Agenda item 5.1
For information

Council

CNL(19)31

Annual Progress Report
on Actions Taken Under the Implementation Plan for the Calendar Year 2018

EU – Ireland

CNL(19)31

Annual Progress Report on Actions taken under the Implementation Plan for the Calendar Year 2018

The primary purposes of the Annual Progress Reports are to provide details of:

- any changes to the management regime for salmon and consequent changes to the Implementation Plan;
- actions that have been taken under the Implementation Plan in the previous year;
- significant changes to the status of stocks, and a report on catches; and
- actions taken in accordance with the provisions of the Convention

These reports will be reviewed by the Council. Please complete this form and return it to the Secretariat **no later than 28 March 2019.**

Party:	**European Union**
Jurisdiction/Region:	**Ireland**

1: Changes to the Implementation Plan

1.1 Describe any proposed revisions to the Implementation Plan
(*Where changes are proposed, the revised Implementation Plans should be submitted to the Secretariat by 1 December).*

No changes.

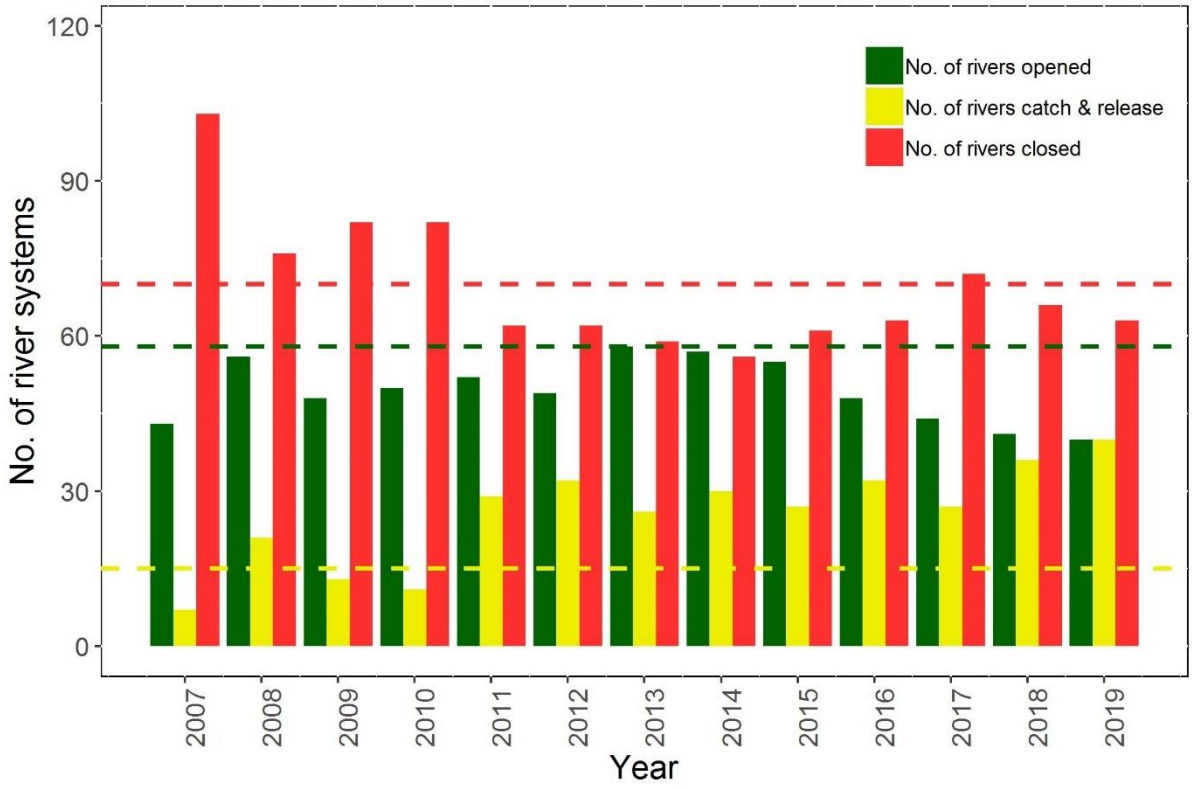
1.2 Describe any major new initiatives or achievements for salmon conservation and management that you wish to highlight.

The North-South Standing Scientific Committee for Inland Fisheries (NSSSCIF) was formed in early 2018 to support the all-island provision of scientific advice relating to the conservation and sustainable exploitation of the inland fisheries resource including such matters concerning Atlantic salmon. Scientific advice is provided in response to requests from the Department of Communications, Climate Action and Environment and its agency Inland Fisheries Ireland (IFI), the Department of Agriculture, Environment and Rural Affairs from Northern Ireland and the Loughs Agency, a North-South Implementation Body. This group is also tasked to give consideration to the co-ordination and effective use of scientific resources for data collection and research projects linked to the above. The NSSSCIF Terms of Reference facilitates the formation of Expert Groups drawn from within the membership of the Committee, or additional invitees as required, to advise and contribute on any particular species, aquatic habitat or biosecurity issues. To this end, the NSSSCIF has established an expert group, the "Technical Expert Group on Salmon", to provide scientific advice (including annual river-specific stock assessments) to guide the NSSSCIF and IFI management in the decisions and policy development relating to salmon in Ireland.

2: Stock status and catches.

2.1 Provide a description of any new factors which may significantly affect the abundance of salmon stocks and, if there has been any significant change in stock status since the development of the Implementation Plan, provide a brief (200 word max) summary of these changes.

Summary of status of stocks and catch advice and forecast for 2019 fishery season

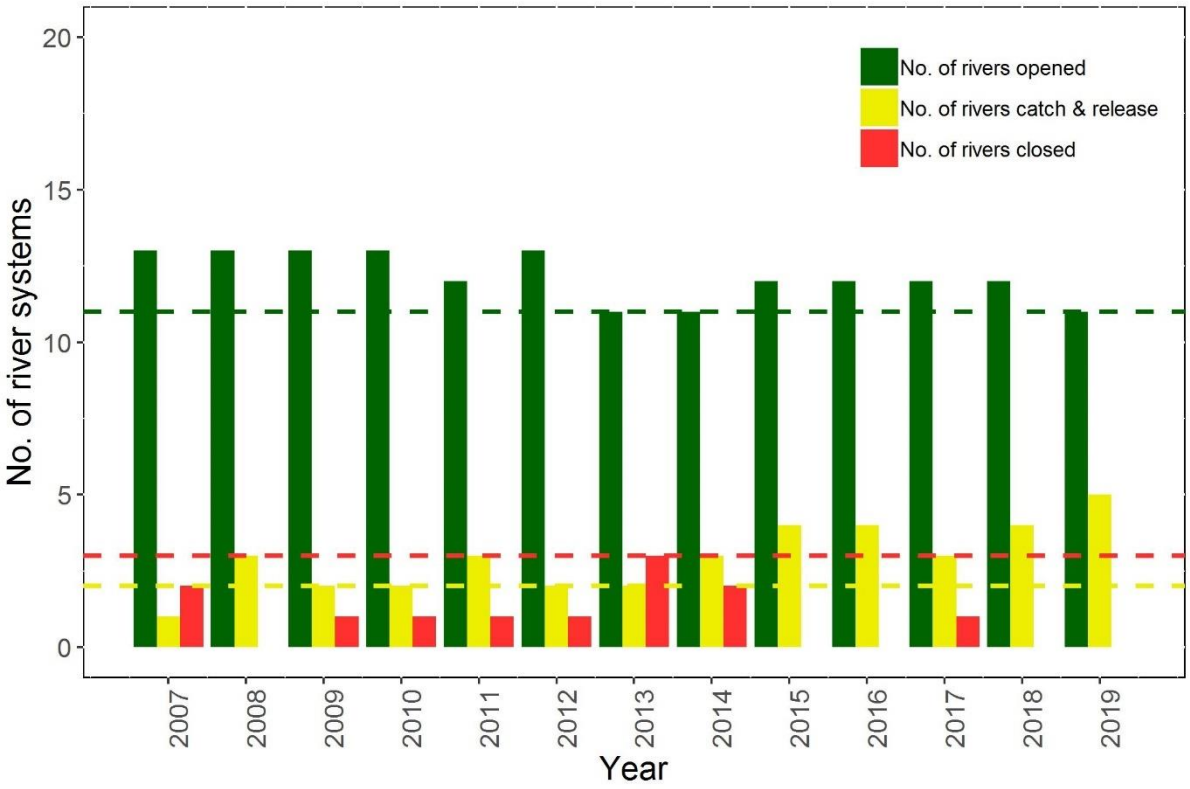


(Dashed lines indicate corresponding baseline stock status reference points as set out in the Implementation Plan)

The stock status and catch advice forecasted for the 2019 fishery is that 40 rivers have an advised harvestable surplus as they are exceeding their conservation limits (CL). A further 40 river systems could open for catch and release-only (C&R-only) fishing based on exceeding a minimum fry threshold (≥15 salmon fry/5 min electro-fishing average) in catchment-wide electrofishing surveys or based on Inland Fisheries Ireland (IFI) management criteria that they meet 50% or over of their CL but do not exceed their CL. 63 river systems should be closed for fishing as they do not exceed the management target of meeting at least 50% of CL, electrofishing thresholds have not been met or there is insufficient information for full stock assessment. In comparison to the baseline stock status reference points as set out in the 2013-2018 Implementation Plan, this represents a progressive decline in the number of systems open as a harvest fishery, an increase in fisheries open solely for C&R and a marginal decline in closed fisheries.

There are 16 river systems for which a separate assessment is made for multi-sea-winter (MSW) salmon where there are significant fisheries. Of these, 11 have an advised harvestable surplus as they are exceeding their CL. Five of these river systems can open for C&R-only fishing based on exceeding the minimum fry threshold in catchment-wide electrofishing

surveys or based on IFI management criteria that they meet 50% or over of their CL but do not exceed CL.



In addition, there are four assessments on river systems used for hydropower which have been assessed as being below their CL (Upper Liffey (Dublin), Upper Lee (Cork), Upper Shannon (Limerick) and the River Erne).

In applying the scientific advice to management, it should be noted that where rivers are only marginally above their CL they may be restricted to C&R-only fishing so that the actual number of rivers open for harvest under regulation can be less than the number of rivers actually achieving CL. It should be noted that previous to the 2018 advice, C&R-only fishing was permitted in systems where 65% or over of the CL was met but the CL was not exceeded, or a minimum fry threshold (≥17 salmon fry/5 minute electro-fishing average) was achieved.

2.2 Provide the following information on catches: *(nominal catch equals reported quantity of salmon caught and retained in tonnes 'round fresh weight' (i.e. weight of whole, ungutted, unfrozen fish) or 'round fresh weight equivalent').*

	In-river	Estuarine	Coastal	Total
(a) provisional nominal catch (which may be subject to revision) for 2018 (tonnes)	46.95 t	15 t	0 t	61.95 t
(b) confirmed nominal catch of salmon for 2017 (tonnes)	45.56 t	18.04 t	0 t	63.6 t
(c) estimated unreported catch for 2018 (tonnes)				6.195 t
(d) number and percentage of salmon caught and released in recreational fisheries in 2018.	9,029 (34% of total rod catch)			

3: Implementation Plan Actions.

3.1 Provide an update on progress against actions relating to the Management of Salmon Fisheries (Section 2.8 of the Implementation Plan).

Note: *The reports under 'Progress on Action to Date' should provide a brief overview with a quantitative measure of progress made. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.*

Action F1:	Description of Action (*as submitted in the IP*)	Protection against illegal fishing is a high priority in Ireland and the state invests a considerable amount of resources on these activities (Fishery Inspectors, Navy, Garda etc). More outreach to local communities is planned to bring the problems of poaching as a major impediment to stock recovery into focus.
	Expected Outcome (*as submitted in the IP*)	Buy-in by local communities in identifying active illegal practices.
	Progress on Action to Date *(Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)*	172,559 hours were spent by Inland Fisheries Ireland (IFI) staff on protecting Ireland's fishing resource in 2018. 30,445 protection patrols were carried out using different methods on lakes, rivers, estuaries and at sea. This protection was largely related to salmon but fishery patrols were also targeted at other fish species. In total, 266 nets were seized measuring a cumulative total of 11,575 metres in length. 165 Fixed Charge Notices were issued for Fishery Offences in 2018. There were 67 prosecutions in 2018. In mid-2018, IFI announced a €3.3. million investment in 12 new state-of-the-art DELTA 780HX RIBs (Rigid Inflatable Boats) to be delivered on a phased basis for use as fisheries protection and enforcement vessels around Ireland's coastal zone and larger inland lakes. By the end of 2018, eight of these RIBs were delivered to IFI. Inland Fisheries Ireland have continued to promote the issue of illegal fishing and its detrimental effect on wild fish stocks in 2018 both locally and nationally. IFI issued 14 press releases in 2018 related to illegal fishing and/or legislative updates on fishing resources which generated significant coverage in local, regional and national media (33 articles with an audience reach of 1.2 million). IFI's web and social media platforms were also employed to regularly highlight this issue throughout 2018 (IFI Facebook @inlandfisheriesireland and Twitter @anglingupdate have 13,904 and 3,338 followers, respectively).
	Current Status of Action	Ongoing
	If 'Completed', has the Action achieved its objective?	

Action F2:	Description of Action (*as submitted in the IP*)	IFI is actively promoting the returns of accurate information from anglers through the national carcass tagging and logbook scheme. This scheme facilitates the identification of inaccurate information and allows some follow-up to redress the issue. Move towards electronic Salmon licences.
	Expected Outcome (*as submitted in the IP*)	More awareness by stakeholders on the need for accurate statistics.
	Progress on Action to Date *(Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)*	Return of catch information from commercial licence holders has been 100% for 2018 and in recent years. Information on the return of logbooks from recreational anglers for calendar year 2018 is not currently available as it is awaiting compilation but is anticipated to be just under 70%. The return of logbooks by anglers in 2017 was 54.5% which is lower than the average logbook returns of 71% for preceding years in the period 2013-2016. All anglers who do not return logbooks are written to as a means of improving logbook returns and a proportion are taken to court annually and fined for non-return of logbooks. The electronic licence system is in operation and can be accessed online at store.fishinginireland.info.
	Current Status of Action	Ongoing
	If 'Completed', has the Action achieved its objective?	
Action F3:	Description of Action (*as submitted in the IP*)	IFI is developing a National Fish Counter Strategy to maintain, operate and enhance the current counter resources and to evaluate where extra counters might be required. This will be enacted in 2014.
	Expected Outcome (*as submitted in the IP*)	A more robust and reliable counter assessment using the most up to date methods for validation of counts (video surveillance, tracking, tagging etc). New database for verification and data capture.
	Progress on Action to Date *(Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)*	A national reporting mechanism for fish counter data and validation has been in place since 2014 and continued to operate in 2018. This is facilitated through a national fish counter website and database for the input and validation of fish counter data. In total, counts from 30 fish counters were used in the 2018 salmon stock status assessment and associated 2019 stock forecast. As part of this, fish counter data from the River Fergus were included in the stock assessment for the first time as five years' worth of data had been collected from it. In the River Lackagh, a new fish counting facility was completed and commenced operation in summer 2017. The first full year of salmon run data was collected from this counter in 2018.

	Current Status of Action	Ongoing
	If 'Completed', has the Action achieved its objective?	

3.2 Provide an update on progress against actions relating to Habitat Protection and Restoration (Section 3.4 of the Implementation Plan).

Note: *The reports under 'Progress on Action to Date' should provide a brief overview with a quantitative measure of progress made. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.*

Action H1:	Description of Action (*as submitted in the IP*)	**Agricultural enrichment** Following the implementation of the Water Framework Directive and the formation of River Basin District management structures, a collective approach to reducing all adverse impacts including agricultural enrichment and eutrophication on aquatic resources is now in place. Having characterised the risks posed to water-bodies nationally, Programmes of Measures are being developed to address habitat impacts / land use practices and to restore impaired water bodies to good status. The aim of the Water Framework Directive is to prevent any deterioration in the existing status of our waters, including the protection of good and high status where it exists, and to ensure that all waters are restored to at least good status by 2015. As a consequence of the implementation of the WFD and the Nitrates Directive, the impact of agricultural enrichment on salmon rivers is expected to reduce considerably over the coming decades. The CAP reform due in 2013 also provides an important opportunity for aligning agriculture objectives with habitat protection.
	Expected Outcome (*as submitted in the IP*)	Significant improvement in water quality due to improved agricultural practice

	Progress on Action to Date *(Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)*	Ireland continues to face major challenges to achieve water quality targets set for 2021 and 2027 as required by the Water Framework Directive (WFD). In 2018, the Environmental Protection Agency (EPA) published the most recent official report on national water quality, *Water Quality in 2017 An Indicators Report* (http://tinyurl.com/yy53klkr). Elevated nutrient concentrations (nitrogen and phosphorus), largely attributed to diffuse inputs, continue to be the most widespread problem impacting water quality in Ireland. The main findings of the report are: • 56% of **rivers** have high or good biological quality status with the remaining 44% being at moderate or worse quality. • River biological quality fell by 3% since 2013–2015. • The reduction in the number of river water bodies at bad quality is continuing. The number of water bodies in this category fell from five in 2016 to just two in 2017. • The decline in high-quality sites is continuing. • There is a relatively stable picture with regard to nitrate concentrations in Irish rivers. This decreasing trend may be slowing down, with evidence of increasing nitrate concentration at some river sites. • The number of river sites with phosphorus concentrations needed to support high-quality rivers dropped from 58% in 2014–2016 to just over 48% in 2015–2017. There is also an increase in the percentage of sites with higher phosphorus concentrations that are likely to lead to water quality issues. • For **lakes**, there has been a 1% decline in good or better quality compared to 2013–2015, and a decline of 4.7% in lakes classified as being of high or good quality since status assessments began in 2007–2009. • Total phosphorus concentrations in lakes are relatively stable. • Overall the number of **fish kills** in the past two decades has been decreasing in Irish river systems. There were 14 reported fish kills in 2017 compared with 31 in 2016.

		• Loadings of phosphorus and nitrogen to the **marine environment** have started to increase again since 2014, despite historical long-term reductions. • 16% of estuarine and coastal waters are classified as eutrophic and potentially eutrophic. • Some 23 estuaries and coastal waters exceeded the winter dissolved inorganic nitrogen threshold, a similar number to the 2014–2016 period (29). • Of the 95 estuaries and coastal water bodies assessed for phosphorus, only one (exceeded the relevant winter threshold compared to three in the 2010–2012 period. The second WFD *River Basin Management Plan for Ireland 2018–2021* (RBMP) was finalised in 2018 (http://tinyurl.com/y6yadxel) after extensive public consultation. This document comprehensively details the approach that Ireland is taking and will take to protect and improve water quality in its rivers, lakes, estuaries and coastal waters. The plan describes existing and upcoming programmes of measures, sets out the implementation strategy and associated monitoring and governance structures and lists expected outcomes. In addition to the above, the fourth *Nitrates Action Programme (NAP)* commenced in 2018. This programme gives effect to the *EU Nitrates Directive via* the *European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017* (http://tinyurl.com/y69n5lxy) and is designed to protect surface and ground waters from agricultural pollution and improve water quality. NAP regulations concern fertiliser storage and spreading restrictions, limits on soil nutrient levels, prevention of run-off from farms and the exclusion of farm animals from watercourses as well as setting out the associated inspection (target is 6,000 per annum) and enforcement regimes.
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	
Action H2:	Description of Action (*as submitted in the IP*)	**Forestry Related Impacts** Many Irish forests that are now mature, or approaching maturity, were planted in landscapes that were unsuited to economically viable forest production. The increasing recognition of the impacts from forestry on water resources has led to the development of a Code of Practice for forestry (Forest Service, 2000). Generally, forest management is based

		on the Code of Practice, although a new Forestry Bill, which will replace the out of date Forestry Act 1946, has been drafted with the opportunity to ensure that forestry management is better able to protect sensitive habitats.
	Expected Outcome (*as submitted in the IP*)	Improved water quality and protection of habitats
	Progress on Action to Date *(Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)*	Ireland's forests principally comprise coniferous plantation forestry for commercial exploitation. Associated risks to water quality and aquatic habitats and species include nutrient and herbicide run-off, drainage, and acidification and sedimentation pressures during forestry planting and establishment, maintenance and felling activities. As detailed in response to *Progress on Action to Date* for *Action H1*, Ireland continues to face major challenges to achieve water quality targets set for 2021 and 2027 as required by the Water Framework Directive (WFD). The second WFD *River Basin Management Plan for Ireland 2018–2021* (RBMP) published in 2018 notes that forestry is a significant pressure in: • 16% (238) of water bodies at risk of not meeting minimum WFD water quality targets; • 40% (51) of waters at risk of not meeting designated high ecological status objectives; and • 23% of the *c*. 800 water bodies having protected Natura 2000 sites with water-dependent habitats and species. During the term of this Implementation Plan, forestry-related regulations, policies and requirements have been officially realigned with national WFD water quality objectives to better protect Irish waters as outlined in the following points: • The Forestry Act was passed into law in October 2014 (Number 31 of 2014; http://tinyurl.com/y3yj69ut). This confers responsibility on the Minister for the Department of Agriculture, Food and the Marine (DAFM) to promote and monitor the protection and enhancement of water quality in all aspects of forestry, including ensuring that forestry operations and forest-based activities regulated under this Act are compatible with the requirements of the WFD. • A mid-term review of the State-aided Forestry Programme 2014 –2020 was published in 2018

		(http://tinyurl.com/y68xfdj4). The Forestry Programme has specific measures to protect water bodies including improved provision for native woodland conservation to enhance water quality; a special construction works grant for forest roads aimed at minimising adverse effects of harvesting such as excess sedimentation of local watercourses; a Woodland Improvement Grant aimed at supporting actions such as installation of silt traps and reinstating setbacks from watercourses; and the obligation to include native woodlands alongside aquatic buffer zones in water and fisheries sensitive areas. The mid-term review recommends significant increases in grant and premium rates to encourage the planting of native woodlands; a requirement for forest owners to consider mitigation measures when undertaking forest management activities to protect against negative impacts on riparian zones, fisheries and watersheds; and the monitoring of water quality in water courses in association with forest management activities. • In December 2016, The Forest Service under the DAFM published the document *Environmental Requirements for Afforestation* (http://tinyurl.com/yyxv763h), which has updated the mandatory requirements for new afforestation licences and consolidates relevant existing environmental guidelines. These include detailing various additional safeguards to better protect vulnerable waters and aquatic species such as the specification of enhanced aquatic buffer zones, the inclusion of native woodland along waterways and direction on sustainable fertiliser application and herbicide use. • The DAFM document *Forestry and Water: Achieving the Objectives and Priorities under Ireland's River Basin Management Plan 2018–2021* (http://tinyurl.com/y5dqlhsj) published in 2018 outlines the principal forestry-related legislative, policy, regulatory and promotional elements now in place to address the challenges and opportunities for forestry set out in the RBMP. The aims of these measures are to safeguard water during all forestry operations, to restructure existing forests to reflect water sensitivities, and to situate and design new forests in line with environmental objectives. In addition, the document sets out a protocol for addressing acute incidents where water bodies are impacted upon or are under risk from forestry activities. The protocol establishes a framework for

		inter-agency communication and reporting, and sets out how water professionals from stakeholder organisations can report an acute incident, the manner in which it will be investigated, and the follow-up actions that will be available to address the matter. • The Forest Service's IFORIS GIS-based management system for forestry grants (http://tinyurl.com/yy2otng2), continues to be used to ensure that planting, felling and road building operations in forests are approved only following detailed environmental consultation. The pre-approval consultation process can include referral to Inland Fisheries Ireland (IFI) if the application concerns a fisheries sensitive area. In 2017 (the most recent year with available data), IFI received 217 such referrals for consideration concerning afforestation applications.
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	
Action H3:	Description of Action (*as submitted in the IP*)	**Poor water quality from Inadequate Sewage Treatment and Industrial Discharges** In Ireland, there has been considerable investment in upgrading of treatment facilities, primarily in larger towns, and this process will continue with the Programme of Measures under the Water Framework Directive. The Department of the Environment have invested many millions of Euro nationally over the recent years in new treatment facilities, and many of the smaller town and village schemes have been upgraded in this process. It is therefore anticipated that the impact on productive capacity of salmon rivers from inadequate sewage treatment will decrease considerably over the coming years with the requirements of the WFD being achieved. Significant upgrading of wastewater treatment plants has occurred in recent years to assist local authorities in complying with the Urban Wastewater Treatment Directive. The EPA regulates major industrial activities through the Integrated Pollution Prevention and Control (IIPC) regulations while the local authorities license small-scale industrial discharges to waters under the Water Pollution Acts. The Work of the EPA in enforcing the regulations and the implementation of the EU Water Framework Directive are likely to ensure that industrial discharges are adequately regulated to prevent impact on rivers nationally.

	Expected Outcome (*as submitted in the IP*)	Improved waste water treatment targeting upgrading of the most urgent facilities
	Progress on Action to Date *(Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)*	Irish Water was formed in 2013 as an independent State-owned subsidiary within the Ervia group. It has taken over the water investment programmes of the 34 county and city councils in Ireland, with the key aim of delivering water and sewerage schemes, and water conservation works aimed at finding additional water supply capacity. Since 2014, 32 wastewater projects have been completed in Ireland with 45 such projects currently in progress. Despite this, further sustained investment in wastewater infrastructure continues to be required. Over the period 2017–2021, Irish Water will invest approximately €1.7 billion in 255 waste-water projects, and on programmes and asset maintenance. Capital expenditure on wastewater infrastructure in 2017 was €215 million, up from €172 million in 2016 (2018 expenditure is not yet available). The second WFD *River Basin Management Plan for Ireland 2018–2021* (RBMP) published in 2018 notes that urban wastewater and domestic wastewater are a significant pressure in 20% (293) and 11% (166), respectively, of water bodies at risk of not meeting minimum WFD water quality targets. The most recent report available on the status of urban wastewater in Ireland, *Urban Waste Water Treatment in 2017* (http://tinyurl.com/y5qd4nn3) was published by the EPA in 2018. The report reviewed the performance of over 500 urban wastewater schemes, assessed compliance status with the requirements of the *EU Urban Waste Water Treatment Directive* (UWWTD) and identifies the key national priorities that require resolution. The key findings are as follows: • Wastewater from 57 areas is the sole threat to waters at risk of pollution and thus not meeting their WFD environmental objectives. • Of 179 large urban areas in Ireland, 84% (151) of these met UWWTD standards in 2017, up from 78% in 2016. Occasional or persistent non-compliant areas account for over half (57%) of the national wastewater load collected in all large urban areas. • There are 38 areas where wastewater is collected in public sewers and then released into the environment without receiving treatment. Irish Water has committed to prioritise treatment for 33 of these areas

		by the end of 2021, three by 2023, one by 2025 with the timescale for the remaining area yet to be indicated. • Over 50 wastewater improvement works were completed in 2017. • The EPA initiated nine prosecutions against Irish Water in 2017 for breaches of wastewater discharge authorisations. The *Water Services (Amendment) Act 2012* provides for the introduction of a registration and inspection system for domestic wastewater treatment systems, including septic tanks and similar systems. Owners of domestic wastewater treatment systems are required to register their systems in accordance with these regulations to ensure protection of water quality. In 2018, the EPA published the third *National Inspection Plan 2018–2021: Domestic Waste Water Treatment* (http://tinyurl.com/yydk4e76) related to this, which has a target of 1,000 such inspections per annum. The latest published quantitative information available indicate that 1,100 inspections were undertaken in 2016, exceeding the 1,000 annual target set, with 49% of sites failing inspection compared with 45% in 2015. 54% (294) of sites that failed inspection in 2016 were subsequently compliant following remedial works.
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	

Action H4:	Description of Action (*as submitted in the IP*)	**Salmon Farms in Estuaries** Both existing and proposed salmon farms in estuaries may pose a threat to wild salmon populations and a number of publications have raised concerns regarding lice induced mortalities of salmon. In Ireland protocols are in place with regard to permitted sea lice thresholds on salmon farms and measures can be taken for farms in breach of protocols. In 2011, this led to stringent action taken by the Irish authorities in removing farmed salmon from an area. The challenge for management is to develop strategies including effective lice treatments to ensure low lice levels on farmed salmon in spring prior to and during wild salmon migration. In fact the thresholds are treatment triggers and when they are reached a treatment must be carried out to reduce lice infestation levels. This is clearly set out in protocols. Annual fallowing of sites, use of single generation sites, avoidance of partial lice treatments and harvesting carried out remote from grower sites are planned to reduce the potential impact of sea lice infestation. Availability of new sea lice treatments are also being pursued to increase effectiveness of sea lice control.
	Expected Outcome (*as submitted in the IP*)	Improved compliance with sea lice protocols and lower sea lice levels in spring
	Progress on Action to Date *(Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)*	There is ongoing monthly monitoring of lice on salmon farms twice in March, April & May and monthly otherwise. The number of one-sea-winter fish with ovigerous lice levels above the 0.5 threshold decreased in spring 2018 over 2017. In 2017, ovigerous lice levels greater than the treatment trigger level were recorded in a total of 16 inspections (16%) on one-sea-winter fish. Within the critical spring period, lice were in excess of the 0.5 ovigerous female lice per fish threshold on 11 occasions (19%). In 2018, within the critical spring period, lice were in excess of the 0.5 ovigerous female lice per fish threshold on one-sea-winter fish on nine occasions (9%). Use of single generation sites and annual fallowing of sites took place in 2018.
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	

3.3 Provide an update on progress against actions relating to Aquaculture, Introductions and Transfers and Transgenics (Section 4.8 of the Implementation Plan). ***Note:*** *The reports under 'Progress on Action to Date' should provide a brief overview with a quantitative measure of progress made. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.*		
Action A1:	Description of Action (*as submitted in the IP*)	**Escapes of farmed fish** The industry comply with the codes of practice regarding husbandry and good engineering practices. In the event of an escape, the farm operator will make an emergency application to the Department of Agriculture for a special licence under Section 14 of the Fisheries Act 1959 to deploy nets to recapture the escaped fish. Inland Fisheries Ireland may take such action as it considers necessary to recapture stock which has escaped from a facility operated under a licence. Under 77(2), the Minister (DCENR), may authorise a licensee or other person or body to take such action as is specified in the authorisation to recapture stock which has escaped from a facility.
	Expected Outcome (*as submitted in the IP*)	Prevention of escapes generally. In the event of escapes, prompt recapture of a significant proportion of the stock.
	Progress on Action to Date *(Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)*	There were no reported escapes of farmed salmon in Ireland in 2018.
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	
Action A2:	Description of Action (*as submitted in the IP*)	**Sea lice Infestation** During the spring period Sea lice protocols are in place which set out ovigerous lice thresholds (0.3-0.5 ovigerous lice per fish March –May and 2.0 ovigerous lice per fish outside this period). When the threshold is breached a notice to treat is issued to the salmon farm to bring lice levels under control. In 2008, a new pest Management Strategy was developed that introduced detailed fallowing requirements and a new approach to monitoring to deal with situations where target lice levels were not being achieved. This approach will identify 'breakout' site options for sites with persistent sea lice problems. While some farms do exceed these thresholds annually, in spring 2012, non-compliance with lice thresholds at two salmon farms resulted in the Minister giving an order to harvest fish early, prior to wild smolt migration.
	Expected Outcome (*as submitted in the IP*)	Reduced sea lice levels on farmed salmon

	Progress on Action to Date *(Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)*	There is ongoing monthly monitoring of lice on salmon farms twice in March, April & May and monthly otherwise. The number of one-sea-winter fish with ovigerous lice levels above the 0.5 threshold decreased in spring 2018 over 2017. In 2017, ovigerous lice levels greater than the treatment trigger level were recorded in a total of 16 inspections (16%) on one-sea-winter fish. Within the critical spring period, lice were in excess of the 0.5 ovigerous female lice per fish threshold on 11 occasions (19%). In 2018, within the critical spring period, lice were in excess of the 0.5 ovigerous female lice per fish threshold on one-sea-winter fish on nine occasions (9%).
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	
Action A3:	Description of Action (*as submitted in the IP*)	**Transfer and increases in incidence of diseases** Early harvesting of farmed salmon where gill damage has been recorded is effective in preventing further outbreaks. See section 4.7 – improved treatments and investment in R&D will result in greater control of gill related disorders in 2013.
	Expected Outcome (*as submitted in the IP*)	Reduced incidence of disease outbreaks in aquaculture facilities.
	Progress on Action to Date *(Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)*	All aquaculture operators in Ireland comply with Council Directive 2006/88/EC *on animal health requirements for aquaculture animals and products thereof, and on the prevention and control of certain diseases in aquatic animals.* Under this legislation, each farm is required to put in place appropriate biosecurity measures to prevent disease incursion and disease spread. They are also required to investigate all increased mortality with their private veterinarian and to notify the Competent Authority where the presence of a listed disease is suspected or confirmed. Compliance with this legislation is assessed during an annual audit carried out by the official services. In addition to these mandatory measures, all farms in Ireland voluntarily comply with a *Fish Health Code of Practice* and the *Farmed Salmonid Health Handbook*, in order to minimise and control the number of outbreaks of non-listed diseases on Irish farms. There were no outbreaks of listed diseases in Ireland in 2018. All salmon farms were inspected under Council Directive 2006/88/EC. A combination of good biosecurity measures, vaccination, early veterinary intervention and expedient treatments, ensured that outbreaks of non-listed diseases were kept to a minimum during 2018. Amoebic

		gill disease continued to be recorded at salmon farms in 2018. In 2016 & 2017, there were 41 outbreaks of disease on salmon farms. In 2017, extensive mortalities at one fish farm were due to Cardiomyopathy Syndrome (CMS), a severe viral cardiac disease.
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	

4: Additional information required under the Convention

4.1	Details of any laws, regulations and programmes that have been adopted or repealed since the last notification.
4.2	Details of any new commitments concerning the adoption or maintenance in force for specified periods of time of conservation, restoration and other management measures.
	In 2018 the Irish Government established a steering group of key stakeholders to examine the barriers to fish passage in the lower River Shannon, where two substantial dams associated with the Shannon hydro-electric scheme are present in its lower reaches since the late 1920s. The Shannon is the largest catchment in Ireland and traditionally held substantial stocks of wild salmon throughout its system. These stocks have progressively declined over the last century and wild salmon are largely extirpated upstream of the dams. The steering group is considering the impact of barriers to fish migration at the dams and is tasked with making recommendations for improving fish passage in the environs. It is expected to make its recommendations within eighteen months. Associated with this initiative, an extensive nationwide assessment of barriers to fish migration in Irish river systems is being undertaken through the State-funded IFI National Barriers Programme, as well as the EU-funded AMBER and EPA-funded RECONNECT projects.
4.3	Details of any new actions to prohibit fishing for salmon beyond 12 nautical miles.
4.4	Details of any new actions to invite the attention of States not Party to the Convention to matters relating to the activities of its vessels which could adversely affect salmon stocks subject to the Convention.
4.5	Details of any actions taken to implement regulatory measures under Article 13 of the Convention including imposition of adequate penalties for violations.