0.07	0.15	0.35	0.15	0.31	0.46
Ballina	Moy	2021	0.1	0.33	0.50	0.15	0.31	0.46
Sligo	Drumcliff	2024-2025	0.07	0.15	0.35			
Sligo	Drumcliff	2023	0.07	0.11	0.26			
Sligo	Drumcliff	2022	0.07	0.15	0.35			
Sligo	Drumcliff	2021	0.07	0.12	0.28			
Sligo	Garvogue (Bonnet)	2024-2025	0.01	0.05	0.12	0.06	0.12	0.27
Sligo	Garvogue (Bonnet)	2023	0.01	0.05	0.12	0.06	0.12	0.27
Sligo	Garvogue (Bonnet)	2022	0.01	0.05	0.12	0.06	0.12	0.27
Sligo	Garvogue (Bonnet)	2021	0.01	0.04	0.1	0.06	0.1	0.22
Ballyshannon	Bungosteen	2024-2025	0.01	0.05	0.12			
Ballyshannon	Bungosteen	2023	0.01	0.0375	0.09			
Ballyshannon	Bungosteen	2022	0.01	0.05	0.12			
Ballyshannon	Bungosteen	2021	0.01	0.04	0.1			
Ballyshannon	Drowes	2024-2025	0.07	0.15	0.35	0.15	0.31	0.46
Ballyshannon	Drowes	2023	0.07	0.11	0.26	0.06	0.12	0.27

District	River	Year	Total or 1SW exploitation rate			MSW exploitation rate		
			Min.	Likely	Max.	Min.	Likely	Max.
Ballyshannon	Drowes	2022	0.035	0.075	0.175	0.15	0.31	0.46
Ballyshannon	Drowes	2021	0.07	0.15	0.35	0.06	0.12	0.27
Ballyshannon	Duff	2024-2025	0.01	0.05	0.12			
Ballyshannon	Duff	2023	0.01	0.0375	0.09			
Ballyshannon	Duff	2022	0.01	0.05	0.12			
Ballyshannon	Duff	2021	0.01	0.04	0.1			
Ballyshannon	Glen	2024-2025	0.01	0.05	0.12			
Ballyshannon	Glen	2023	0.01	0.0375	0.09			
Ballyshannon	Glen	2021-2022	0.01	0.05	0.12			
Ballyshannon	Oily	2024-2025	0.01	0.05	0.12			
Ballyshannon	Oily	2023	0.01	0.0375	0.09			
Ballyshannon	Oily	2022	0.01	0.05	0.12			
Ballyshannon	Oily	2021	0.01	0.04	0.1			
Ballyshannon	Owenwee (Yellow)	2024-2025	0.01	0.05	0.12			
Ballyshannon	Owenwee (Yellow)	2023	0.01	0.0375	0.09			
Ballyshannon	Owenwee (Yellow)	2022	0.01	0.05	0.12			
Ballyshannon	Owenwee (Yellow)	2021	0.01	0.04	0.1			
Letterkenny	Clady	2024-2025	0.07	0.15	0.35			
Letterkenny	Clady	2023	0.07	0.11	0.26			
Letterkenny	Clady	2022	0.07	0.15	0.35			
Letterkenny	Clady	2021	0.07	0.12	0.28			
Letterkenny	Crana	2025	0.01	0.05	0.12			
Letterkenny	Crana	2024	0.01	0.05	0.12			
Letterkenny	Crana	2023	0.07	0.11	0.26			
Letterkenny	Crana	2021-2022	0.01	0.05	0.12			
Letterkenny	Gweebara	2024-2025	0.07	0.15	0.35	0.06	0.12	0.27
Letterkenny	Gweebara	2023	0.07	0.11	0.26	0.06	0.12	0.27
Letterkenny	Gweebara	2022	0.01	0.05	0.12	0.06	0.12	0.27
Letterkenny	Gweebara	2021	0.07	0.12	0.28	0.06	0.1	0.22
Letterkenny	Gweedore (Crolly R.)	2021-2025	0.01	0.05	0.12			
Letterkenny	Leannan	2022-2025	0.01	0.05	0.12	0.06	0.12	0.27
Letterkenny	Leannan	2021	0.07	0.12	0.28	0.06	0.1	0.22
Letterkenny	Owenea and Owentocker	2024-2025	0.07	0.15	0.35			

District	River	Year	Total or 1SW exploitation rate			MSW exploitation rate		
			Min.	Likely	Max.	Min.	Likely	Max.
Letterkenny	Owenea and Owentocker	2023	0.07	0.11	0.26			
Letterkenny	Owenea and Owentocker	2022	0.035	0.075	0.175			
Letterkenny	Owenea and Owentocker	2021	0.07	0.12	0.28			
Letterkenny	Ray	2024-2025	0.01	0.05	0.12			
Letterkenny	Ray	2023	0.01	0.0375	0.09			
Letterkenny	Ray	2022	0.01	0.05	0.12			
Letterkenny	Ray	2021	0.01	0.04	0.1			
Letterkenny	Tullaghobegly	2024-2025	0.01	0.05	0.12			
Letterkenny	Tullaghobegly	2023	0.07	0.11	0.26			
Letterkenny	Tullaghobegly	2022	0.01	0.05	0.12			
Letterkenny	Tullaghobegly	2021	0.07	0.12	0.28			

Appendix III. Summary results from the catchment-wide electro-fishing programme in 2025

Analysis of salmon fry index

In cases where the scientific forecast of returning salmon recruits to a river provides a catch option resulting in less than a 75% chance of the river meeting its conservation limit (CL), the scientific advice recommends that the river is closed for fishing. As a separate recommendation, TEGOS advise that if a river is meeting 65% or more of its CL the river can open for catch and release-only (C&R-only) angling. There are many rivers where a direct assessment is not possible due to a very low or inconsistent reported angling catch (*i.e.* less than 10 on average annually). Therefore, advised closures of rivers with very low rod catches, or which have been closed over a period due to the absence of new and alternative information (e.g. fish counter information) poses a problem for assessing the status of the rivers salmon population and CL attainment over time as there are no new data for updating the forecast and risk analysis method currently employed by the TEGOS.

A relative index of fry abundance based on a semi-quantitative electrofishing technique (Crozier and Kennedy 1994; and Gargan *et al*. 2008) was developed in 2009 and 2010 to provide an alternative method for assessing CL attainment in rivers closed for angling or where there was no counting facility. Electrofishing of juveniles presents an alternative (and fisheries independent) source of population information as the numbers of juveniles should be a good reflection of the number of adults which produced them and the relative productive capacity of that river. This method is based on a relationship between fry abundance (which may be measurable annually) and adult returns for rivers with information on rod catches or counters over a number of years was available. The scientific advice is that assessments should preferentially be based on a recent five-year average of available data. Some catchment-wide electro-fishing data are based on less than five data points, however, it is expected that more robust assessments can be made over the coming years as more surveys are carried out.

The method is primarily used for rivers where there is no other index of stock. Some catchments are electro-fished annually as index catchments. An index of at least 17 salmon fry per five-minute standardised electro-fishing is advised as the cut-off between rivers below this threshold where the stock is clearly below CL and those rivers above the threshold where it is more likely that the stock is meeting CL. If the fry index is above the threshold, C&R-only fishing in the following year is advised. This

provides a safeguard against opening a river prematurely, while still allowing some fishery activity and the subsequent collection of catch data.

Catchment-wide electro-fishing is also important in providing managers with information on the distribution and abundance of salmon fry and to identify management issues in a catchment or tributary. The absence or low density of salmon fry may be related to water quality issues, obstructions, or habitat damage and areas of low abundance can be investigated.

During 2025, catchment-wide electro-fishing was undertaken in 41 catchments or sub-catchments to assess abundance and distribution of salmon fry (Figure 12 and Figure 13). Thirty-six catchments were fully surveyed. Sub-catchment surveys were undertaken on parts of the Erne and investigative surveys were conducted on portions of the Ballysadare River, the Drowes system and the Liffey upper in Dublin. A survey started on the Garvogue could not be completed due to high water levels. A total of 1047 sites were visited. In the 19 years of the programme (2007-2025) 673 catchment/sub-catchment surveys in 173 catchments or sub-catchments have been undertaken comprising 16,099 site surveys. For the catchments surveyed in 2025 results ranged from zero salmon fry on the Erne, Kealincha and Lough Fada, to 34.07 salmon fry/ 5 min on the Sheen. Sixteen of the catchments surveyed in 2025 had averages of at least 17 salmon fry/ 5 min in 2025. (Figure 12 and Figure 13).

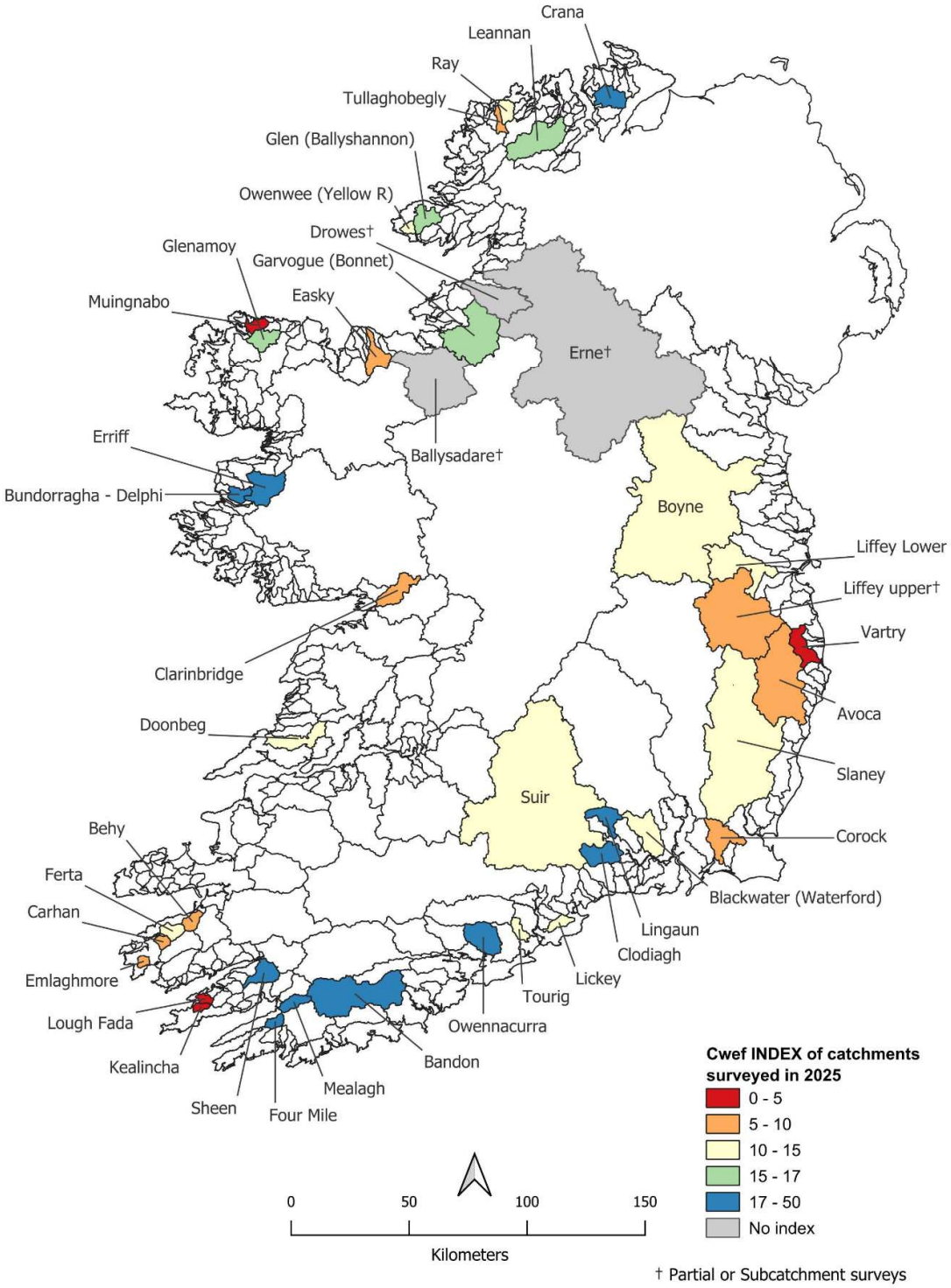

Figure 12 Mean salmon fry index values for catchments surveyed in 2025.

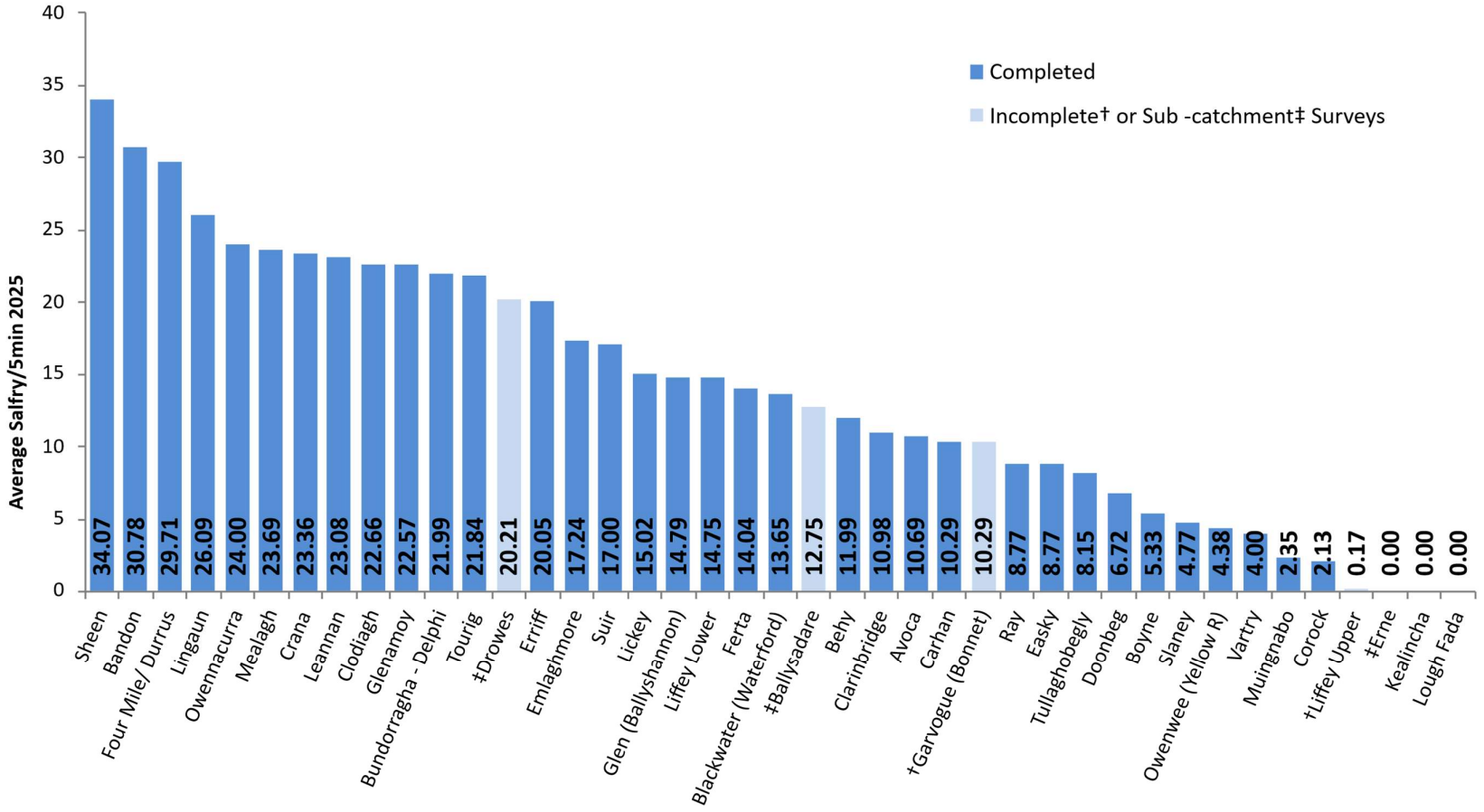

Figure 13 Results of catchment wide electro-fishing undertaken in 2025.

Appendix IV. River / stock specific information used in the salmon catch advice process for the 2026 advice and catch advice at various probabilities of attaining conservation limit

This appendix is provided as a separate document.

Appendix V. Salmon-designated rivers within Special Areas of Conservation (SAC) where salmon have a qualifying interest and status relative to CL for the 2026 advice.

Table 9 Salmon-designated rivers within Special Areas of Conservation (SAC) where salmon have a qualifying interest and status relative to conservation limit for the 2026 advice at the 75% probability of achieving CL.

District	River	Assessed river	Above CL for 2026 advice	SAC
Ballina	Brusna	N		RIVER MOY SAC
Ballina	Moy	Y	Above	RIVER MOY SAC
Ballinakill	Bundorragha	Y	1SW Above; MSW below	MWEELREA/SHEEFFRY/ERRIFF COMPLEX SAC
Ballinakill	Bunowen	Y	Above	MWEELREA/SHEEFFRY/ERRIFF COMPLEX SAC
Ballinakill	Carrownisky	Y	Above	MWEELREA/SHEEFFRY/ERRIFF COMPLEX SAC
Ballinakill	Culfin	Y	Above	THE TWELVE BENS/GARRAUN COMPLEX SAC
Ballinakill	Dawros	Y	Above	THE TWELVE BENS/GARRAUN COMPLEX SAC
Ballinakill	Erriff	Y	Below	MWEELREA/SHEEFFRY/ERRIFF COMPLEX SAC
Ballinakill	Owenglin	Y	Above	THE TWELVE BENS/GARRAUN COMPLEX SAC
Ballyshannon	Drowes	Y	Above	LOUGH MELVIN SAC
Ballyshannon	Eske	Y	Below	LOUGH ESKE AND ARDNAMONA WOOD SAC
Ballyshannon	Glen	Y	Above	SLIEVE TOOEY/TORMORE ISLAND/LOUGHROS BEG BAY SAC
Bangor	Ballinglen	N		GLENAMOY BOG COMPLEX SAC
Bangor	Glenamoy	Y	Below	GLENAMOY BOG COMPLEX SAC
Bangor	Muingnabo	N		GLENAMOY BOG COMPLEX SAC
Bangor	Newport	Y	Below	NEWPORT RIVER SAC
Bangor	Owenduff	Y	Above	MWEELREA/SHEEFFRY/ERRIFF COMPLEX SAC
Bangor	Owengarve	N		OWENDUFF/NEPHIN COMPLEX SAC
Bangor	Owenmore	Y	Above	MWEELREA/SHEEFFRY/ERRIFF COMPLEX SAC
Bangor	Srahmore	Y	Below	OWENDUFF/NEPHIN COMPLEX SAC
Connemara	Ballynahinch	Y	Above	THE TWELVE BENS/GARRAUN COMPLEX SAC

District	River	Assessed river	Above CL for 2026 advice	SAC
Connemara	Cashla	Y	Above	CONNEMARA BOG COMPLEX SAC
Connemara	Lough na Furnace	N		CONNEMARA BOG COMPLEX SAC
Connemara	Screebe	Y	Below	CONNEMARA BOG COMPLEX SAC / MAUMTURK MOUNTAINS SAC
Drogheda	Boyne	Y	Below	RIVER BOYNE AND RIVER BLACKWATER SAC
Galway	Corrib	Y	Above	LOUGH CORRIB SAC / MAUMTURK MOUNTAINS SAC
Galway	Knock	N		CONNEMARA BOG COMPLEX SAC
Galway	Owenboliska	Y	Below	CONNEMARA BOG COMPLEX SAC
Kerry	Behy	N		KILLARNEY NAT PARK, MACGILLYCUDDY'S REEKS SAC
Kerry	Caragh	Y	Above	KILLARNEY NAT PARK, MACGILLYCUDDY'S REEKS & CARAGH R CAT SAC
Kerry	Croanshaugh	Y	Below	GLANMORE BOG SAC
Kerry	Ferta	Y	Above	KILLARNEY NAT PARK, MACGILLYCUDDY'S REEKS & CARAGH R CAT SAC
Kerry	Finnihy	N		KILLARNEY NAT PARK, MACGILLYCUDDY'S REEKS & CARAGH R CAT SAC
Kerry	Inny	Y	Below	KILLARNEY NAT PARK, MACGILLYCUDDY'S REEKS & CARAGH R CAT SAC
Kerry	Kerry Blackwater	Y	Above	BLACKWATER RIVER (KERRY) SAC
Kerry	Laune and Cottoners	Y	Above	KILLARNEY NAT PARK, MACGILLYCUDDY'S REEKS SAC
Kerry	Lough Fada	N		GLANMORE BOG SAC
Kerry	Owenreagh	N		KILLARNEY NAT PARK, MACGILLYCUDDY'S REEKS & CARAGH R CAT SAC
Kerry	Roughty	Y	Above	KILLARNEY NAT PARK, MACGILLYCUDDY'S REEKS & CARAGH R CAT SAC
Kerry	Sneem	Y	Above	KILLARNEY NAT PARK, MACGILLYCUDDY'S REEKS & CARAGH R CAT SAC
Kerry	Waterville	Y	Above	KILLARNEY NAT PARK, MACGILLYCUDDY'S REEKS SAC
Letterkenny	Clady	Y	Below	LOUGH ESKE AND ARDNAMONA WOOD SAC
Letterkenny	Gweebarra	Y	1SW Above; MSW below	WEST OF ARDARA/MAAS ROAD SAC
Letterkenny	Gweedore (Crolly)	Y	Above	CLOGHERNAGORE BOG AND GLENVEAGH NATIONAL PARK SAC
Letterkenny	Lackagh	Y	Below	CLOGHERNAGORE BOG AND GLENVEAGH NATIONAL PARK SAC
Letterkenny	Leannan	Y	Below	LEANNAN RIVER SAC

District	River	Assessed river	Above CL for 2026 advice	SAC
Letterkenny	Owenea	Y	Above	WEST OF ARDARA/MAAS ROAD SAC
Letterkenny	Owennamarve	N		CLOGHERNAGORE BOG AND GLENVEAGH NATIONAL PARK SAC
Letterkenny	Ray	N		CLOGHERNAGORE BOG AND GLENVEAGH NATIONAL PARK SAC
Letterkenny	Tullaghobegly	Y	Above	CLOGHERNAGORE BOG AND GLENVEAGH NATIONAL PARK SAC
Limerick	Feale	Y	Above	LOWER RIVER SHANNON SAC
Limerick	Mulkear	Y	Below	LOWER RIVER SHANNON SAC
Limerick	Shannon	N		LOWER RIVER SHANNON SAC
Lismore	Blackwater	Y	Above	BLACKWATER RIVER (CORK/WATERFORD) SAC
Lismore	Bride	Y	Below	BLACKWATER RIVER (CORK/WATERFORD) SAC
Lismore	Lickey	N		BLACKWATER RIVER (CORK/WATERFORD) SAC
Sligo	Ballysadare	Y	Above	UNSHIN RIVER SAC
Sligo	Garavogue	Y	Below	LOUGH GILL SAC
Waterford	Barrow	Y	Below	RIVER BARROW AND RIVER NORE SAC
Waterford	Nore	Y	Below	RIVER BARROW AND RIVER NORE SAC
Waterford	Suir	Y	Below	LOWER RIVER SUIR SAC
Wexford	Slaney	Y	Below	SLANEY RIVER VALLEY SAC

Salmon is also a qualifying interest in the Castlemaine Harbour SAC (in freshwater only)


TEGOS