

## Salmon Interactions Working Group Recommendations: Fisheries Management Scotland Overview

The following table sets out the impact of implementing the recommendations of the Salmon Interactions Working Group (SIWG) in full, and how their implementation would work to protect our wild fish.

Current Status	After implementation of the SIWG
The regulatory regime is complex, disjointed and fails to protect wild salmon and sea trout.	<ul> <li>The SIWG recognised the current failings of the regulatory system and agreed that the following principles should underpin the reformed regulatory regime:</li> <li>It should be comparable with the highest international and domestic regulatory standards.</li> <li>It should protect wild migratory salmonids.</li> <li>It should proactively seek to address negative impacts detected through monitoring.</li> <li>It should be robust, transparent, enforceable and enforced.</li> <li>An enforcement policy should be published, including specific penalties and sanctions for breaching conditions.</li> <li>Fines relating to sea lice and escapes to be invested into wild salmonid conservation work, in line with the polluter pays principle.</li> <li>Scottish Ministers should direct all relevant statutory bodies to discharge their duties such that they fully take into account the health and welfare of wild salmonids and of farmed fish.</li> </ul>
Protection of wild fish is considered as part of the local authority planning process, but once permanent planning permission is granted, local authorities do not have the resources, or expertise to adequately ensure that wild fish are protected.	A single lead body, with appropriate powers for monitoring and enforcement, will be responsible for regulating wild and farmed fish interactions. Strengthened licence conditions and associated enforcement measures will deliver essential regulatory protection for wild salmonids.

The Marine Scotland Fish Health Inspectorate are responsible for the health and welfare of farmed fish but impacts on wild fish are out with their remit. SEPA are responsible for consenting the size of farms and the use of chemical sea lice treatments, but do not consider impacts on wild fish when making these determinations. There is therefore no single body with responsibility for wild and farmed fish interactions.	Protection of wild salmonids will no longer sit within the planning process. Such licences can be reviewed or revoked and failure to comply with a licence condition is subject to enforcement action.
Local authorities have attempted to address the concerns set out above by including Environmental Management Plans (EMPs), as a condition of planning. These require operators, for example, to monitor for impacts on wild fish. However, this approach is inconsistent, applies only to new farms, and local authorities do not have appropriate enforcement powers.	<ul> <li>Licences will include conditions to protect wild fish including: <ul> <li>A requirement to monitor lice levels in the environment and assess any impacts on wild salmonids.</li> <li>A requirement to report on the results of such monitoring.</li> <li>The actions required to be taken where monitoring demonstrates adverse impacts on wild salmonids.</li> </ul> </li> <li>Unlike EMPs, these licence conditions will apply to all farms, not just new farms or farms which wish to increase in size.</li> </ul>
Planning permission is permanent, and relocation of farms has been almost impossible.	The consenting regime will enable efficient relocation of existing biomass to a suitable alternative location.
Farms are considered and consented on a case-by- case basis, and cumulative impacts are not well addressed.	Consenting of new developments to be managed within a spatial planning system which takes account of the effect of existing farms and impacts on wild salmonid fish. We consider that this precautionary approach will act to prevent damage to wild salmonids, by providing a framework within which new and expanding farms, are managed.

Publication of sea lice data is voluntary and applies only to salmon farms.	Publication of all data will be a mandatory licence condition and will apply to all farms (salmon and trout).
	This recommendation has already been taken forwards: In June 2019, Scottish Ministers committed to reporting on-farm sea lice levels one week in arrears for all marine fish farms (salmon and trout).
Voluntary data publication includes the number of lice per fish but does not include the overall number of fish in the farms. This is a crucial omission, because it is the overall number of sea lice in an area that is important to wild fish <sup>1</sup> .	Mandatory licence conditions will require fish farms to provide data on the number of farmed fish per farm in addition to the number of lice per fish.
Sea lice thresholds do not relate to impacts on wild fish. The Scottish Government Sea Lice Compliance Policy is based on the health and welfare of farmed fish but does not take into account any impacts on wild salmon and sea trout.	Mandatory licence conditions will include trigger levels for sea lice intervention action. Licence conditions will be designed to safeguard wild salmonids.
It is not an offence to have an escape – the only offence is to fail to report an escape, or fail to report circumstances that may have led to an escape.	Fish farmers required to keep 100% of farmed fish in all production facilities. Fines to be introduced (on a per fish basis) to apply to escapes of fish.
Monitoring for escapes in freshwater lochs not required.	Mandatory monitoring for the presence of escaped farmed fish from freshwater open pen farms to be introduced.

<sup>&</sup>lt;sup>1</sup>0.1 lice per fish on a 500 tonne farm results in a significantly lower overall number of lice than 0.1 lice per fish on a 2500 tonne farm. This information is even more important when multiple farms are operating in a farm management area, as it is the relationship between the total number of fish being farmed, and the number of lice per fish, which will ultimately determine the magnitude of any impact on wild fish.

Scottish Ministers have had powers to introduce a Scottish Technical standard since 2013, but this has never been enacted.	Minimum technical standards for prevention of escapes of farmed fish to be included in licence conditions.
Identification of escaped fish to their farm of origin is a particular challenge.	Tools to be refined or developed to distinguish recent genetic introgression from historic introgression. This is to allow the identification of escaped fish to their farm of origin and establish where licence conditions have been breached. Access to biological information from past, current and future farmed strains of salmon to be secured to support the above.
Protection of wild fish is considered as part of the planning process, but once permanent planning permission is granted, local authorities do not have the resources, or expertise to adequately ensure that wild fish are protected. The Marine Scotland Fish Health Inspectorate are responsible for the health and welfare of farmed fish but impacts on wild fish are out with their remit. SEPA are responsible for consenting the size of farms and the use of chemical sea lice treatments, but do not consider impacts on wild fish when making these determinations.	Strengthened licence conditions and associated enforcement measures to deliver the essential regulatory protection that wild salmonids require.
Information on the migratory distributions of wild salmon and sea trout is poorly understood. This has been recognised as an important knowledge gap for many years.	Licence conditions to require fish farmers to contribute to research to understand the migratory distributions of wild salmonids. This will contribute to application of the precautionary principle through the planning and licensing framework.