

Status of wild Atlantic salmon in Norway 2026



Photo: Eva B. Thorstad

Norwegian Scientific Advisory Committee for Atlantic Salmon

The status of Norwegian wild Atlantic salmon is evaluated annually by the Norwegian Scientific Advisory Committee for Atlantic Salmon. This is an English summary of the 2026 report.

The committee is appointed by the Norwegian Environment Agency to evaluate the status of salmon and the importance of different threats, and to give science-based catch advice and advice on other issues related to wild salmon management.

Fourteen scientists from seven institutions serve on the committee: Torbjørn Forseth (leader), Geir H. Bolstad, Sigurd Einum, Morten Falkegård, Peder Fiske, Anders Foldvik, Åse Helen Garseth, Øyvind Kaste, Helge Skoglund, Monica F. Solberg, Eva B. Thorstad, Kjell Rong Utne, Knut Wiik Vollset and Asbjørn Vøllestad. The committee is an independent body, and the members do not represent the institutions where they are employed when serving on the committee.

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Status of Atlantic salmon - short summary

The number of salmon that returned from the sea to Norway in 2025 was higher than in the record-low year of 2024, but Norwegian wild salmon are still at a historically low level. Salmon populations have been at a low level for many years, and the past five years have seen a further decline. It is particularly the salmon populations in Central Norway and Western Norway that are showing negative trends.

The reduced salmon populations are caused by human pressures and low survival rates at sea. The greatest threats are salmon farming and climate change. There was no improvement in any of the threats to salmon since the previous assessment.

Pink salmon is the only human-caused pressure that poses an increased risk of causing further harm since the previous assessment - and at the same time, knowledge about the effects of pink salmon remains very limited.

The salmon population in the Tana River system is endangered. The main reason is past overexploitation. Even though fishing has been stopped both in the river system and at sea, rebuilding the populations from today's critically low levels is very challenging.

The 2026 annual report is published in Norwegian: <https://nva.sikt.no/registration/019ed0a394a7-994ea5ec-c370-423d-b01c-bff300e12767>



River Surna. Photo: Eva B. Thorstad

Extended summary

- The number of Norwegian wild salmon remains at a historically low level, but has increased from the record-low year of 2024

Wild Atlantic salmon populations have been at a low level for many years, and over the past five years there has been a further decline. The reduced salmon populations are due to human-caused threats and lower marine survival rates.

In 2025, the number of salmon increased compared with the record-low year of 2024 (**figure 1**). The pre-fishery abundance, which is the number of salmon returning from the ocean towards Norway to spawn, was estimated at around 456 000 wild salmon in 2025, including those caught in fisheries. Despite the increase, 2025 was still among the six poorest years since records began in the early 1980s (**figure 1**).

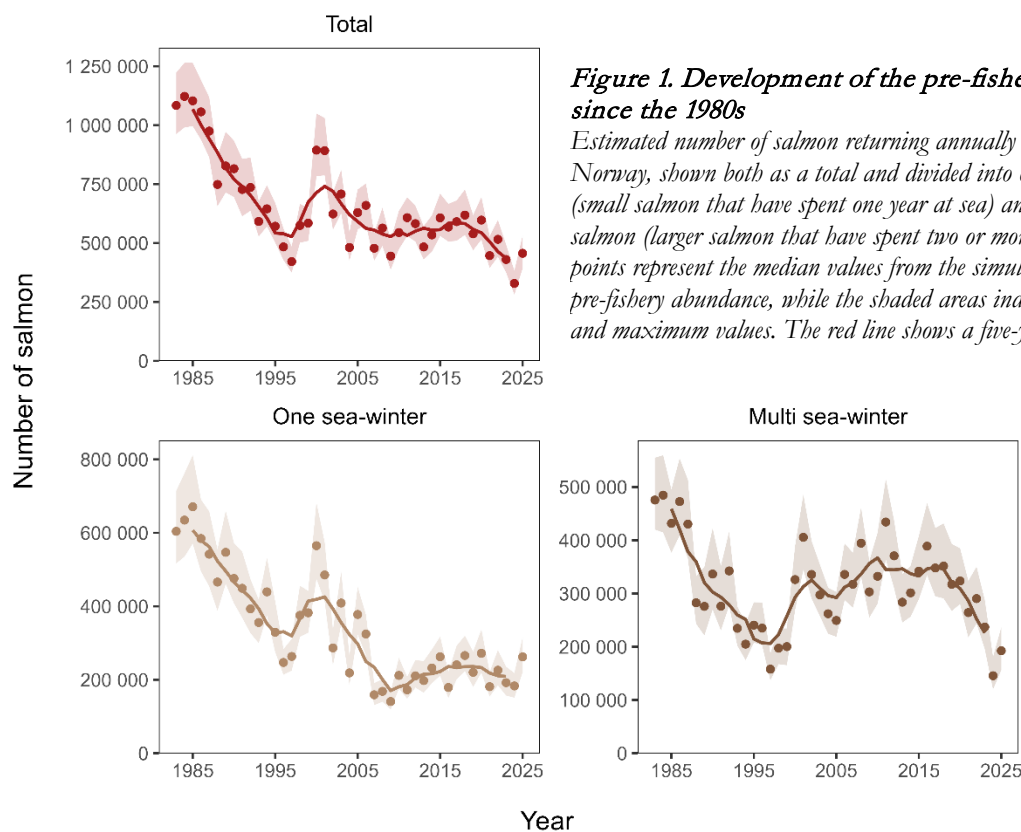


Figure 1. Development of the pre-fishery abundance since the 1980s

Estimated number of salmon returning annually to the coast of Norway, shown both as a total and divided into one-sea-winter salmon (small salmon that have spent one year at sea) and multi-sea-winter salmon (larger salmon that have spent two or more years at sea). The points represent the median values from the simulation model for the pre-fishery abundance, while the shaded areas indicate the minimum and maximum values. The red line shows a five-year moving average.

- The greatest decline in salmon populations has occurred in Central Norway, Western Norway, and in the Tana River system. In Western and Central Norway, the impacts of aquaculture (salmon farming) have contributed significantly to this decline

The long-term development of salmon populations from the late 1980s to the present is different in various parts of the country. Unlike the trends in other regions, the pre-fishery abundance of salmon returning to Western Norway and Central Norway has declined significantly since 1989. In both Western Norway and parts of Central Norway, it is highly likely that the impacts of salmon farming have made substantial contributions to reduced salmon populations - and to a reduction in the harvestable surplus available for fishing.

Most of the salmon populations that had no harvestable surplus available for fishing in either 2024 or 2025 are located in Western Norway and Central Norway. Approximately one-third of the

salmon populations in these regions had no harvestable surplus in 2025 (27% of the populations in Western Norway and 34% of the populations in Central Norway).

The salmon returns to Southern Norway have generally not changed much since the late 1980s, although there have been year-to-year fluctuations, and the abundance of large salmon (multi-sea-winter salmon) has been low during the past two years.

Changes in the salmon returns to Northern Norway, excluding the Tana River system, have been minor since 1989. However, the number of large salmon (multi-sea-winter salmon) has declined since 2016, and the harvestable surplus has been reduced in recent years, probably due to poorer survival conditions in the northern marine areas.

• The Scientific Advisory Committee continues to consider the salmon population in the Tana River system to be endangered

The reason is a critical reduction in the population abundance. The salmon returns have declined sharply since 2002 and are far below the level needed to achieve the spawning target. The Tana River system has experienced a markedly reduced pre-fishery abundance compared with the rest of Northern Norway. Particularly concerning is the very low pre-fishery abundance since 2020, including the critically low return in 2024. In 2025, the pre-fishery abundance of large salmon (multi-sea-winter salmon) remained very low, while the abundance of small salmon (one-sea-winter salmon) increased compared with 2024, but was still low. Many of the sub-populations in the river system have been overfished for many years, and fishing in the Tana River system and adjacent sea areas was closed from 2021. In 2025, most salmon fisheries in the sea in the northernmost county Finnmark were closed, and the salmon catch from the Tana River system is now minimal. When populations have reached such low levels as they are now, low marine survival - possibly combined with increased predation pressure - makes rebuilding the populations in the Tana River system very challenging.

• The catch of salmon in rivers and the sea fisheries in 2025 was the second lowest ever recorded (time series from 1980)

Salmon catches in 2025 were the second lowest since the data series began in 1980, following the historically poor catches the year before. A total of 64,000 salmon were reported caught and killed in the sea and rivers in 2025, with a combined weight of 189 tonnes. In addition, 26 500 salmon (102 tonnes) were reported released during river fishing. Of all salmon caught in rivers, 39% were released. The proportion of salmon released in rivers was the highest ever recorded.

The low catches in 2025 and the high proportion of caught and released fish were due to a reduced number of multi-sea-winter salmon (large salmon that have spent several years at sea), and because many river systems had prepared for a reduced run of medium and large salmon by implementing stricter fishing regulations from the start of the fishing season than in previous years.

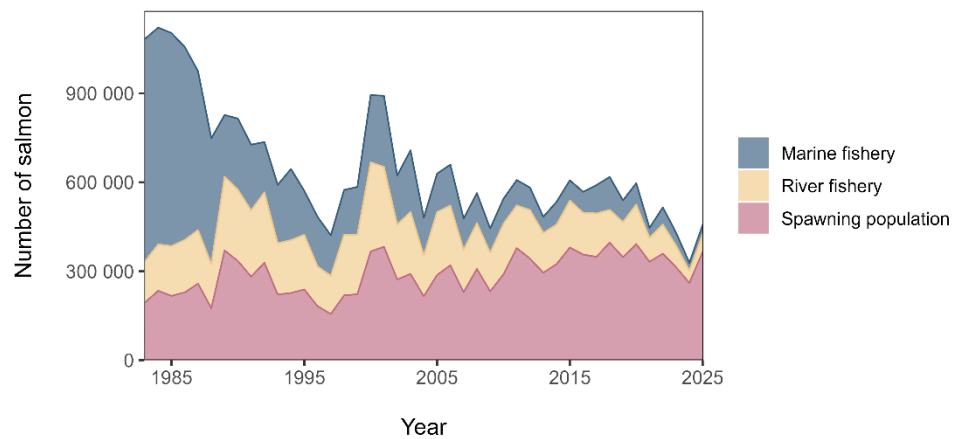
• Never before has fishing mortality been as low as in 2025

Overall, 20% of the salmon migrating from the ocean to Norwegian rivers were caught and killed in sea or river fisheries in 2025. Most salmon are caught in rivers. In 2025, 13% of salmon migrating from the ocean were caught and killed in river fisheries, and 7% were caught in sea fisheries.

There has been a strong reduction in salmon fishing. In the 1980s, more than 80% of salmon were taken in fisheries. Drift net fishing at sea was banned in 1989, and since then both sea salmon fishing and recreational river fishing have been progressively restricted up to the present day.

Fishing has been reduced more than the decline in salmon populations, and as a result the number of salmon spawning in rivers has increased over the past 10-15 years (**figure 2**). In other words, reduced fishing has more than compensated for the decline in salmon populations.

Figure 2. The number of Atlantic salmon returning to Norway, divided between sea salmon fishing, river fishing, and the spawning populations (the number of fish remaining after catches in the sea and rivers) in the period 1983–2025. The figures are from the simulation model for the salmon run to Norway, with only the median values of the simulations shown to improve readability.



- **More populations met their spawning targets in 2025 than in 2024**

In 2025, a small increase in the salmon returns, slightly higher surplus, and continued very low fishing pressure contributed to a modest improvement in the proportion of populations reaching their spawning targets compared with the previous year, from 57% in 2024 to 67% in 2025.

The management target for a population is that the average probability of the spawning target being met over the last four years is at least 75%. The management targets for the period 2022–2025 were met or nearly met for 79% of the populations (**figure 3**), taking into account uncertainty in the targets and the assessment of achievement. There has been a long-term improvement in the achievement of management targets since 2009, with a marked increase in both the number and proportion of populations where the target has been met. This long-term improvement is due to stricter fishing regulations and thus reduced exploitation. However, there was a decline in the proportion of populations meeting the management targets for the four-year periods up to 2024 and 2025 compared with earlier years.

- **Many populations have poor or very poor population status**

Population status is considered good only when the conservation limit (spawning target) is reached, and there is a normal harvestable surplus that can be fished (according to sea survival conditions). When a population does not have a normal harvestable surplus, it indicates that local or regional factors have negatively affected it. A population that reaches the conservation limit but where harvesting has ceased because fishing has not been allowed, or is very small due to strict fishing restrictions, does not have good status.

In 2025, 42% of salmon populations had very poor status. Particularly in Central Norway and Western Norway, many populations had poor and very poor population status. Northern Norway has the largest proportion of populations in good or very good condition.

- **The greatest human-caused threats to Norwegian salmon are linked to the effects of salmon farming and climate change**

There was no improvement in any of the human-caused threats to salmon in this year’s assessment. Salmon lice from fish farms are the biggest human-caused threat to Norwegian salmon, along with escaped farmed salmon and infections related to aquaculture (**figures 4 and 5**). The number of salmon populations assessed as endangered due to salmon lice has increased in recent years. The

amount of escaped farmed salmon observed in Norwegian watercourses has decreased over time, but genetic changes due to interbreeding with escaped farmed salmon have been detected or indicated in a large number of salmon populations. Watercourses with a high proportion of escaped farmed salmon show that there is still a need for measures to reduce escapes. The occurrence of escaped farmed salmon and introgression is especially serious because it is a threat that, in addition to reducing population sizes, also causes genetic changes in wild salmon populations.

Infections related to fish farming are also a significant threat to Norwegian salmon populations. However, knowledge about their effects is limited, and there is great uncertainty about future developments. More knowledge about such infections is needed. Lack of knowledge may lead to this threat being underestimated.

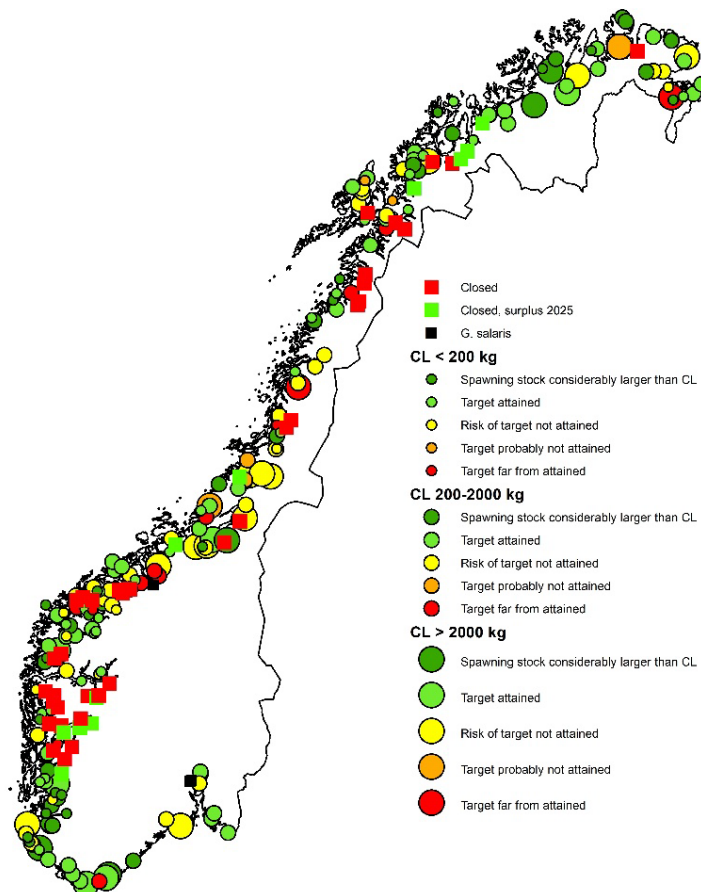


Figure 3. Assessment of the achievement of management goals for individual watercourses for the period 2022-2025. The management goal was reached in all populations marked with green circle symbols. The size of the symbols reflects the size of the conservation limit in each watercourse. Watercourses closed for fishing or where no assessment was made because the population is infected with *G. salaris* are also shown. For closed watercourses, it is indicated whether there was likely a harvestable surplus in 2025 or not. CL = conservation limit.

• **Climate change affects salmon at all stages of its life**

Climate change affects all marine areas used by salmon. Rivers throughout the country are also affected, for example through high summer temperatures and drought, floods occurring at unusual times of the year, loss of spring floods, loss of stable ice cover in many river systems that normally had ice cover, and more ice breakups during winter. The threat assessment is made for a time period covering two to three salmon generations into the future, and climate may pose an even greater threat to salmon populations in the longer term than what is assessed here.

Reducing greenhouse gas emissions is a necessary measure and a global challenge. For salmon management, climate change is a threat that increases the importance of maintaining large and genetically diverse salmon populations that are capable of adapting to the rapid changes. Climate change also increases the need for measures addressing the other threats.

- Other major threats to salmon are habitat alterations in rivers and hydropower regulation. Negative effects can be mitigated by measures on a much larger scale than currently implemented

Many more measures can be taken to reduce the effects of hydropower regulation and other habitat alterations. Methods for reducing negative effects are well developed and available.

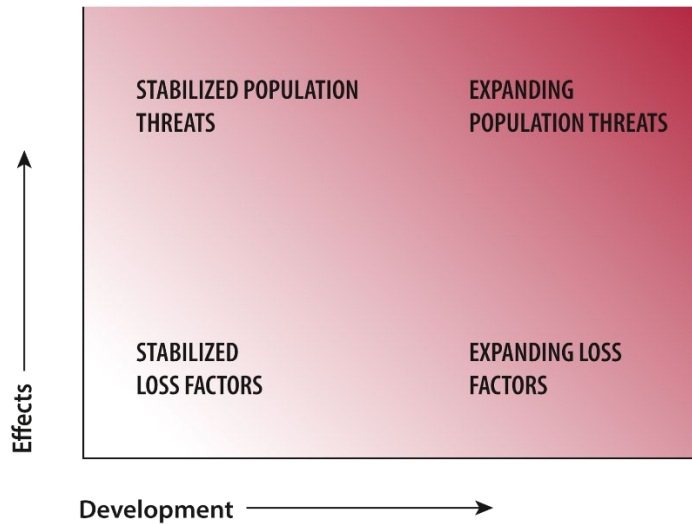


Figure 3. The classification system developed to rank different human-caused pressures to Atlantic salmon populations along the effect and development axes. The four major impact categories are indicated, but the system is continuous. Dark background colour indicates the most severe impacts. The effect axis describes the effect of each impact factor on the populations, and ranges from factors that cause loss in adult returns, to factors that cause such a high loss that they threaten population viability and genetic integrity. The development axis describes the likelihood for further reductions in population size or loss of additional populations in the future.

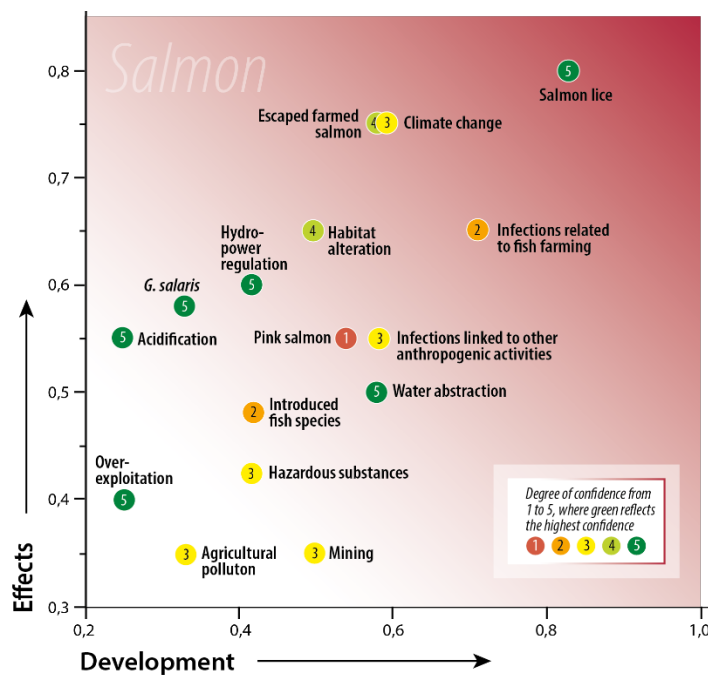


Figure 4. Ranking of 16 human-caused pressures considered in 2025, according to their effects on wild Atlantic salmon in Norway, and the likelihood of a further negative development. Confidence for the assessment of effect by each threat is indicated by the color of the markers, where green indicates the highest confidence level and red the lowest.

- Pink salmon is the only factor that has worsened in this year’s threat assessment, and at the same time it is the factor we have the least knowledge about

Pink salmon is an introduced non-native species and a threat that has developed significantly in recent years due to a marked increase in numbers and distribution. Knowledge about its effects on salmon, sea trout, and Arctic char is insufficient. Therefore, there is considerable uncertainty about future developments.

Pink salmon have been recorded in between 160 and 260 Norwegian rivers during the odd-numbered years from 2017 to 2025. The number of pink salmon has increased significantly from 12 000 individuals in 2017 to a maximum at 580 000 in 2023, followed by a reduction to 324 000 in 2025. In 2025, more than 1 000 pink salmon were recorded in 40 rivers, whereas more than 10 000 pink salmon were recorded in six rivers.

The area with high numbers of pink salmon across many rivers expanded from eastern Finnmark, near the Russian border, in 2017 to include all of Finnmark and parts of Troms in 2023 and 2025. However, in eastern Finnmark, the number of pink salmon decreased in 2025 compared to 2023, while in Troms, 4.6 times as many pink salmon were recorded in 2025 as in 2023. Migration barriers to stop pink salmon were installed in 65 rivers in 2025.

• The parasite *Gyrodactylus salaris* and acid rain are threats that currently have limited impact on salmon due to effective measures

The introduced parasite *G. salaris* has been one of the major threats to salmon, but successful eradication efforts and conservation of salmon populations have allowed populations to rebuild in previously infected watercourses. Measures have further limited the risk of spreading to new watercourses. All infected regions except the Driva region and the Drammen region have now been declared free of *G. salaris*. The five infected watercourses in the Driva region have been fully treated and are being monitored under the recovery certification program. Acid precipitation has also been one of the major threats to salmon, but due to extensive liming measures and reduced emissions, there is little risk of further damage. The negative impact on salmon populations from acid precipitation is therefore assessed as lower than before, but this depends on funding for liming in salmon rivers remaining at least at its current level.

• For sea trout, salmon lice from fish farms is by far the greatest human-caused threat

Salmon lice from fish farms is the largest human-caused threat to sea trout and is assessed as an expanding population threat (**figure 6**). Many populations across large parts of the country are severely affected by salmon lice, and the impact of salmon lice on sea trout was likely greater in 2025 than before. The risk that populations will become critically endangered or lost due to salmon lice is high because of insufficient measures. The threat picture for sea trout in 2026 is similar to that of the two previous years, except that the risk of further damage due to pink salmon has increased. As with salmon, knowledge about the effects of pink salmon and the measures being taken is very limited, and there is considerable uncertainty about future developments.

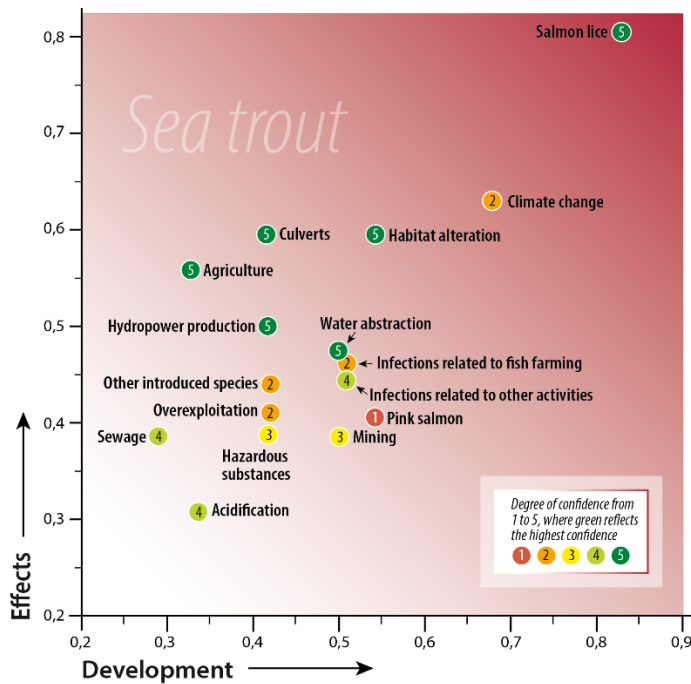


Figure 6. Ranking of 16 human-caused pressures considered in 2025, according to their effects on sea trout populations, and the likelihood of a further negative development. Confidence for the assessment of effect by each threat is indicated by the color of the markers, where green indicates the highest confidence level and red the lowest. Note that water abstraction, infections related to fish farming and other infections have the same assessment for development (0.5), but the symbols are spread out for graphical visibility.

Scientific publications from the Norwegian Scientific Advisory Committee for Atlantic Salmon

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- Fiske, P., Forseth, T., Thorstad, E.B., Bakkestuen, V., Einum, S., Falkegård, M., Garmo, Ø.A., Garseth, Å.H., Skoglund, H., Solberg, M., Utne, K.R., Vollset, K.W., Vøllestad, A. & Wennevik, V. 2024. Novel large-scale mapping highlights poor state of sea trout populations. *Aquatic Conservation: Marine and Freshwater Ecosystems* 34: e4067.
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