SALMON WATCH

"Dedicated to the restoration of salmon abundance in Ireland"

Saving the Irish Salmon

A policy statement adopted by
The Board of Salmon Watch Ireland
August 2025

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"Protecting Atlantic salmon and sea trout – visit Salmon Watch Ireland for our regular newsletter, data, policy insights, and conservation action."
https://salmonwatchireland.ie

Foreword to Salmon Watch Ireland salmon policy statement

Foreword

Salmon Watch Ireland published its' draft proposals for a comprehensive salmon policy for Ireland in August 2019. To the best of our knowledge, it was the first such statement ever produced in Ireland, and it was widely welcomed, even among some of those who did not necessarily agree with all our conclusions.
The overarching propositions on which the draft policy statement was built were that:

(a) Given the rate of decline in the past forty years, in the lifetime of people living today, Ireland's wild Atlantic salmon could become a curiosity confined, at best, to a small number of rivers.
(b) Ireland must move the dial from a policy position that protects the salmon for exploitation to one which is closer to the conservation of what is becoming an endangered species.
(c) The rational management approach to the challenges that wild salmon is experiencing is to redouble efforts to ensure that salmon rivers naturally produce the maximum number of healthy wild smolts.

These propositions were supported in all the consultations which we have had since the document was published, including at our conference in Galway in October 2019 which was attended by over 100 people from the salmon community.

We are now publishing our revised policy proposals in 2025 to accurately reflect the challenging situation that Atlantic salmon faces. These proposals which incorporate many of the suggestions we have received and which we think add up to a comprehensive treatment of all the major issues affecting the salmon. A key factor in achieving success in the conservation of the salmon is the engagement in the issues of those beyond the rather small salmon community, especially young people. The growing public awareness and activism surrounding environmental and climate change issues indicate that a broader base of support can be built. This is a challenge the salmon community must embrace if it hopes to preserve this iconic species for future generations.

Bob Wemyss
Chair
Salmon Watch Ireland
August 2025

The role of Salmon Watch Ireland (SWIRL)

- Advocate **for Salmon Conservation**
  Champion the protection of salmon, recognising their undeniable cultural, recreational, economic, and social significance—values that can only be sustained if the species continues to thrive.
- Raise **Public Awareness**
  Educate the wider public—not just those with a direct stake—about the urgent threats facing salmon and the substantial efforts required to reverse their decline. As this document outlines, significant political action will be essential to implement critical measures, such as reforming open cage salmon farming. Achieving this will require broader public understanding and support.
- Campaign **for Government Action**
  Vigorously advocate with the Government and relevant agencies for the targeted actions detailed in this document. A coordinated, cross-government response is essential. While Inland Fisheries Ireland is a key agency, others such as the Department of Climate, Energy and Environment (IFI's parent), the Marine Institute, the National Parks and Wildlife Service, the Environmental Protection Agency, the Department of Agriculture, Food and the Marine, and local authorities also have vital roles to play.
- Support **Local Conservation Initiatives**
  Subject to available resources, SWIRL aims to assist anglers, fishery owners, managers, and community groups in forming local conservation bodies—such as river trusts—to plan, implement, and manage conservation efforts at the grassroots level.
- Collaborate **with Like-Minded Organisations**
  Foster partnerships and collaboration with other NGOs, both domestically and internationally, that share the goal of protecting and restoring wild salmon populations.

Summary

It is no exaggeration to state that within the lifetime of people living today, Ireland's wild Atlantic salmon could become a rarity—restricted, at best, to a handful of rivers. The dramatic increase in marine mortality, exacerbated by climate change, is the leading cause of this alarming decline. Compounding this are human-driven threats such as open-net salmon farming, large industrial scale pelagic fisheries in traditional salmon feeding areas, and obstructive river barriers, which must be urgently addressed. Illegal fisheries both at sea and in our freshwater catchments is increasingly harmful as a consequence of reduced survival at sea.

In response, SWIRL advocates for a rational, science-based management approach that prioritises increasing freshwater productivity. This means ensuring that our salmon rivers produce the maximum possible number of healthy wild salmon smolts.

To achieve this, SWIRL puts forward the following demands and proposals:

- **Shift Policy Toward Conservation**
  Ireland must transition from a policy stance that protects salmon primarily for exploitation to one focused on conserving what is fast becoming an endangered species.
- **Integrate Salmon Conservation into Climate Adaptation**
  SWIRL calls for cross-government recognition of the importance of including salmon habitat restoration and enhancement in national strategies for climate adaptation, especially in river catchments.

- **Remove Obsolete Barriers to Migration**
  A coordinated, and long-term programme is needed to remove all redundant river barriers and to optimise fish passage at all significant remaining structures to support migratory species like salmon. While this has commenced there needs to be an accelerated programme to address the major hydro schemes along the Shannon, Erne, Lee and Liffey and this needs to be prioritised going forward.

- **Reduce Exploitation Until Recovery**
  SWIRL accepts that all forms of salmon exploitation must be curtailed until stocks show meaningful signs of recovery.
- **End Commercial Net Fishing**
  SWIRL supports the complete elimination of commercial net fisheries, with fair and appropriate compensation for those impacted, along with reductions in other forms of exploitation to support the long-term survival of the species.
- **End Open-Net Salmon Farming**
  SWIRL asserts that open-net salmon farming is environmentally unsustainable and must be phased out as a matter of urgency. It should be replaced with closed containment systems (On-Land) that eliminate harmful interactions with wild fish and surrounding ecosystems. No new licences for open-net farms should be granted, and during the transition period, strict and enforceable environmental regulations must be applied. A new, independent aquaculture authority should be established—separate from the Department of Agriculture, Food and the Marine—with responsibility for setting standards, licensing, regulation, and enforcement.
- **Restrict Restocking to Exceptional Cases**
  While SWIRL opposes the indiscriminate restocking of salmon rivers, it acknowledges that restocking may have a limited but important role in restoring local populations—provided it is carried out under strictly controlled, scientifically justified conditions. SWIRL supports the use of gene banking as a tool to preserve the genetic integrity of unique salmon stocks and recommends its integration into any long-term conservation strategy. Additionally, we advocate for proactive intervention before salmon populations in individual river catchments fall below their conservation limits.
- **Modernise Fisheries Legislation**
  SWIRL urges the government to prioritise and accelerate the modernisation of fisheries legislation, ensuring that Inland Fisheries Ireland (IFI) is empowered to deploy its protection resources more effectively and adapt to emerging challenges.
- **Promote Genuine Stakeholder Collaboration**
  SWIRL believes that Inland Fisheries Ireland (IFI) currently lacks—and is unlikely to obtain—the level of resources necessary to fully protect, manage, and conserve wild salmon stocks independently. As such, a genuinely collaborative approach involving stakeholders across the salmon community is essential to achieving meaningful conservation outcomes. Local groups should be empowered and supported, including through financial assistance, to take an active role in managing their catchments for the protection and restoration of salmon populations.
- **Streamline Environmental Governance**
  SWIRL advocates for the consolidation of all government activities that impact environmental protection and biodiversity under a single department, to ensure coherence, accountability, and more effective action.

- **Support International Cooperation**
  SWIRL endorses active engagement with the North Atlantic Salmon Conservation Organisation (NASCO) and similar bodies, recognising the importance of international cooperation in safeguarding migratory species like the Atlantic salmon.

Background – Salmon stocks are at crisis point

It is no exaggeration to say that within the lifetime of people living today, Ireland's wild Atlantic salmon could become little more than a relic of the past—confined, at best, to a small number of rivers. While total extinction is not yet inevitable, it is a very real possibility. Even if the species manages to survive, stocks may decline to levels so low that neither commercial nor recreational exploitation will be sustainable. The potential loss of this iconic species—so deeply woven into Ireland's cultural, heritage, and folklore fabric—would mark a profound social, ecological, and economic tragedy.

There is a collective responsibility on all of us to prevent such an outcome—for the sake of both current and future generations. The road ahead will not be easy, but inaction is simply not an option.

Across its entire North Atlantic range, the Atlantic salmon is in crisis. While the rate of decline varies between countries, the long-term trend has been alarmingly consistent: a sharp and sustained downward trajectory over the past four decades.

In Ireland, the situation is particularly grave. The number of adult salmon returning to Irish waters—known as the pre-fishery abundance (PFA)—has collapsed from approximately 2 million in the late 1970s to just 150,000 in recent years. Catches[i] have plummeted to historic lows, with total landings now around 21,000 fish annually. In 2023, this comprised approximately 4,000 salmon taken by commercial nets and 17,000 by anglers, including 9,447 caught and released. Preliminary figures for 2024 and 2025 suggest an even further decline, with spring salmon catches up to May 2025 showing a stark and dramatic reduction.

As of 2025[ii], only just over 40 of Ireland's 144 designated salmon rivers and lake systems remain open for harvest. Over 100 rivers have failed to meet their conservation limits. The Atlantic salmon is now officially listed as 'Vulnerable' in the latest Irish Red List of threatened species. Make no mistake—salmon are in crisis.

This crisis extends beyond Ireland. Throughout the southern part of the Northeast Atlantic—including Ireland, the UK, France, and southern Iceland—one-sea-winter salmon (grilse) have experienced alarming declines since 1970. The decline in multi-sea-winter salmon (springers) has been even more severe and deeply concerning.

One of the most troubling aspects of this decline is that the removal of mixed-stock drift netting at sea in 2007—once seen as a major conservation milestone—has not led to a meaningful recovery in salmon numbers. In 2006, the final year of drift netting, the reported catch was 70,000 fish, with the true figure likely closer to 100,000 when accounting for illegal harvests. Despite this large-scale removal of fishing pressure, neither commercial estuarine nets nor recreational anglers have seen their catch levels return to pre-2007 levels in any subsequent year.

This leads to a sobering and urgent question: **Where have all the salmon gone?**

The Decline

The following graphs[iii] illustrate the severe decline of both one-sea-winter (1SW) and multi-sea-winter (MSW) salmon in Ireland. These declines accelerated significantly after 1990 and have continued on a downward trajectory since 2008, highlighting the worsening state of salmon stocks.

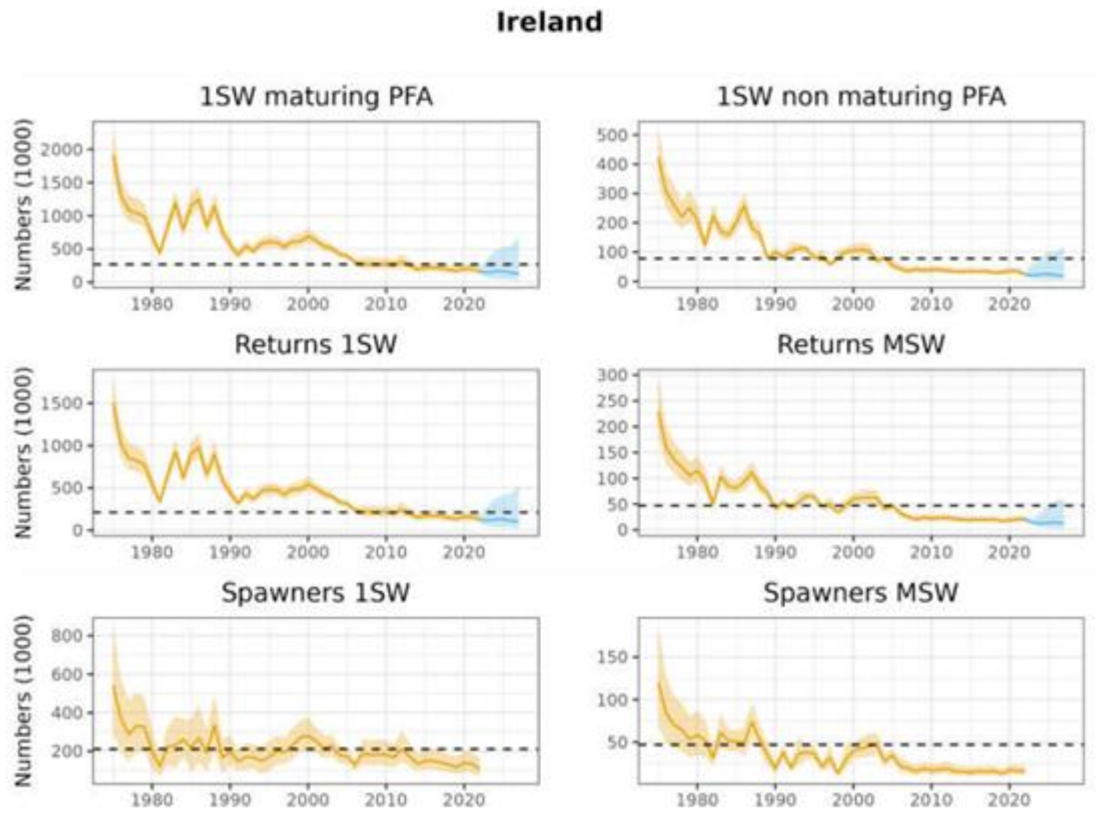

Figure 7 Top panel: Pre-Fisheries Abundance of Irish 1SW and MSW salmon stocks (solid line) with respective Spawner Escapement Reserve indicated (dashed line). Mid and bottom panels: Estimated return of 1SW and MSW salmon to Ireland prior to homewater fisheries and spawners (solid line) relative to national CL (dashed line). (source: ICES 2024).

The Causes of Decline

The life cycle of the Atlantic salmon is highly complex, and the causes of its decline are even more so. Salmon traverse freshwater, estuarine, and marine environments throughout their lives. Mortality factors in each of these habitats do not operate in isolation—changes in one stage or environment may have cascading effects on others, compounding overall mortality.

Of all the pressures facing salmon, dramatically increased mortality at sea is regarded as the single most significant contributor to the decline of wild stocks. Just thirty years ago, as many as 20% of Irish smolts returned from the sea as adults. Today, that figure has dropped to 5% at best for wild smolts—and is even lower for hatchery-reared juveniles. Climate change is already impacting salmon survival both in rivers and at sea, affecting key life stages in ways we are only beginning to understand.
In 2011, a 'Salmon Summit' was convened to examine the causes of the ongoing decline and explore prospects for the species. Drawing on the latest scientific and management knowledge—including early insights from the SALSEA programme—the Summit provided a comprehensive overview of marine influences on salmon survival.

The Salmon Summit's conclusions on marine contributions to salmon decline can be accessed at the following link: *Salmon at Sea*.[iv]

Climate Change and Freshwater Challenges
Climate change is also altering the freshwater environment, leading to:
Increased river temperatures, which may cause smolts to migrate earlier, often before they are physiologically ready.
Flash floods and droughts, which can degrade spawning habitat and disrupt migration.
Mismatches between river and ocean conditions, where early migrating smolts encounter poor marine feeding conditions, reducing survival.
In the marine environment, rising ocean temperatures have been linked to:
Altered ocean currents, affecting plankton blooms and prey availability.
A shift in prey composition, with nutrient-rich species being replaced by lower-quality alternatives.
These changes help explain the declining growth and survival rates of salmon at sea—a trend that has been observed since the 1980s.

Other Marine Pressures
There remains significant uncertainty about the by-catch of salmon in marine fisheries. However, such by-catch has been documented to varying degrees by authorities in Norway, Iceland, and the Faroe Islands. In 2017, SWIRL submitted evidence to NASCO and ICES indicating the presence of juvenile and adult salmon in the blue whiting fishery in the Northeast Atlantic, highlighting an overlooked risk to already struggling stocks.

Predation is another growing concern. Birds and marine mammals appear to be exerting increasing pressure on salmon in rivers, estuaries, and at sea. While data on predator abundance and impact is inconsistent, the anecdotal evidence from anglers and river managers is hard to dismiss.

Additional Factors Identified by SWIRL
In addition to the factors above, SWIRL highlights the following threats:
Salmon farming has well-documented negative impacts, particularly relating to sea lice infestations and escaped farmed salmon. These issues are compounded by the potential of farms to act as reservoirs for pathogens and diseases that can spread to wild populations.

Illegal fishing in rivers, estuaries, and offshore remains a persistent and under-measured threat. While accurate data is difficult—if not impossible—to obtain, its cumulative impact may be significant.

Emerging evidence from the SMOLTRACK[v] Project, which is being conducted across Ireland, Northern Ireland, England, Spain, and Denmark, indicates that smolt survival during migration from rivers to the sea is significantly lower than previously expected.

According to the findings, "the low survival rate in river systems… is a new development," with data showing that, in a poor year, smolt survival can be as much as three times lower than in a good year. This highlights a troubling new dimension in the salmon decline—freshwater and estuarine survival may now be contributing to overall mortality at levels not previously recognised.

Official Irish salmon policy lacks vision, ambition, and cohesion

Official Irish salmon policy has changed little since the introduction of single stock management in 2006. While Ireland's management system is, in some respects, more advanced than those of many other North Atlantic jurisdictions, it has failed to evolve in response to the increasingly perilous state of salmon stocks. Critically, it lacks a coherent long-term vision for the protection and restoration of the species.

The only formal articulation of Ireland's salmon policy objectives appears in the 2019–2024 Implementation Plan (IP)[vi] submitted to NASCO. This document outlines the Irish Government's overarching goal as ensuring "that all stocks meet and exceed biologically based Conservation Limits, with only the surplus above those limits being available for harvest." However, this stands in contrast to the more comprehensive and forward-looking strategies of jurisdictions such as Scotland and Norway, whose IPs emphasise the preservation of biodiversity and set out clear, detailed objectives for salmon conservation.

While the lack of strategic direction might be mitigated by a strong domestic analysis and action plan, Inland Fisheries Ireland (IFI) currently offers no clearly articulated assessment of the state of Irish salmon stocks, their projected trajectory, or the policy measures required to reverse their decline.

Much of this shortfall stems from the fragmented approach of the Irish Government to biodiversity management. Responsibility for the many factors that affect salmon abundance and genetic diversity is dispersed across multiple government departments and agencies. IFI, despite being the lead body responsible for salmon conservation, lacks the authority to influence these entities, and there are few effective cross-departmental mechanisms in place to develop or implement coordinated policy change.

SWIRL acknowledges that a revised policy on salmon policy is being prepared currently, and we await its publication. We hope that it will prioritise conservation over exploitation as a strategic goal.

Salmon Watch Ireland's framework for reversing the decline

As outlined previously, the primary threat to salmon stocks lies in marine mortality, with significant additional pressures in freshwater environments. Unfortunately, there is very little within our control that can meaningfully alter oceanic conditions, even over the long term. As such, we must realistically accept that return rates of 3–5% for migrating wild smolts may be the upper limit of what can be achieved under foreseeable future conditions.

Considering this, SWIRL proposes that Ireland's salmon management policy adopt one of the core conclusions of the 2011 Salmon Summit as its central guiding principle:

To focus efforts on improving those factors affecting salmon productivity in rivers and nearshore areas that are within our power to manage.

The key factors influencing river productivity—and which are amenable to targeted action by the State, fisheries managers, fishery owners, and the angling community—include:

- The extent and quality of freshwater habitat.
- Barriers to migration within river systems.
- The level of exploitation by both recreational and commercial fisheries.
- The impact of open cage salmon farming and other inshore activities on migrating salmon, particularly juveniles.
- Restocking practices and policies.
- The availability and effectiveness of protection and enforcement services in both freshwater and marine environments.
- Strong, coordinated collaboration between State agencies and stakeholders in the private and voluntary sectors.
- The engagement of anglers, clubs, and their national federations in such efforts.
- International co-operation at governmental and non-governmental levels through NASCO and other agencies to achieve action on such issues as the continuation of restrictions on the Greenland and Faroese salmon fisheries, illegal exploitation on the high seas and by catches of juvenile and adult salmon in pelagic fisheries.

By concentrating on these areas, Ireland can meaningfully improve the freshwater and nearshore conditions that are critical to salmon survival—mitigating losses where it is still possible to do so.

Our Policies

Considering the alarming current condition and projected trajectory of Irish salmon stocks—and recognising the limited but critical tools currently available to reverse this decline—SWIRL calls for an urgent and coordinated national response.

As such, SWIRL strongly supports the implementation of the following strategic measures:

Climate Adaptation and Salmon Conservation

SWIRL calls for cross-government recognition of the urgent need to include salmon habitat enhancement as a central pillar in adapting Ireland's rivers to a changing climate. While the Salmon Conservation Fund (SCF) has a role to play in this effort, it requires significant reform and resourcing. The protection and management of freshwater habitats in a warming climate can only be achieved through inclusive, cooperative partnerships between government agencies, anglers, fishery owners, landowners, and local communities.

Climate Change Impacts on Salmonids
Atlantic salmon and sea trout now face increasingly severe environmental challenges in both freshwater and marine environments. Many of these pressures—particularly those driven by oceanic changes—are beyond our control. However, the adaptation of salmonids to climate change is best supported by maintaining wild populations in rivers with high-quality, resilient habitat capable of mitigating the extremes of a changing climate.

Key observed and predicted freshwater impacts include:
- Warmer winters and increased rainfall, now established features of Irish climate.
- Hotter, drier summers, reducing base flows and stressing aquatic ecosystems.
- Intensifying rainfall events, causing flash flooding and erosion.
- Rivers lacking thermal refuges, which may not sustain salmonid populations during summer temperature extremes.
- Degraded water quality, worsened by land-use intensification and nitrate pollution.

Salmonids are particularly vulnerable to these changes. The decline in overall water quality, linked to agricultural practices and inadequate riparian protection, is now a major concern. While measures such as improved wastewater treatment and agri-environment schemes are welcome, the most effective safeguards for freshwater ecosystems remain:

- Restricting damaging land-use practices, particularly those affecting catchment hydrology.
- Maintaining and restoring diverse, functional riparian zones, which provide shade, stabilise riverbanks, and regulate water quality.
- Addressing tunnelling on a case-by-case basis especially in larger catchments where riparian zones have been neglected. This will require expert intervention to integrate thermal refuge while optimising productivity.

Integrated Governance and Missed Opportunities
Salmon conservation must not occur in isolation. Salmon are part of a broader, interconnected ecosystem—nationally and internationally—where negative impacts in one area often produce unintended consequences elsewhere.

Ireland's National Biodiversity Action Plan 2023–2030[vii] is the main framework for coordinated environmental action. However, while it offers significant attention to marine ecosystems and fish, it lacks integration regarding inland fish species. Key freshwater pressures—such as arterial drainage, agricultural intensification, and nitrate pollution—are addressed inadequately. The nitrates derogation has contributed to declining water quality. While recent reductions in this derogation are welcome, it remains unclear whether further action will be taken—such as eliminating the derogation altogether or reducing herd numbers.

Rehabilitating Modified Rivers and Habitat

Many of Ireland's rivers have been modified by hard engineering and drainage schemes, leading to degraded habitat and blocked fish passage. Reversing these impacts requires comprehensive rehabilitation strategies, including:

- Natural river channel restoration, with a return to pool-glide-riffle sequences.
- Soft engineering solutions to stabilise banks and reduce erosion.
- Reconnection of rivers with floodplains, wetlands, and off-channel habitats.

At SWIRL's 2014 annual conference, presentations from the Marine Institute and the UK's Centre for Environment, Fisheries and Aquaculture Science (CEFAS) outlined key climate-driven impacts and proposed mitigation strategies.

Findings from the Marine Institute (Burrishoole catchment):

- Ova hatching now occurs up to 30 days earlier than in the 1970s.
- Smolt migration timing has advanced by up to 14 days, with runs now extending over a longer period.
- These changes may result in a mismatch with optimal marine conditions, increasing mortality and predation risks.

Recent Findings:[viii]

- Salmon returning earlier when compared to 1970s
- Smaller body size
- Decline in survival at sea

Recommendations from Marine Institute & CEFAS:

- Shading rivers through intact riparian vegetation.
- Creating floodplain woodlands to reduce runoff.
- Rehabilitating wetlands to maintain summer flows.
- Protecting groundwater inputs to regulate temperature.
- Developing thermal refugia for extreme heat events.
- Reducing drainage and modifying land-use practices.
- Creating off-channel floodplain habitats for fish during flood and drought periods.

These are sensible, evidence-based interventions that deserve widespread support. However, they often require substantial resources, cross-agency coordination, and alignment with programmes under the Water Framework Directive (WFD) and the Office of Public Works (OPW) flood mitigation schemes. Unless salmon conservation priorities are fully integrated into WFD, OPW, and related programmes, critical habitat will remain degraded, and key opportunities for climate resilience will be lost.

Funding and Policy Leverage
The Salmon Conservation Fund, while currently underutilised, is insufficient to meet the scale of the task. Its reform and better integration into national conservation policy are essential. Meanwhile, practical actions can also provide immediate benefits:

- Closing commercial and recreational salmon fisheries during low water or extreme temperature events.
- Supporting voluntary habitat restoration efforts, especially where landowners and local communities are willing partners.

Conclusion: Towards a Coordinated National Effort

SWIRL recognises that the challenges in freshwater environments are substantial. However, with a coordinated, cross-sectoral approach, supported by government leadership and stakeholder collaboration, real progress is possible—particularly in the areas of:

- Land-use planning and regulation
- Riparian zone restoration
- Integrated catchment management

Much can also be achieved through community and voluntary action, especially with targeted support from the Salmon Conservation Fund and the active engagement of landowners.
If Ireland is serious about preserving its iconic salmon populations in a warming world, now is the time to act.

Conservation Hatcheries Salmon

SWIRL is opposed to the indiscriminate restocking of salmon rivers but recognises that in limited, strictly controlled circumstances, restocking may have a role to play.

Carefully and judiciously managed, restocking can be a useful component in the restoring of salmon stocks in certain rivers. SWIRL is broadly supportive of conservation hatcheries but only where scientific and natural circumstances dictate.

Due to the decline of returning adults caused by poor survival at sea, an increasing number of catchments may be judged to have little prospect of again achieving their conservation limit. In these circumstances Salmon Watch Ireland is supportive of an intervention using a conservation hatchery or other methods to artificially boost numbers of juveniles.

Salmon Watch Ireland will support scientifically based rearing programs in catchments where it can be demonstrated that intervention will not unduly harm wild stocks and that there is a strong biological reason for intervention.

The natural carrying capacity of catchments is affected by many factors including water quality, drainage, habitat destruction, land usage causing excessive and accelerated runoff and man- made barriers to migration. The use of hatcheries or other artificial methods to boost stocks will fail unless serious catchment issues are addressed.

There is no substitute for the natural process. However, a lack of adults is certainly posing increased problems, and some intervention may be required.

SWIRL would certainly support the view that a self-sustaining stock of Atlantic salmon cannot be achieved through natural or artificial intervention unless issues within a catchment are addressed. The use of a hatchery to increase productivity outside a catchment's natural capacity is not supported by SWIRL. The displacement of wild salmonids by hatchery produced fish is harmful in the short term and in the long term can lead to a dramatic reduction in the productivity of a catchment.

The planting of ova (green eggs or eyed ova) has long been a successful stocking method but must be planned and scientifically based to enhance its success. It is important to plant ova in areas which are not oversubscribed by wild salmon. It is also necessary to mix genetics at the fertilisation stage to ensure that genetic biodiversity is improved. The brood stock should be from the tributary into which ova are being deposited. The choice of brood-stock to cross fertilise ova is important as in nature there is a strong preference in choice of mate.

SWIRL supports the planting of fry and parr when natural production is negatively affected by a lack of spawning adults. SWIRL does not support stocking of fry and parr where catchment issues do not allow optimum productivity.

Neither does SWIRL support the stocking of large numbers of fry and parr into a catchment which already has optimum stocks of wild salmonid juveniles. This is to guard against naturally produced fish being dominated and displaced by hatchery fish. It is evident that if natural capacity is exceeded the wild or hatchery fish will suffer negatively.

A newer concept involves the movement of fry within a tributary to alleviate density related issues. We would certainly support this option as these are complete wild fish without human interference in mate choice. As with other methods it is essential that adequate scientific input is used to locate density poor areas with suitable habitat. IFI are undertaking a pilot project on the River Erriff to test out this concept in Irish conditions

The planting of fry and parr in waters where there are no existing salmon (as in the case of an impassable natural obstacle) can give excellent success if habitat and water quality are sufficient. However, catchments must be viewed as a unique ecosystem and waters above natural impassable falls may have other ecosystem functions which the catchment requires.

The stocking of smolts (ranching or to supplement rod catches) can be very effective with reasonable survival. The fish do not feed in the freshwater habitat so are not exposed to the levels of predation that wild salmonids experience and do not pose a problem regarding competition with wild juveniles.

However, their survival rate is quite inferior to wild fish. Issues arise, however, when adults reared to smolt stage return and breed with other hatchery progeny or indeed wild salmon causing a dilution of the genetic base and it is well established that this type of rearing program will eventually reduce smolt output.

Strategies to reduce the impact of ranched salmon should always include the removal of adult ranched stock before they spawn, using trapping facilities as part of the process.

A long-term study from Burishoole [ix]demonstrated the damage to smolt production by the integration of ranched (hatchery) salmon into the catchment. The number of ranched salmon allowed to spawn in the wild had a negative effect on smolt productivity within the catchment.

Any attempt to artificially propagate Atlantic salmon can have negative aspects especially regarding survival, reproduction and the promotion of mal-adapted genes. Wild fish reared in a natural environment have many advantages over hatchery progeny and examples of self-sustaining stocks being built from hatchery reared fish are non-existent. The reproduction success of hatchery or hybrid hatchery-wild salmon has been demonstrated to be inferior to wild fish.

Salmon Watch Ireland hosted a conference[x] detailing the various conservation hatchery and alternative techniques to restore distressed salmon stocks.

The Salmon Conservation Fund: Reform for Greater Impact

Overview and Background

The Salmon Conservation Fund (SCF) is administered by Inland Fisheries Ireland (IFI) and is primarily funded by contributions from salmon anglers and commercial fishers, collected at the time of licence purchase. The Fund currently receives approximately €500,000 annually.

Since 2019, the SCF's remit has been expanded to cover conservation efforts for sea trout in addition to Atlantic salmon. Officially titled the Salmon and Sea Trout Rehabilitation, Conservation and Protection Fund, the SCF is guided by a 2006 Ministerial Direction implemented by the now-defunct Central Fisheries Board (CFB) and its successor, IFI.

The Fund's stated purpose is to "coordinate the preparation and implementation of a revised programme for the rehabilitation, conservation and protection of wild Atlantic salmon and sea trout stocks."

Activities Funded by the SCF

The SCF supports a wide range of conservation activities, including:

- Funding for IFI's fry surveys, which provide critical scientific insight into salmon system productivity.
- Local conservation projects—primarily focused on systems below their conservation limits, but also supporting broader ecological restoration initiatives.
- Work aimed at improving spawning and nursery habitats, which are essential for self-sustaining salmon populations.
- Projects that address bottlenecks in smolt production, often due to habitat degradation or migratory obstructions.

Limitations and Barriers to Impact

While the SCF has supported numerous worthwhile initiatives, only a small number of projects have delivered measurable improvements in salmon stock rehabilitation. In SWIRL's view, this limited impact can be attributed to two main challenges:

- Scale and Resourcing Constraints
  The SCF, in its current form, is too small to support large-scale, high-impact projects. Many heavily degraded systems in urgent need of intervention require more substantial investment than the Fund can currently provide.
- Administrative and Regulatory Complexity
  The regulatory burden associated with conservation projects—including environmental impact assessments, planning permissions, public procurement rules, insurance requirements, and compliance with local authority demands—has proved too onerous for small organisations, such as angling clubs and local community groups. These procedural hurdles have deterred many potential applicants, stalling valuable grassroots efforts.

SWIRL's Proposals for Reform

To unlock the full potential of the SCF and enhance its strategic impact, SWIRL recommends the following actions:

- **Refocus the Fund's Mission**
  The SCF should be returned to its original objective:

  > *Giving priority to rivers that are below their conservation limits, particularly those located in Special Areas of Conservation (SACs), and which have the greatest prospect of recovery.*

- **Strategic Project Identification by IFI**
  At the river basin level, IFI should take the lead in identifying and publishing target rivers and project priorities that align with the Fund's mission. This process should be conducted in consultation with key stakeholders, including:
  - Anglers and angling associations
  - River owners and fishery managers

Emphasis should be placed on:

- Enhancing the productivity of spawning and nursery areas
- Removing or mitigating barriers to fish migration
- Optimised Use of IFI Project Facilitators
  IFI's project facilitators should shift focus from passively supporting ad hoc sponsor-led proposals to proactively pursuing strategically identified, high-potential projects. This would make better use of existing expertise and drive greater conservation returns.

- Augment SCF Resources through Government Support
  While modest increases in licence contributions from anglers and commercial fishers may be explored, this revenue stream is declining alongside licence sales. Therefore, additional Government capital funding must be secured if the SCF is to play a transformative role in salmon conservation.

Conclusion

The Salmon Conservation Fund represents a valuable tool for salmonid conservation in Ireland. However, it is currently underutilised and underpowered relative to the scale of the crisis facing wild Atlantic salmon.

Through strategic refocusing, administrative reform, and enhanced funding, the SCF can become a central pillar of Ireland's national response to salmon decline—supporting both large-scale habitat rehabilitation and empowering local communities to take meaningful action.

Barrier Removal and River Connectivity: A Critical Step for Salmonid Recovery

The recent announcement of €100 million in government funding for the National Barriers Programme marks a major milestone in addressing one of the most critical challenges facing Ireland's migratory fish species: the obstruction of natural river connectivity. Over the lifetime of this programme, it is expected that 257 barriers will be removed or mitigated. The funding will target structures such as bridge aprons, culverts, sluices, fords, and weirs—all of which can interfere with natural river processes and disrupt the life cycles of species such as Atlantic salmon, sea trout, European eel, and lamprey.

SWIRL's Commitment to Barrier **Mitigation**

SWIRL strongly supports the removal or mitigation of man-made barriers to migration for Atlantic salmon and sea trout and endorses designs that facilitate the free movement of all fish species, both upstream and downstream. A properly functioning river ecosystem is essential to optimise juvenile salmonid production in freshwater.

While many migration barriers are now obsolete and serve no functional purpose, SWIRL acknowledges that some structures may pose environmental or economic challenges if removed. In such cases, careful assessment and stakeholder engagement are essential.

Why Barrier Removal Matters

The negative impact of weirs and similar structures on salmonids is well documented. Research shows that:

- Weirs create ponding effects upstream, which significantly reduces habitat quality and juvenile salmonid productivity.
- Removing these barriers can restore natural pool-glide-riffle sequences, greatly enhancing river function and fish habitat.
- All weirs, regardless of size, represent substantial migration barriers and create predation hotspots, as fish are delayed and concentrated in specific locations.

As noted by NASCO in its 2015 report:

"Barriers to migration in fresh water and in estuaries, whether natural or man-made, can block or delay access and may lead to increased mortality through, for example, diseases, predation and, in the case of smolts and kelts, passage through turbines. Delays in smolt migration may also affect their survival when they enter the sea."

Even where fish passes or ladders are present, these are not optimal solutions—they often represent partial and selective passage that may disadvantage weaker or smaller fish.

National and European Efforts

Under the River Basin Management Plan for Ireland, IFI is mandated to assess all barriers to fish movement in Irish waters. IFI is also a key participant in the EU-funded AMBER project (Adaptive Management of Barriers in European Rivers), which seeks to raise awareness about river fragmentation and promote innovative solutions for river restoration.

While rock ramps have been constructed in some Irish rivers to assist migration, these structures often do not resolve the upstream ponding issue, limiting their effectiveness in restoring natural flow and habitat.

Addressing Operational and Private Weirs

Some weirs and dams remain in active use, particularly for water management or hydroelectric purposes. These pose significant challenges to salmonid migration and require:

- Mandatory operational changes to manage flows during migration periods.
- Site-specific solutions developed collaboratively by stakeholders.
- Strict enforcement of ecological responsibilities for private weir owners.

Small Hydro Projects: A Growing Concern

SWIRL is increasingly concerned by the renewed interest in small-scale hydroelectric generation, given the potential for ecological harm and river fragmentation. It is vital that local authorities rigorously enforce environmental assessments, particularly regarding the impact on protected species like salmon.

One recent case on the River Liffey in Kildare—brought to public attention by the Liffey Salmon Project, Salmon Watch Ireland, and IFI—demonstrates the importance of vigilance. The project is currently under investigation for unauthorised development, and the associated turbine is not permitted to operate.

Large Hydro Schemes: The Need for Modernisation

SWIRL is concerned about the lack of progress by the ESB in modernising fish passage at its hydroelectric facilities. Despite global advances in fish-friendly infrastructure, little has been done over the past 30 years to improve upstream and downstream passage at key facilities, including Ardnacrusha and Parteen Weir.

A wide range of modern fish ladder, bypass channel, and turbine bypass designs are now available and proven elsewhere. These could and should be applied in Ireland to benefit migratory species.

Discussions are currently underway regarding fish passage improvements at Ardnacrusha and Parteen Weir. In our submission concerning the proposed major water extraction project from the Shannon, SWIRL has made clear that:

No water should be extracted unless effective fish passage facilities are operational during construction, and radical improvements are made to both upstream and downstream fish movement across hydro infrastructure.

Conclusion and Call to Action

The National Barriers Programme is a once-in-a-generation opportunity to reconnect Ireland’s rivers and restore natural migration pathways for Atlantic salmon and other species. But success will require:

- Strategic prioritisation of high-impact sites.
- Strong enforcement of planning and environmental regulations.
- Integration with national biodiversity and climate policies.
- Ongoing dialogue with communities, river users, and conservation stakeholders.

SWIRL remains committed to supporting these efforts and to ensuring all man-made barriers to salmonid migration are either removed or made fully passable, using the best science and engineering solutions available.

Commercial and Recreational Exploitation of Atlantic Salmon: A Call for Urgent Review

Background and Context

With Atlantic salmon stocks in Ireland continuing to decline, all forms of exploitation—commercial and recreational—must be reassessed considering their impact on spawning populations and long-term stock sustainability.

SWIRL supports the complete elimination of all commercial net fisheries, with appropriate compensation for affected stakeholders, and advocates for a measured and significant reduction in recreational exploitation as part of a broader conservation framework.

Support for Single Stock Management

SWIRL fully endorses the Single Stock Management System introduced following the end of drift netting in 2007. This system provides a structured and science-based approach to managing exploitation and has served Ireland well. However, given current conditions, a review of the parameters and implementation of this system is now necessary.

If, as SWIRL proposes, the overarching management objective is to maximize the number and quality of wild smolts reaching the sea, then both commercial and recreational exploitation levels must be kept under continuous and rigorous scrutiny.

Current Exploitation Levels

According to the most recent published data (2023):

- Approx. 21,000 salmon were taken by all methods.
    - Just over 4,000 harvested by commercial nets.
    - Approx. 7500 retained by rod and line anglers.
    - Approx. 9500 caught and released by anglers.

Preliminary data for 2024 and 2025 indicate a continued decline in salmon numbers, despite a modest increase in 2024 compared to 2023. However, this slight upturn is insufficient to change the overall downward trajectory. A significant increase in spawning stock is urgently required to compensate for the rising mortality rates in both freshwater and marine environments.

Commercial Fisheries: A Sector in Decline

There remain approximately 78 licensed public nets available to operate annually across seven estuaries, harvesting an estimated 4,000 salmon per year. These operate alongside a number of private netting operations governed under different legal frameworks. All commercial salmon fisheries are confined to estuaries that are assessed as having a harvestable surplus and are managed under a quota system.

However, with declining quotas, shortened fishing seasons, and the ongoing deterioration of salmon stocks, both the economic viability and the ecological justification for maintaining this commercial netting sector are becoming increasingly untenable.

Given the long-term trends, SWIRL sees no realistic prospect of re-opening closed commercial fisheries or authorising new ones, unless there is a dramatic and sustained improvement in salmon stocks—something that, in the current global context, appears unlikely.

SWIRL Recommendations on Commercial Netting:

- Government should publicly signal its intent to phase out all public netting licences, providing a clear date for closure.
- A scheme should be introduced to buy out or lease netting rights, with compensation for both public and private operators.
- Where necessary, private rights should be addressed through compulsory purchase orders or negotiated settlements.
- No reopening of closed fisheries should be contemplated without robust scientific evidence of surplus and sustainability.

Recreational Fisheries: Time for Realignment

Ireland's current recreational exploitation regime—allowing anglers to retain up to 10 salmon per season—is generous by international standards and no longer reflects the reality of dwindling stocks.

While some temporal and regional restrictions are in place, catch limits must be revised downward in line with modern conservation principles.

However, mandatory catch-and-release policies, while scientifically justifiable, have had mixed outcomes—including:

- Declines in angling club membership
- Reduced surveillance and protection efforts by local anglers
- Social and economic impacts in rural communities

We contend that if a manageable surplus exists there should be proactive management to limit exploitation. Mandatory catch and release on systems where no manageable surplus exists is strongly supported by SWIRL.

SWIRL acknowledges the critical conservation role played by anglers and believes these concerns must be considered in designing any future restrictions.

SWIRL Recommendations on Recreational Exploitation:

- Review and reduce catch limits to reflect current stock levels and international conservation standards.
- Implement balanced catch-and-release policies with local stakeholder input to maintain angler engagement.
- Ensure data transparency and science-based decision-making in all exploitation policies.
- Establish a five-year review mechanism to evaluate the effectiveness of exploitation restrictions and allow reversal or relaxation if stocks recover.

Mixed Stock Fisheries: Firm Opposition to Reintroduction

SWIRL is deeply concerned by political pressure to reintroduce mixed stock drift net fishing at sea and categorically opposes any return this type of exploitation.

Such a move would:

- Undermine Ireland's Single Stock Management regime.
- Breach the principles of the EU Habitats Directive.
- Contradict the European Commission's 2005 position, which led to the 2007 ban on drift netting.

SWIRL will resist any efforts to reinstate this practice under any guise.

Conservation Limits and Data Integrity

SWIRL supports a scientific, conservation-based approach to salmon fishery management and does not support exploitation in systems without proven surpluses. However, there is an urgent need to:

- Review conservation limit methodologies, especially for rivers without fish counters, where surplus estimates may not reflect physical observations.
- Given that the current probability threshold for meeting the conservation limit is set at 75%, SWIRL believes this level of certainty is insufficient in the context of the ongoing and rapid decline in salmon stocks. To align more effectively with conservation objectives and the precautionary principle, consideration should be given to increasing this probability factor ensuring a more robust buffer against continued stock depletion.
- Improve data collection across all catchment types—including both catch-and-release and harvestable catchments.

Strengthening the Tagging System

The current tagging system, used to monitor and enforce legal salmon catches, is vulnerable to abuse in both the commercial and recreational sectors.

SWIRL recommends:

- Making the system more robust and traceable, with improved verification.
- Introducing stricter penalties for breaches, including:
  - Revocation of licences for those found in contravention of tagging regulations.

Conclusion

In the face of accelerating declines in salmon populations, Ireland must take bold and proactive steps to curb all forms of unsustainable exploitation— illegal, commercial, recreational, and potential mixed-stock practices.

These measures, taken together with habitat restoration, barrier removal, and policy reform, represent the best hope for preserving Ireland's iconic Atlantic salmon for future generations.

Protecting Salmon: Restore Habitats, Balance Predators, Save a Species

Introduction: The Predation Challenge

Predation of salmonids by birds, mammals, and piscivorous fish in rivers, estuaries, and marine environments is widely believed to be increasing. While hard data on predator abundance and impact remain patchy, anecdotal and observational evidence from anglers and local stakeholders—particularly in rivers and estuaries—is increasingly difficult to ignore.

Salmon Watch Ireland (SWIRL) recognises that predation is a natural and necessary part of the salmonid life cycle, helping to maintain population fitness through selective pressure. However, under current conditions of low adult abundance, habitat degradation, and climate-driven stressors, unmanaged or excessive predation may now be driving population declines in certain catchments.

Predation in Context: Natural vs. Unnatural Pressure

- Predation plays a vital ecological role in shaping the survival traits of salmonid populations.
- However, human-induced changes to river systems—including migration barriers, weirs, degraded water quality, and altered flow regimes—have amplified the risks associated with predation by concentrating fish, slowing migrations, and creating unnatural bottlenecks.

These conditions have tipped the ecological balance, turning otherwise natural predator-prey dynamics into serious obstacles to salmonid recovery.

Predation Across the Salmonid Life Cycle

Ova Stage

- Eggs deposited in gravel are generally well protected.
- Exposure to predation (mainly by birds or other fish) is limited to disturbed or shallow redds.
- Overall impact: low.

Fry and Parr

- Salmon fry are vulnerable to predation by trout and other piscivorous fish, especially in systems with dense predator populations.
- Parr face threats from pike, large brown trout, and avian predators (cormorants, grey herons, divers), particularly in nursery areas.
- Overall impact: moderate, but more severe in degraded habitats.

Smolt Stage

- Smolts face high predation pressure during downstream migration.
- Delays caused by weirs, reservoirs, and artificial barriers increase exposure to predators.
- Predators include birds, piscivorous fish, and mammals.
- Any slowdown in migration creates predation hotspots.

Post-Smolts and Estuarine Phase

- In estuaries and near-coastal waters, smolts are especially vulnerable during acclimatisation to saltwater.
- Predators include seals, seabirds, bass, cod, and other marine fish.
- Sea lice damage from aquaculture operations can also impair swimming ability, further increasing predation risk.

Adult Return Phase

- Delays in freshwater entry due to low water levels or barriers increase adult vulnerability.
- Predation in estuaries and rivers—particularly by seals and otters—can significantly impact spawning potential.
- Adult losses at this stage have the most direct impact on stock recruitment.

Climate Change and Predation Dynamics

- Climate-related stressors—low summer flows, warmer water temperatures, and poor water quality—can increase predation pressure.
- Mismatched migration timing (e.g., early smolt runs) may lead to fish entering marine environments before peak productivity, increasing mortality from both starvation and predation.
- Climate change is altering predator behaviour and shifting predator-prey balances, particularly in estuarine and nearshore environments.

Addressing the Issue: SWIRL's Position

Habitat Restoration First

- The most sustainable and enduring solution is to repair damaged habitats, remove migration bottlenecks, and restore river function.
- Healthy habitats enable fish to migrate quickly and develop natural predator avoidance behaviours.

Managing Predation Responsibly

- SWIRL supports a balanced and evidence-based approach to predator management.
- Lethal control should only be considered where:
    - Vulnerable salmonid stocks are at risk, and
    - Non-lethal measures have proven ineffective.

Policy Recommendations:

Raise Awareness and Monitor Predation Hotspots

- Promote better understanding of predator impacts—especially in heavily impacted catchments.
- Focus attention on known bottlenecks and barrier sites where predation is amplified.

Fast-Track Regulatory Tools

- Provide Inland Fisheries Ireland (IFI) and National Parks and Wildlife Service (NPWS) with a clear, standardised template for assessing and managing predator risk.
- Ensure that Section 42 licences (Wildlife Act 1976, as amended) can be issued efficiently and without delay when justified by fishery conditions.

Prioritise Seal Management in Freshwater

- Adult salmon trapped by barriers are particularly vulnerable to seal predation.
- IFI and NPWS must act promptly where seal presence in freshwater threatens spawning populations.

Maintain Ecosystem Balance

- SWIRL supports a managed population approach, not broad-scale predator removal.
- Excessive removal may destabilise ecosystems and have unintended consequences.

Collaborate with Research Initiatives

- SWIRL welcomes efforts by the Atlantic Salmon Trust, Inland Fisheries Ireland, and other international agencies to study salmon survival and identify where predation has the greatest impact.
- Data from projects such as SmoltTrack should be used to inform adaptive policy.

Protect At-Risk Catchments

- In rivers where adult and juvenile numbers are critically low, targeted predator management should be prioritised to safeguard recruitment potential.

Conclusion

Predation is a natural and necessary ecological process, but under current conditions, it is also a significant conservation concern. While predator control may play a role in protecting the most vulnerable stocks, it must be part of a broader strategy focused on:

- Restoring habitat
- Eliminating migration barriers
- Reducing human-induced stressors
- Supporting well-informed, balanced ecosystem management

SWIRL will continue to advocate for predator management policies that reflect both conservation science and the urgent need to protect the future of wild Atlantic salmon in Irish rivers.

Salmon Aquaculture in Ireland: A Threat to Wild Salmonids and Urgent Need for Reform

SWIRL's Position

Salmon Watch Ireland (SWIRL) is unequivocally opposed to the expansion of open-net salmon farming in Ireland. We will continue to campaign vigorously against:

- The issuance of new licences
- Renewal and review of current extant licences

The current model of open-net pen farming is unsustainable and incompatible with the protection of Ireland's wild salmonid heritage. It must be phased out as a matter of urgency and replaced with closed or semi-closed containment systems (On-Land). During the transition, strict, enforceable environmental standards must be applied.

The Current Reality: Unsustainable and Harmful

Ireland's salmon farming industry is small by global standards—less than 12,000 tonnes per annum, from 38 licensed sites (14 active as of August 2025), and employing fewer than 250 people. Yet, despite its size, the ecological damage is significant:

- Wild salmonid populations near farms have collapsed, especially sea trout, due to high exposure to sea lice and disease.
- Scientific consensus confirms that farms create zones of elevated parasite and pathogen density, threatening migratory smolts and sea trout.
- Research shows that wild salmon returns are reduced by up to 19%[xi] and sea trout by up to 90% near farming operations.

The industry's environmental impact is compounded by:

- Escaped farmed fish interbreeding with wild stocks
- Chemical treatments for sea lice harming local ecosystems
- Disease transmission, poorly understood due to lack of research and regulatory interest

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Technological Alternatives and Missed Opportunities

There is growing international momentum for closed and semi-closed containment systems, including:

- Land-based Recirculating Aquaculture Systems (RAS)
  Proven in smolt rearing; still economically and technically limited for full-cycle farming.
- Semi-closed containment systems at sea.
  These draw deeper, lice-free water and provide physical barriers to parasite transfer.
  Trials in Norway show promise but are underused in Ireland. We are not convinced that these are sufficient to protect wild salmonids. Technological advances may allow this system to protect the wider environment but at present we cannot endorse this technology.
- Flow through systems on land have potential and would alleviate most concerns but energy usage to pump sufficient sea water might inhibit sustainability.

These technologies are being adopted abroad—not primarily for wild fish protection, but to safeguard farmed stocks from disease and parasite overload.

SWIRL is deeply disappointed that Irish authorities have failed to adequately incentivise or trial these solutions, representing a major strategic and regulatory failure.

A System in Conflict: Governance and Regulation

A fundamental issue lies in the conflict of interest at the heart of Irish aquaculture governance. The Department of Agriculture, Food and the Marine (DAFM) is simultaneously tasked with promoting and regulating the sector.

SWIRL calls for the creation of an independent Aquaculture Authority, responsible for:

- Setting environmental and operational standards
- Issuing licences
- Monitoring compliance
- Enforcing penalties

This separation of promotion from regulation is essential for public trust and ecological protection.

Legal Challenges and Licensing Process

SWIRL continues to hold the industry and government to account through legal and regulatory avenues:

- In 2021, SWIRL successfully challenged a licence in Bantry Bay [xii] in the High Court, resulting in its quashing.
- We have made numerous submissions on current licence renewal applications, many of which we believe are flawed and contrary to environmental law.
- We have highlighted the problematic Section 19[xiii] of the Fisheries Act, which allowed continued operations without full environmental assessment. It is now due for repeal—a development we welcome.

SWIRL relies on the precautionary principle, supported by Irish and EU case law. In *Connelly v An Bord Pleanála* [2018] IESC 31, the Supreme Court clarified that consent can only be granted when all reasonable scientific doubt has been removed regarding adverse effects on sensitive environments.

Path Forward: What Must Happen

To protect wild salmonids, SWIRL proposes the following urgent measures:

- Immediate moratorium on new open-net salmon farming licences
  No further approvals should be granted.
- Phased closure of existing open-net sites
  With a clear timeline and funding for transition to closed/semi-closed systems (Pending technology advance) or decommissioning.
- Establishment of an independent Aquaculture Authority
  With full legal powers for licensing, monitoring, and enforcement.
- Mandatory and transparent environmental impact assessments
  For all licence applications, as required by EU law.

- Incentivisation of sustainable technologies
  Including RAS and semi-closed systems (Pending technology advance), with government and EU support.
- Increased investment in independent research
  Especially into disease transmission from farms to wild fish.

Conclusion

The current trajectory of salmon aquaculture in Ireland is incompatible with the survival of wild salmonids. It is time for decisive action, grounded in science, law, and ecological responsibility. Open-net salmon farming must end. A new model—transparent, accountable, and genuinely sustainable—must take its place.

SWIRL will continue to lead the campaign for this transition, in defence of one of Ireland's most iconic and threatened species.

Feed Supply and the Impact of Pelagic Fisheries- Salmon Farming

While the environmental impacts of open-net salmon farming in Ireland's coastal waters are increasingly well-documented, less attention has been given to the global footprint of feed sourcing, particularly the use of wild-caught pelagic fish to manufacture fishmeal and fish oil for farmed salmon diets.

It must be clearly stated: if the salmon aquaculture industry is to make any credible claim to sustainability, it must also address the unsustainable nature of its feed supply chains.

Pelagic Fisheries: A Hidden Ecological Cost

Current salmon aquaculture is heavily dependent on large-scale industrial pelagic fisheries—notably targeting species such as:

- Blue whiting (Micromesistius poutassou)
- Sprat (Sprattus sprattus)
- Sandeel (Ammodytes spp.)
- Capelin (Mallotus villosus)

These species are not only critical prey for marine predators (including seabirds, whales, and commercially important fish including cod, salmon, sea trout and haddock), but they are also key components of healthy marine ecosystems. Removing large quantities of these fish to feed farmed salmon poses serious ecological risks, particularly in already stressed ecosystems such as the North-East Atlantic.

The blue whiting fishery, for example, has been the subject of concern due to levels of bycatch, of adult wild Atlantic salmon, as noted by SWIRL. Despite growing evidence, regulatory scrutiny remains weak, and bycatch remains underreported.

These pelagic fisheries are also known to concentrate in areas where salmon smolts migrate, raising the risk of unintended interactions and increased juvenile mortality.

The Need for Reform in Salmon Feed Production

If Ireland is to support a truly sustainable aquaculture sector, then the following reforms are essential:

Control and Oversight of Pelagic Fisheries

- Strict quotas and ecosystem-based management must be implemented to ensure pelagic fisheries used for aquaculture feed are genuinely sustainable.
- Comprehensive and transparent bycatch monitoring is essential, with reporting obligations extended across all EU and third-country fleets supplying feed markets.
- Ireland must play a proactive role in pushing for reform at the EU level, particularly through ICES and NEAFC, to better regulate shared pelagic stocks.

Diversification of Feed Ingredients

- The industry must transition away from wild-caught fish dependency by accelerating the development and use of alternative, lower-impact feed ingredients, including:
  - Insect protein
  - Algae-based oils
  - Fermented microbial proteins
- Innovation in circular economy feed solutions should be incentivised and supported through state funding, EU research grants, and industry co-investment.

Transparency and Traceability

- Feed producers must be required to disclose the species composition, catch areas, and sustainability certifications of fishmeal and fish oil used.
- Full traceability of feed ingredients should be enforced, allowing regulators and consumers to assess environmental performance.

Conclusion: Global Impacts, Local Responsibility

The sustainability of Ireland’s salmon farming industry cannot be assessed solely on its local operations. The ecological impacts of sourcing fishmeal and fish oil from distant marine ecosystems—often at great environmental cost—must also be accounted for.

Salmon Watch Ireland believes that continued reliance on unsustainable pelagic fisheries undermines the credibility of the aquaculture sector. Without fundamental reform, including feed diversification and strict fisheries controls, Ireland’s salmon farming industry will remain environmentally unjustifiable—no matter what technologies are used.

Real sustainability requires change at every level of the supply chain—not just in the cages, but in the sea, and on the boats that harvest the feed.

Protection and Co-operation: A Shared Responsibility for Salmon Conservation

Salmon Watch Ireland (SWIRL) believes that the long-term survival and recovery of Atlantic salmon and sea trout in Ireland depends on two foundational principles: effective protection and genuine cooperation among all stakeholders.

The Need for Stronger Legislative Support

SWIRL urges the Government to prioritise and accelerate the modernisation of Ireland's outdated fisheries legislation. The primary legal framework underpinning enforcement—the Fisheries Consolidation Act of 1959—is now ill-suited to address the complex and evolving challenges facing wild salmonids in a changing climate and environmental landscape.

Modern, flexible legislation is urgently required to:

- Enable Inland Fisheries Ireland (IFI) to respond more effectively to threats.
- Support cross-agency enforcement and environmental protection.
- Reflect the expanding remit of IFI, which now includes trout and coarse fish protection alongside salmon.

The Role of Inland Fisheries Ireland (IFI)

Under the Inland Fisheries Act 2010, IFI's primary function is the "protection, management and conservation of the inland fisheries resource." Additionally, IFI is mandated to:

"Encourage and coordinate, together with inland fisheries owners, bodies and organisations, the voluntary development of inland fisheries catchment management plans, having regard to the distinctive circumstances of each catchment."

A Collaborative Model for Protection

SWIRL recognises that protecting Ireland's salmonid populations requires a collaborative, catchment-based approach. The scale of the challenge is too great for any single body, statutory or otherwise. There are thousands of kilometres of river that require constant protection and monitoring—a task far beyond the capacity of IFI's limited enforcement personnel.

However, a critical and underutilised resource exists in the angling and river-keeping community:

- Anglers, fishery managers, and local clubs possess deep, long-term knowledge of their rivers.
- They are the "eyes and ears" on the ground, able to detect issues before they escalate.

- Many have demonstrated the ability to mobilise financial, volunteer, and technical support for conservation work.

SWIRL believes this “private sector of protection” is a vital, untapped force in the protection and restoration of wild fish stocks.

River Trusts and Catchment-Based Partnerships

SWIRL strongly supports the development of river trusts and other catchment-based community partnerships. These collaborative bodies can:

- Unite anglers, landowners, environmental NGOs, and local authorities.
- Address the diverse environmental pressures affecting salmon stocks, from water quality to land use.
- Act as vehicles for funding, education, and habitat improvement at the catchment level.

While still limited in number in Ireland, river trusts have a proven track record in the UK and have shown promise here with support from UK partners. IFI should actively promote and support the development of such structures.

Lessons from Citizen Science and Collaborative Projects

IFI has demonstrated success in working with stakeholders through initiatives such as:

- The Celtic Sea Trout Project
- Longstanding partnerships with clubs and owners on conservation projects
- Engagement with citizen science, such as scale analysis and fry surveys

SWIRL believes that IFI should now formally evaluate the lessons learned from these projects and develop a dedicated programme of stakeholder engagement to promote a collaborative model of protection and conservation.

Law Enforcement and Multi-Agency Cooperation

Enforcement of fisheries law within:

- Freshwater systems
- The inshore marine environment (up to the 12-mile limit)
- Inland angling areas

...is the responsibility of Inland Fisheries Ireland, supported by An Garda Síochána, the Naval Service, and the Air Corps.

However, enforcement efforts would benefit greatly from a risk-based deployment model informed by local knowledge, voluntary reports, and stakeholder collaboration.

A National Strategy for Shared Protection

To meet the scale of the crisis facing Ireland's salmonids, the state must foster a whole-of-community approach to fisheries protection.

SWIRL recommends:

- A formal partnership framework between IFI and angling/fishery stakeholders
- Incentives and training to support local monitoring and reporting efforts
- Greater transparency and accountability in the allocation of IFI protection resources
- Recognition of angling clubs and river groups as frontline partners in fisheries management

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Conclusion: A Shared Mission

Protecting and restoring Ireland's wild salmon and sea trout is not a task that can be achieved by legislation alone, nor can it be left solely to the State.

It requires a mobilisation of public will, private initiative, and community energy. With the right legislative tools, collaborative structures, and shared commitment, Ireland can create a sustainable future for its iconic wild salmonids.

SWIRL is committed to working with all stakeholders to realise this vision.

Government Approach and International Co-operation

The Need for Leadership and Integration

Salmon Watch Ireland (SWIRL) strongly believes that the conservation of Ireland's wild Atlantic salmon must be embedded within a broader, coordinated national biodiversity strategy, led by a single government department.

At present, responsibilities related to environmental protection, water quality, fisheries, biodiversity, agriculture, and aquaculture are fragmented across at least four government departments and numerous agencies. This siloed governance model results in policy conflicts, weak accountability, and missed opportunities for coordinated action.

SWIRL calls for the establishment of a single lead department responsible for overseeing all activities that impact biodiversity and habitat protection, including:

- Inland and coastal water quality
- Catchment and river restoration

- Land-use policy
- Fisheries protection and regulation
- Aquaculture oversight

A clear, unified mandate is needed to ensure that biodiversity protection—especially for species like Atlantic salmon—is central to all relevant policy areas.

Gaps in the Current Government Approach

The recently published National Biodiversity Action Plan 2023–2030, prepared by the National Parks and Wildlife Service, includes strong commitments such as:

"By 2027, protection and restoration measures detailed in Ireland's third River Basin Management Plan will be implemented to ensure that our natural waters are sustainably managed... and restored to at least good ecological status."

While these are commendable goals, there is no clear mechanism across government departments to ensure their implementation. Each department continues to pursue its own policies and operational priorities, often in ways that are disconnected or even contradictory.

This lack of interdepartmental coordination undermines Ireland's ability to meet its legal and moral obligations to restore degraded ecosystems and safeguard vulnerable species such as the Atlantic salmon.

Role of Inland Fisheries Ireland (IFI)

Inland Fisheries Ireland plays a central role in salmon conservation and enforcement but lacks the authority or resources to influence broader government policy, particularly on issues like agriculture, land-use, water quality, or aquaculture—each of which has major impacts on salmon survival.

A whole-of-government approach, with IFI as a key implementing body under a unified environmental and biodiversity framework, is urgently needed.

International Co-operation: The Role of NASCO and Beyond

SWIRL strongly supports continued and expanded Irish engagement with the North Atlantic Salmon Conservation Organisation (NASCO)—a treaty-based intergovernmental body dedicated to the protection and sustainable management of Atlantic salmon across the North Atlantic.

Through its membership in the NGO Observer Group, SWIRL is part of a global network of conservation organisations that actively engage with NASCO's work. While international processes can be slow-moving, they are essential for:

Key Areas of NASCO's Work Benefiting Ireland:

- Maintaining restrictions on commercial exploitation of salmon in the feeding grounds of Greenland and the Faroe Islands
- Coordinating multinational research (e.g., the *SALSEA* programme) into salmon migration, marine mortality, and climate impacts
- Setting international standards for aquaculture impacts through the *Williamsburg Resolution*
- Mandating national Implementation Plans and Annual Progress Reports, which create greater visibility and accountability for Ireland's salmon management
- Highlighting the issue of by-catch in North Atlantic pelagic fisheries and pushing for mitigation measures
- Promoting action against illegal and unregulated salmon fishing in international waters

Despite the inherent challenges of multilateral diplomacy, Irish participation in NASCO is essential. It enables Ireland to:

- Influence international norms and standards
- Access and contribute to cutting-edge research
- Build alliances with other salmon-producing nations
- Ensure that global pressures on salmon, such as marine by-catch and climate change, are addressed collaboratively

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Priority Areas for International Action

From an Irish perspective, the most urgent international priorities are:

- Stronger international action on the environmental impacts of salmon farming, particularly the enforcement of standards to protect wild stocks.
- Enhanced research into salmon by-catch in pelagic fisheries and the development of effective mitigation strategies.
- Greater transparency and enforcement of international obligations concerning illegal and unregulated fishing in the North Atlantic.

Conclusion: A Coherent National and Global Approach

The conservation of Atlantic salmon in Ireland cannot be achieved in isolation. It demands a cohesive national strategy, backed by active and meaningful international engagement.

SWIRL calls for:

- A consolidated government department with full oversight of biodiversity and environmental policy
- Robust cross-departmental coordination to implement the National Biodiversity Plan and River Basin Management Plan
- Continued leadership in international forums like NASCO
- Clear alignment of national actions with EU and international conservation goals

Only through strong national leadership and effective global cooperation can Ireland hope to safeguard its remaining wild salmon populations for future generations.

Contact Details – Salmon Watch Ireland

If you wish to learn more, please visit our website to keep informed of the latest news about wild Atlantic salmon.

Website: **https://salmonwatchireland.ie**

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If you wish to become a supporter or donate to Salmon Watch Ireland, please follow the link below

https://salmonwatchireland.ie

Please support Ireland’s native wild salmon and sea trout.

Salmon Watch Ireland (“SWIRL”) is a non-governmental organisation, dedicated to protection of wild salmon. Our origins go back to the campaign for ending drift netting of wild salmon in 2007. It is supported by anglers, fishery owners and tourism businesses.

SWIRL is an observer at the North Atlantic Salmon Conservation Organisation (NASCO).

Atlantic salmon have an iconic image. Their survival is now threatened at every level. Wild populations in Ireland have declined by approximately 90%, from c.1.75 million returning annually in the 1970’s, to around 145,000 today.

Threats include.

- Habitat Loss and Degradation
- Pollution from industry and agriculture
- Overfishing
- Climate Change: Rising temperatures, changing rainfall patterns, loss of river flow, disrupting the life cycle of salmon.
- Aquaculture and escapes from salmon farms introduce diseases, genetic impacts and sea lice that kill juvenile salmon.
- Predators, seal colonies and marine mammals
- Interbreeding with escaped farmed salmon which reduces genetic diversity and survival.
- By-catch in the high sea’s pelagic fisheries

SWIRL invites you to support us in our advocacy for wild Atlantic salmon. SWIRL also helps local communities to restore habitats, mitigate climate impacts, and regulate aquaculture and protect spawning areas.

SWIRL supports local organisations on removing river barriers, creating fish-passes, and engagement with regulatory processes. Our limited resources have helped prevent the spread of salmon farms and pollution. SWIRL opposes the current ‘light touch’ regulation of salmon farming and the compliant approach to aquaculture in general. We oppose licensing of open cage salmon farms.

SWIRL is expanding its supporter base to increase funding and enhance public awareness of the challenges facing wild salmon. SWIRL seeks to develop community initiatives to protect salmon.

We engage with Inland Fisheries Ireland, NPWS, LAWPRO and Leader programmes to assist community organisations.

Please join SWIRL now in our science-based approach to salmon conservation with community involvement. This is our best opportunity to prevent further irreversible decline in Atlantic salmon numbers in Ireland.

Complete the Standing Order Form- Attached

Individual Supporter of Swirl - €30.00

Angling Club/Conservation Body Supporter of Swirl - €100.00

Become a Patron by Committing to an Annual Contribution of €1,000 For 3 Years.

You may also support us online at https://salmonwatchireland.ie

Email: salmonwatchireland@gmail.com

Phone: 00353863991074

Contact Person: John Murphy

Please Detach
Standing Order Form

SALMON WATCH IRELAND COMPANY LIMITED BY GUARANTEE
Registered in Ireland No. 396522 - Please **Return This Form to Your Own Bank**

To the Manager:
Bank Name: ____________________________________
Bank Branch Address: ____________________________________
National Sort Code: ___________
IBAN: ____________________________________

Beneficiary Reference (usually your name): ____________________________________

Payer Information

I/We (Name): ____________________________________
Address: ____________________________________
POSTCODE: __________________
Email: ____________________________________

Authorisation: I/We hereby authorise and request you to debit my/our account number:
Account Number: ____________________ and to **credit the account of**:

Salmon Watch Ireland
Bank: **Bank of Ireland, Thomastown, Co. Kilkenny**
Account Number: 88206176
Sort Code: 90-60-99
IBAN: IE82BOFI90609988206176
BIC: BOFIIE2D

Payment Details

Amount: € ___________ (Write amount in words): ____________________________________

Frequency:
☐ Monthly ☐ Quarterly ☐ Annually
(Please tick one)

Commencement Date: ____ / ____ / ______ (Must be a future date)

This payment is to continue **until further notice.**
You may alter or cancel this Standing Order at any future date by issuing a written cancelation instruction to your bank branch.

Date: __________
Signature(s): ____________________________________

Let Us Know About Your Standing Order Contribution

If you have set up a Standing Order to support Salmon Watch Ireland, please let us know by emailing us at mailto:salmonwatchireland@gmail.com

Kindly include the following details:

- Your name
- Address
- Phone number
- Email address
- Type of contribution

Alternatively, you can post this information to:
Mr. Bob Wemyss
Jerpoint Hill
Thomastown
County Kilkenny
Ireland
Postcode: R95 D2CF

Do Not Include Bank Details

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