

### Council

CNL(20)41

Annual Progress Report on Actions Taken Under the Implementation Plan for the Calendar Year 2019

EU – UK (Northern Ireland)

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# Annual Progress Report on Actions taken under the Implementation Plan for the Calendar Year 2019

The Annual Progress Reports allow NASCO to evaluate progress on actions taken by Parties / jurisdictions to implement its internationally agreed Resolutions, Agreements and Guidelines and consequently the achievement of their objectives and actions taken in accordance with the Convention. The following information should be provided through the Annual Progress Reports:

- 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.

In completing this Annual Progress Report please refer to the **Guidelines for the Preparation and Evaluation of NASCO Implementation Plans and for Reporting on Progress**, CNL(18)49.

These reports will be reviewed by the Council. Please complete this form and return it to the Secretariat no later than 1 April 2020.

Party:	European Union
Jurisdiction / Region:	UK (Northern 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 November).
- 1.2 Describe any major new initiatives or achievements for salmon conservation and management that you wish to highlight.

A number of successful IYS events were held in the DAERA area including an open day for the public at the River Bush Salmon Station in June. As part of the IYS Loughs Agency held a successful, salmon conference in Omagh Co. Tyrone, the Agency has also run a Foyle Ambassadors program which introduced young people to environmental and fisheries management as a component.

- 2: Stock status and catches.
- 2.1 Provide a description of any new factors that 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.

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').

unfrozen fish) or 'rot	unfrozen fish) or 'round fresh weight equivalent').			
(a) provisional nominal	In-river	Estuarine	Coastal	Total
catch (which may be	3.4t			3.4t
subject to revision) for				
2019 (tonnes)				
(b) confirmed nominal	4.1t			4.1t
catch of salmon for				
2018 (tonnes)				
(c) estimated	0.3t			0.3t
unreported catch for				
2019 (tonnes)				
(d) number and	DAERA Area 1,2	279 salmon release	ed c. 93%	
percentage of salmon	Loughs Agency (	Catch Returns to d	ate are showing 10	063 Salmon
caught and released in	Released and 461 Retained for 2019.			
recreational fisheries in	Percentage C&R for 2019 is currently 70%			
2019				

#### 3: Implementation Plan Actions.

3.1 Provide an update on progress on actions relating to the Management of Salmon Fisheries (section 2.9 of the Implementation Plan). Note: the reports under 'Progress on action to date' should provide a brief overview of each action. For all actions, provide clear and concise quantitative information to demonstrate progress. In circumstances where quantitative information cannot be provided for a particular action because of its nature, a clear rationale must be given for not providing quantitative information and other information should be provided to enable progress with that action to be evaluated. 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.

	with that action to be evaluated. 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):	The target is to manage the 18 primary rivers affected by both commercial and recreational fisheries to exceed their CLs.	
	Expected outcome (as submitted in the IP):	More primary salmon rivers increasing their adult returns and exceeding their CLs.	
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	All N. Ireland primary salmon rivers were assessed against CL in 2019 (see DAERA area rivers CL compliance for 2019 in fig below - Note Agivey River data not yet available). Management of rivers in 2019 was based around scientific advice.  Three salmon rivers were managed with a harvestable surplus in DAERA area in 2019 (Melvin, Clady & Glenarm). Harvest was tightly controlled via allocation of carcass tags and a total of 101 salmon were harvested from these rivers.  In the LA area all rivers were open with a harvestable surplus in 2019 except the River Finn and Foyle (cross border catchment) which remains as catch & release.  Conservation limit attainment;  River Roe 107%  River Finn 98%	

		Divon Fougher 2000/ -1
		River Faughan 200% plus
		River Mourne partial count only
		Attainment of CL for DAERA Area Rivers
		200 —
		150 ————————————————————————————————————
		100
		Bethere Heil Cherring Cherring Brain Burk, Weiner Hoods White Carl Bulleter French
		10. p. 114. 244. p.
	Current status of action:	Ongoing
	If 'Completed', has the	
	action achieved its	
	objective?	
Action	Description of action	Update Conservation limits and Management targets for 3
F2:	(as submitted in the IP):	primary salmon rivers in Northern Ireland using refreshed
	( 2	habitat data.
	Expected outcome	To update CLs for the 3 rivers identified in Section 1.5.
	(as submitted in the IP):	
	Progress on action to	Habitat walk-over surveys were undertaken in the
	date	DAERA area on the Glendun river and Ballinamallard
	(Provide a brief overview	rivers during the reporting period. This action is on-going
	with a quantitative	and by the end of the current implementation plan 3 rivers
	measure, or other justified	will have their CLs updated
	evaluation, of progress.	Will have their ells apauted
	Other material (e.g.	
	website links) will not be	
	evaluated):	
	Current status of action:	Ongoing
	If 'Completed', has the	
	action achieved its	
	objective?	
Action	Description of action	Maintain the Long Term Monitoring of Wild Salmon Stock on
F3:	(as submitted in the IP):	the River Bush – used as an Index River for NI.
	Expected outcome	Maintain and build the long term dataset of adult returns, smolt
	(as submitted in the IP):	migration, stock recruitment data, freshwater survival, marine
	(	survival, biological characteristics of the R Bush stock over the
		5 year period.
	Progress on action to	All the datasets were updated and completed in 2019 and
	date	annual survival metrics determined for the Bush salmon
	(Provide a brief overview	stock. The total adult return of wild salmon to the Bush
	with a quantitative	river in 2019 was 634 fish & marine survival rate of 1SW
	measure, or other justified	salmon was 2.8%. The freshwater survival rate from egg-
	evaluation, of progress.	smolt for the most recent fully recruited ova cohort
	Other material (e.g.	(2014) was 0.78%.
	website links) will not be	[ (2011) 1140 0.7070. ]
	evaluated):	
	Current status of action:	Ongoing

	If 'Completed', has the action achieved its	
	objective?	
Action F4:	Description of action (as submitted in the IP):	To assess mortality of wild salmon smolts moving from the freshwater to the marine environment.
	Expected outcome (as submitted in the IP):	To assess riverine mortality and identify possible areas of losses.
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	This action has seen good progress in 2019 with collaboration between local fishery scientists and EU funded projects (EU smoltrack & COMPASS). Research has indicated that survival from release to coastal inshore waters for acoustic-tagged smolts released at the river Bush trap varied between 32% and 68%, with both year and brightness during river exit playing a significant role in explaining the variations in survival. Some of these data have been published in the reference listed below; Flávio, H, Kennedy, R, Ensing, D, Jepsen, N, Aarestrup, K. (2019). Marine mortality in the river? Atlantic salmon smolts under high predation pressure in the last kilometres of a river monitored for stock assessment. Fisheries Management & Ecology; 27: 92–101. Loughs Agency area has a project called SeaMonitor underway. SeaMonitor which is a unique marine research project studying the seas around Ireland, Western Scotland and Northern Ireland. The project is led by the Loughs Agency and supported by another eight leading marine research institutions using innovative marine species tracking technology to better understand and protect vulnerable marine life in our oceans. Funding for the SeaMonitor project has been provided by the EU's INTERREG VA Programme (Environment Theme), which is managed by the Special EU Programmes Body (SEUPB), to the tune of 64.6m. Match-funding for this project has been provided by the Department for Agriculture, Environment and Rural Affairs in Northern Ireland and the Department of Housing, Planning and Local Government in Ireland. This substantial investment will extend the existing network of 'smart' buoys and oceanographic models – delivered by sister projects COMPASS and MarPAMM – so that a line of acoustic receivers runs between the island of Ireland and Scotland.
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	
Action	Description of action	To improve recreational catch returns and statistics from the
F5:	(as submitted in the IP):	current baseline of 5 - 10% to 30%.
13.		
	Expected outcome	To increase catch returns / data for recreational caught salmon.

	( 1 1 1 1 1	
	(as submitted in the IP):  Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	The current system is being migrated onto DAERA hardware and therefore any changes to it cannot be considered until this piece of work has been completed. Discussions will begin with the LA about how we can improve angling catch returns in both jurisdictions
	Current status of action:	Not started
	If 'Completed', has the action achieved its objective?	
Action F6:	Description of action (as submitted in the IP):	To protect wild salmon stocks from illegal activity.
	Expected outcome (as submitted in the IP):	To protect salmon stocks by detecting, deterring and disrupting any illegal activity directed at damaging or removing salmon stocks subject available resources.
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	Organised patrols (on land and water) are carried out in both the DAERA and LA areas to deter, disrupt and detect illegal fishing activities. In 2019, 3846 patrols were carried out in the DAERA area and no detections made re the illegal capture of salmon. However a total of 282 illegal nets were seized and any illegal caught salmon were released unharmed. In addition 50 inspections were carried out on commercial premises where salmon can be bought or sold.  In the Loughs Agency area in 2019, a number of successful prosecutions were made. 8 illegally captured fish taken and 89 seizures were made, including 31 salmon nets
	Current status of action:	Ongoing
	If 'Completed', has the	
	action achieved its objective?	
	objective:	

**3.2 Provide an update on progress on actions relating to Habitat Protection and Restoration** (section 3.5 of the Implementation Plan). **Note:** the reports under 'Progress on action to date' should provide a brief overview of each action. For all actions, provide clear and concise quantitative information to demonstrate progress. In circumstances where quantitative information cannot be provided for a particular action because of its nature, a clear rationale must be given for not providing quantitative information and other information should be provided to enable progress with that action to be evaluated. 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.

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Action	Description of action	To assess and provide fishery advice for 100% of River	
H1:	(as submitted in the IP):	drainage maintenance schemes to protect salmon habitat and to incorporate mitigation / improvement measures where possible.	

	Expected outcome	Ensure sensitive / mitigated engineering solutions to maintain
	(as submitted in the IP):	or where possible seek opportunities to restore or enhance
	Progress on action to	salmonid habitat.
	date	Fisheries advice was provided for the entire 2019 DFI river drainage maintenance works programme in both the
	(Provide a brief overview	DAERA and Loughs Agency areas to ensure protection
	with a quantitative	of fish stocks and habitat at the sites where works were
	measure, or other justified	carried out. Quarterly meetings between both parties are
	evaluation, of progress.	held to discuss the ongoing programme and to ensure the
	Other material (e.g.	works are not detrimental to fish stocks. Loughs Agency
	website links) will not be	is regularly consulted by River maintenance and planning
	evaluated):	authorities and has a robust consultation response
		program
	Current status of action:	Completed
	If 'Completed', has the	Yes
	action achieved its	
	objective?	
Action	Description of action	Management and control of water quality in salmon producing
H2:	(as submitted in the IP):	rivers in NI – the target is to have 70% of rivers at good
	, in the second	ecological status by 2021.
	Expected outcome	Protection against degradation of salmonid habitat through
	(as submitted in the IP):	pollution or waste disposals.
	Progress on action to	NIEA also carried out approximately 1755 investigations
	date (Provide a buief everyion)	in relation to reports of water pollution in 2019. Further
	(Provide a brief overview with a quantitative	actions were taken as appropriate. There were 9 incidents
	measure, or other justified	in 2019 in which fish were killed due to water pollution – 3 were classified as Major, 5 as Moderate and 1 as a
	evaluation, of progress.	slight fish kill. All discharges are regulated and fisheries
	Other material (e.g.	advice is provided on them as part of the planning
	website links) will not be	application process.
	evaluated):	The Loughs Agency investigated 252 incidents of
		pollution in their area and initiated prosecutions for high
		severity incidents as appropriate.
		The Northern Ireland Environment Agency continues to
		work toward achieving the objectives set out in the Water
		Framework Directive (WFD). In 2019-20 the Agency has
		been focusing on the water bodies that deteriorated for
		interim 2018 WFD status. Investigations where
		undertaken to establish why the water body deteriorated,
		while putting remedies in place to help the water body
		achieve its objective status.
		The levels of Soluble Reactive Phosphate (SRP) in our
		waters continues to cause concern. If levels of Soluble
		Reactive Phosphate continue to rise in our water bodies
		on its current trend this will impact on environmental
		outcomes and indicators as set out within Programme for
		Government, while putting at risk the achievement of
		minimum requirements of WFD. Policies have been
		reviewed in light of the emerging evidence on SRP. The

	Current status of action:  If 'Completed', has the	Nutrient Action Programme Regulations 2019-2022 aims to improve water quality by protecting water against pollution caused by nutrients from agriculture sources. Further strategic interventions will be required and DAERA will use this evidence to underpin the policy positions with regard to emerging strategies on the environment and agriculture, especially in the context that nutrients, including phosphorus, which are causing the deterioration.  Ongoing
	action achieved its objective?	
Action H3:	Description of action (as submitted in the IP):	To identify and assess the impact of barriers on 18 primary salmon rivers in NI by 2024.
	Expected outcome (as submitted in the IP):	To carry out surveys to identify all potential barriers to fish passage in primary salmon rivers in NI subject to resources and assess fish passage at them.
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):  Current status of action: If 'Completed', has the	The River Blackwater, Arney and Finn have all been surveyed and all barriers identified have been added to a GIS Layer and assessed for fish passage using a tool developed for the Catchment care programme. DAERA will seek to review existing data held on barriers and collect more on barriers on the primary rivers over the period of this IP. Discussions will be held with LA about what system will be used to assess fish passage at barriers. Loughs Agency have information on GIS layers of all the potential barriers on primary rivers in their area and work to assess these will be carried out over the period of the IP  Ongoing
	action achieved its objective?	
Action H4:	Description of action (as submitted in the IP): Expected outcome (as submitted in the IP):	To update inventory of current and potential salmon habitat on 3 primary salmon rivers in NI.  To update salmon habitat inventory data on a GIS database for the Blackwater, Glendun, Margy /Glenshesk rivers This will help identify and prioritise subsequent habitat enhancement actions. In the Loughs Agency area surveys have been completed and is recorded on GIS layers which are available.
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	Fieldwork has been undertaken on the Glendun river and Ballinamallard rivers and this data is currently being uploaded into GIS format. Some other habitat assessments have been conducted on the Blackwater, Arney and Finn rivers under an EU funded project (Catchment CARE) and these data will be made available for use in salmon conservation. Loughs Agency has a comprehensive GIS overlay of salmon habitat, this has

		been updated for rivers affected by the major floods in
		2017 on the Mourne, Faughan and Strule catchments
	Current status of action:	Ongoing
	If 'Completed', has the	
	action achieved its	
A -4°	objective?	To enhance degraded habitat or improve salmon habitat on
Action H5:	Description of action (as submitted in the IP):	primary salmon rivers in NI with rivers below CL being prioritised.
	Expected outcome (as submitted in the IP):	To enhance degraded habitat or improve salmon habitat on primary salmon rivers in NI including government and stakeholder schemes.
	Progress on action to date	In the DAERA area the following habitat works were carried out:
	(Provide a brief overview with a quantitative measure, or other justified	Addition of 20 tonnes spawning gravel to Sixmile Water Addition of 700 tonnes spawning gravel and enhancement of spawning habitat on River Bush
	evaluation, of progress.  Other material (e.g.  website links) will not be	Addition of 300 tonnes spawning gravel and enhancement of spawning habitat on Agivey River
	evaluated):	Installation and improvement of spawning and nursery habitat on Glenshesk River
		Fish passage improvements on R Lagan trib Colin River by Lagan River Trust
		The enhancement of 2.1 km of the main Blackwater river, comprising of the construction of paired deflectors, 2 stage channel and rubble mats for the development of parr/fry production, intermixed with introduction of appropriate gravels. Bankside side revetment works were carried out using cobble stone and soft engineering techniques, and appropriate tree/branch management was conducted where risk to furthering bankside erosion was taking place.
		In the LA the following habitat improvements were carried out:  Clanrye River – erosion management and riparian fencing
		River Faughan - riparian fencing River Roe and sub catchments – Habitat restoration and riparian fencing River Finn - riparian fencing River Strule catchment - Habitat restoration, erosion management and riparian fencing Glenelly River - Habitat restoration and riparian fencing
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	

## 3.3 Provide an update on progress on actions relating to Aquaculture, Introductions and Transfers and Transgenics (section 4.11 of the Implementation Plan). Note: the reports under 'Progress on action to date'

should provide a brief overview of each action. For all actions, provide clear and concise quantitative information to demonstrate progress. In circumstances where quantitative information cannot be provided for a particular action because of its nature, a clear rationale must be given for not providing quantitative information and other information should be provided to enable progress with that action to be evaluated. 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.

by t	he Review Group	0.
Action	Description	Assess baseline sea lice levels on R Bush wild salmon remote from NI Aquaculture
A1:	of action	production as advised in the BNP guidance.
	(as submitted	
	in the IP):	
	Expected	Annual assessment of base sea lice levels on adult salmon remote from Aquaculture
	outcome	returning to the River Bush for each year of assessment.
	(as submitted	
	in the IP):	
	Progress on	Sea lice infestation levels were monitored in the returning adults on the River Bush.
	action to	In 2019 95% of fish had no sea lice, with 4% low to moderate and 1% moderate to
	date	high levels of sea lice infestation. These numbers are an increase on the levels
	(Provide a	reported for 2018, which were the lowest numbers recorded in the time series. The
	brief overview	2019 numbers are still among the lowest in the time series.
	with a	2017 Humbers are sum among the lewest in the time series.
	quantitative	
	measure, or	
	other justified	
	evaluation, of	
	progress.	
	Other	
	material (e.g.	
	website links) will not be	
	evaluated):	
	Current	Completed
	status of	
	action:	
	If	Yes for 2019
	'Completed',	
	has the	
	action	
	action achieved its	
	objective?	
A -4°		Manitan fan Nan XII agaan as gewantens aslenan in a wild aslenan staak in XI Insland
Action	Description	Monitor for Non-NI escapee aquaculture salmon in a wild salmon stock in N. Ireland.
<b>A2:</b>	of action	
	(as submitted	
	in the IP):	Escapee aquaculture salmon not from NI are monitored annually at the River Bush trap.
	Expected	Escapee aquaeunture sannon not from N1 are monitored annually at the River Bush trap.
	outcome	
	(as submitted	
	in the IP):	

	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress.	No escaped sa reports of fish				hmills trap. T	There	wer	e als	o no		
	Other material (e.g. website links) will not be evaluated):											
	Current status of action:	Ongoing										
	If 'Completed', has the action achieved its objective?											
Action A3:	Description of action (as submitted in the IP):	Monitoring sea lice levels in aquaculture salmon in N. Ireland.										
	Expected outcome (as submitted in the IP):	An annual assessment of sea lice levels of sea cage reared salmon in N. Ireland.										
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	Both cage site salmon. Although stream each sureport that we were carried of	ough these site is continue have not with	es are at the ed to be we nessed any	e high end Il maintair	of the expos	ed fet iged.	DAI Uine	s and ERA insp	l tidal can also		
		Date 16/01/2019 20/02/2019 20/03/2019	Number of fish Harvested 1040 1960 2015	No of fish checked 200 313 383	No positive fish  1 3 3	Percentage fish infected 0.50% 1%	1 1 3 3	0	0 0	Total 4 Lice 0 1 0 3 0 3		
		01/05/2019	1680	327	4	1.20%	4	0	0	) 4		

	Current status of action:	19/06/2019 1560 303 4 1.30% 4 0 0 0 4 10/07/2019 1560 345 5 1.40% 5 0 0 0 5 28/08/2019 1100 260 10 3.80% 10 0 0 0 10 18/09/2019 1860 348 2 0.50% 2 0 0 0 2 27/11/2019 2100 291 1 0.30% 1 0 0 0 1 O O O O O O O O O O O O O O O							
Action	'Completed', has the action achieved its objective?	Monitoring levels of genetic introgression of aquaculture selmon into wild stocks in NI							
Action A4:	Description of action (as submitted in the IP):	Monitoring levels of genetic introgression of aquaculture salmon into wild stocks in NI.							
	Expected outcome (as submitted in the IP):	Triennial assessment of levels of genetic introgression of aquaculture salmon into wild stocks adjacent to the sites for salmon aquaculture in NI.							
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	Triennial assessment of levels of genetic introgression of aquaculture salmon into wild stocks adjacent to the sites for salmon aquaculture in NI are carried out. The most recent data suggests there has been a decrease in the level of genetic introgression of farmed genetic material into wild stocks in UK NI between 2014 and 2018. In the 2014 study a maximum of 5.9% of juveniles had genomes of part farmed origin, compared to 1.9% in the 2018 study.							
	Current status of action:	Ongoing							
	If 'Completed', has the action achieved its objective?								

