	Council *Annual Progress Report on Actions taken under the Implementation Plan for the Calendar Year 2021 Russian Federation*	**CNL(22)22**

Annual Progress Report on Actions taken under the Implementation Plan for the Calendar Year 2021

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 2022**.

Party:	**Russian Federation**
Jurisdiction / Region:	

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.

2: Stock status and catches.
2.1 Provide a description of any new factors that may affect the abundance of salmon stocks significantly 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.
Pink salmon is a non-native species for the Atlantic salmon waters. Its introduction to the European North of Russia was started in 1956. Before 2021, numerous ascends of pink salmon

were recorded in the White Sea rivers only, whereas in the Barents Sea rivers the abundance of adults was modest. In Russia pink salmon was also registered east of the Kola Peninsula in the rivers flowing into the Barents and the Kara seas. Currently the Taymyr Peninsula appears to be a natural border that divides pink salmon populations in the native and new ranges of the species.

Since the 1960s, fisheries for pink salmon in the Northwest Russia have been conducted in coastal waters and rivers of the White Sea and up to the 2000s pink salmon harvests exceeded 100 t only four times (1973, 1975, 1977 and 1997). It was in 2001 when a nominal catch exceeded 300 t for the first time. The declared pink salmon catch in 2021 was 715 t, the record catch in the time series (Figure).

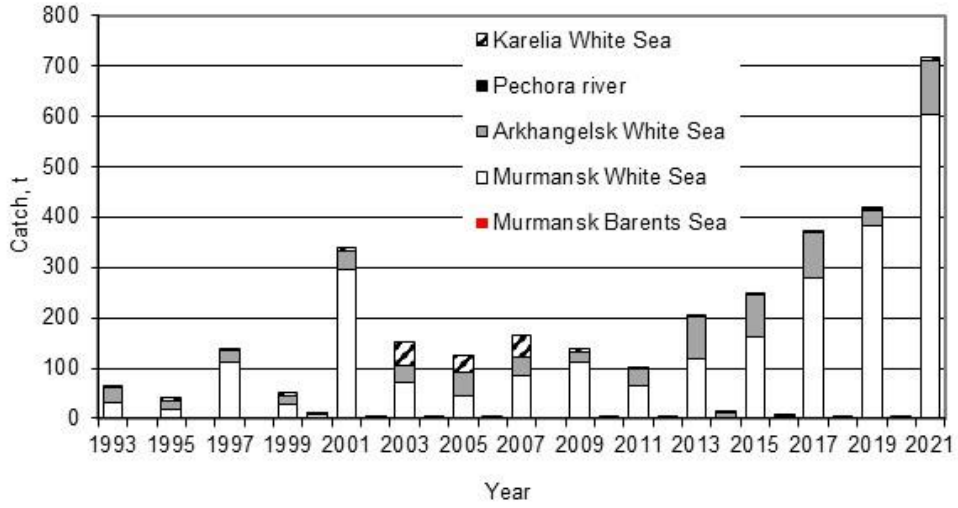

Figure. Nominal catches of pink salmon in the Northwest Russia by regions.

Despite the current lack of convincing evidence of the negative impact of pink salmon on the reproduction of Atlantic salmon, unlimited exploitation of this species in all types of fisheries was recommended (Alekseev et al., 2019).

Alekseev, M. Yu., Tkachenko, A. V., Zubchenko, A. V., Shkatelov, A. P., Nikolaev, A. M. 2019. Distribution, spawning and the possibility of fishery of introduced pink salmon (Oncorhynchus gorbusha Walbaum) in rivers of Murmansk Oblast. Russian Journal of Biological Invasions, 10(2): 09-117.

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 2021 (tonnes)	31.6	0.0	17.3	48.8
(b) confirmed nominal catch of salmon for 2020 (tonnes)	32.4	0.0	16.4	48.8

(c) estimated unreported catch for 2021 (tonnes)	n/a	n/a	n/a	n/a
(d) number and percentage of salmon caught and released in recreational fisheries in 2021	10,727 salmon were caught and released (71% of the total recreational rod catch). The numbers do not include 998 salmon retained in recreational gill net fisheries in the Archangelsk region and the Pechora River.			

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.*

Action F1:	Description of action (*as submitted in the IP*):	Determine problem areas. Estimate the level of unreported catches. Take further measures to reduce unreported catches.
	Expected outcome (*as submitted in the IP*):	Reduced level of unreported catches in problem areas.
	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):*	No estimates of unreported catches is available for 2021. The Murmansk Regional Commission on Regulation of Harvesting the Anadromous Fish closed salmon recreational catch-and-take fisheries in some fishing sites of the Varzuga and Kola rivers and established "no fishing" periods for coastal, in-river commercial and recreational fisheries for 2021 season. Recreational and commercial fishing sites were protected by fish guards hired by the fishing sites managers. Protection patrols were carried out using different methods on lakes and rivers by fish inspectors of the Regional Directorate of the Federal Agency for Fisheries. Protection patrols in coastal areas of Barents and White seas were carried out using different methods by fish inspectors of the Border Guard Department of the Russian Federal Security Service.
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	

Action F2:	Description of action (*as submitted in the IP*):	Continue developing the conservation limits for salmon stocks.
	Expected outcome (*as submitted in the IP*):	Data on the status of salmon stocks. Conservation limits for all salmon stocks.
	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):*	Conservation limits have been set for all salmon stocks in the Murmansk region. In the Arkhangelsk region and in the Nenets autonomous district CLs have been set for exploited salmon stocks only. No CLs have been developed for salmon stocks in the Republic of Karelia. No new or revised CLs for Atlantic salmon stocks were established in 2021.
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	
Action F3:	Description of action (*as submitted in the IP*):	Continue monitoring salmon stocks in the Murmansk region. Assess the effectiveness of new management measures introduced for interceptory coastal salmon fisheries in the Barents Sea.
	Expected outcome (*as submitted in the IP*):	Data on status of salmon stocks in the Murmansk region and assessment of the effectiveness of management measures introduced for coastal interceptory salmon fisheries in the Barents Sea.
	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):*	Atlantic salmon returns to some rivers were assessed. The level of attainment of spawning requirements was determined. The estimates of salmon juveniles densities were derived. Recommendations on catch limits for 2022 salmon fisheries were developed for the Federal Agency for Fisheries of the Russian Federation and for the Regional Commissions on Regulation of Harvesting the Anadromous Fish. The 2021 meeting of the Working Group on Atlantic salmon in Finnmark County and the Murmansk Region was postponed from August due to COVID-19 pandemic and rescheduled for 2022. In 2020 the Kolarctic ENI CBC project CoASal "Conserving our Atlantic salmon as a sustainable resource for people in the North; fisheries and conservation in the context of growing threats and a changing environment (KO4178)" was started. The project aims to document and examine the new sea salmon fishery regulations, study the effects of growing threats Atlantic salmon populations face today with climate change, growing cage culture industry and emerging diseases. Initially the project was planned to be

		completed by December 2021, however it was prolonged to September 2022 due to COVID-19 pandemic.
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its 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.*		
Action H1:	Description of action (*as submitted in the IP*):	Continue developing the inventories of salmon rivers. Estimate salmon habitat and productive capacity of salmon rivers. Fieldwork and analysis of available data on current quantity of salmon habitat to provide a baseline for future comparison will be conducted in Archangelsk region and in the Republic of Karelia.
	Expected outcome (*as submitted in the IP*):	Inventories of salmon rivers to provide baseline data on salmon habitat and productive capacity for management in relation to estuarine and freshwater habitat.
	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):*	Work on revision and updating the book "The inventory of salmon rivers of the Murmansk region. The Barents Sea basin" was started in 2021. The book was first published in 2011 and presented data on salmon habitat and productive capacity of rivers and creeks. Monitoring of salmon juveniles densities in rivers of Murmansk region was continued in 2021. No inventories of salmon rivers have been developed for other regions. No fieldwork and analysis of available data on current quantity of salmon habitat was conducted in the Arkhangelsk region and the Republic of Karelia in 2021.
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	
Action H2:	Description of action (*as submitted in the IP*):	Development of habitat protection and restoration plans for specific rivers.
	Expected outcome (*as submitted in the IP*):	Detailed habitat protection and restoration plans for specific rivers.
	Progress on action to date	Recommendations on habitat restoration were updated for a number of salmon rivers in Murmansk and Arkhangelsk regions, and for Republic of Komi.

	(Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	No detailed habitat protection and restoration plans have been developed for specific rivers.
	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.*		
Action A1:	Description of action (*as submitted in the IP*):	Developing a policy consistent with the international goals on sea lice and containment agreed by NASCO and ISFA concerning the protection of wild salmonids.
	Expected outcome (*as submitted in the IP*):	Achievement of the international goals for 100% of farms to have effective sea lice management and achieving 100% containment.
	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):*	Experts of the Murmansk Animal Health Center monitored fish infestation with Lepeophtheirus salmonis in marine cages during quarterly epizootic and ichthyopathological surveys of the mariculture farms in the Murmansk region. Russian veterinary legislation lacks the regulations implying the procedure for diagnostic and treatment- preventive activities in case of fish infestation with these copepods in the mariculture farms. There are also no regulations setting the critical intensity of this parasite's invasion for fish of different ages when farming in marine cages. Thus, veterinary experts collected information on fish infestation by calculating Lepeophtheirus salmonis invasion intensity during routine parasitological studies in the marine cage farms of the Murmansk region. In 2021 in marine cage farms of the Murmansk region (PJSC "Russian Aquaculture", "Russian Salmon"), the intensity of sea lice infestation in fish of different ages ranged from 1 to 3. In addition, the fish farms independently monitored the intensity of parasite. To control the invasion of sea lice, the PJSC "Russian Aquaculture" has adopted the

		Standard Operating Procedure (SOP) for monitoring the intensity of invasion. As a part of the SOP, company's personnel are trained to gain skills in identifying different life stages and species of sea lice (Lepeophtheirus salmonis and Caligus elongatus). When the water temperature is 5ºC and higher, in every fish farming complex monitoring for the invasion intensity is performed every 7 days, alternately for each half of the cages. When the water temperature is low, monitoring is not performed as fish is at high risk for the development of winter ulcers. For counting, 20 fish specimens are taken from every cage, and then they are sedated by an anesthetic solution and thoroughly examined. The obtained data on the species and life stages of sea lice are listed in the table and later used to assess the dynamics of the invasion intensity in every fish farming complex, as well as for the company. Control over the correct Standard Operating Procedure (SOP) performance is carried out by the company's biological service. Recently the PJSC "Russian Aquaculture" has introduced the FLS CALIGUS delousing system for mechanical salmon delousing at its farms in the Barents Sea. To achieve 100% containment the PJSC "Russian Aquaculture" has introduced the following practices: - monthly checks of cages and nets for integrity by divers and robots; - cage and net checks for robustness after every cycle of use; - fish counting procedures to control numbers of salmon at every stages: introduction to a cage, dead fish collection, stock removal. There were no salmon escape incidents in 2021 at the PJSC "Russian Aquaculture" marine farms.
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	
Action A2:	Description of action (*as submitted in the IP*):	Minimise the risk of further spread of *Gyrodactylus salaris*. Implement the eleven recommendations contained in the 'Road Map' to enhance information exchange and co-operation on monitoring, research and measures to prevent the spread of *Gyrodactylus salaris*.

	Expected outcome (*as submitted in the IP*):	Further measures to prevent the introduction or further spread of parasite due to aquaculture and recreational fisheries. The development of a plan in line with the 11 recommendations contained in the Road Map.
	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):*	In Russia, G. salaris, as a pathogenic parasite, was first recorded in the Keret River (Republic of Karelia, the White Sea basin) in 1992. G. salaris, therefore, has been monitored since 1993 in the salmon rivers of the Barents and White Seas. Since 2009, monitoring has been carried out on a regular basis within the framework of the Program of State Monitoring of Aquatic Bioresources of Inland Water bodies in the Murmansk region and the rivers of the Republic of Karelia in the White Sea basin. No G. salaris monitoring has been carried out in salmon rivers of the Arkhangelsk region and the Nenets autonomous okrug. In the Murmansk region the parasite G. salaris was recorded for the first time in the Pak River in 2015 and in the Shovna River in 2017 (Lower Tuloma reservoir, Barents Sea basin). As a source of infestation of Atlantic salmon juveniles, an infected rainbow trout is considered which escaped the cages of aquaculture farms located in the reservoir. No parasite has been found in other salmon tributaries of the Lower Tuloma reservoir. Experts of the Murmansk Animal Health Center took actions to prevent the spread of Gyrodactylus salaris in the Murmansk region during surveys of the freshwater aquaculture farms and through outreach activities. Stocking material for the needs of freshwater aquaculture was transferred in compliance with the requirements of Russian veterinary legislation, as well as with mandatory parasitological survey of fish for the transfer, and taking into account the epizootic status of the water body. In addition, preventive measures for fish farming at the freshwater aquaculture facilities were in line with the veterinary and sanitary plans involving obligatory quarterly parasitological surveys, anti-parasitic treatments of fish (if required), disinfection of gear, equipment and floating crafts, etc. and also in line with the “Instruction on actions to prevent fish gyrodactylosis”, adopted by the Veterinary Department (Ministry of Agriculture and Food of the Russian Federation) on 08.06.1998. The Anti-Epizootic Commission of the Murmansk region restricted live fish transfers from the region of Leningrad

		and from Republic of Karelia into Murmansk region. The Commission made recommendations to ban the development of new aquaculture sites in watercourses where Atlantic salmon occurs. No new aquaculture sites were established in such freshwater areas in 2021. Outreach activities included posting information on the websites of the Murmansk Veterinary Committee and Animal Health Center of the Murmansk Region. Recreational fisheries companies in the Murmansk region implement voluntary programmes to prevent the spread of parasite on fishing equipment, tackle, etc. by use of approved disinfection methods. The regional Severomorskiy Directorate of the Federal Agency for Fisheries has developed recommendations for users of salmon fishing sites and for anglers.
	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.

Revised Fishing Regulations for the Northern Fisheries Basin came in force in 2021 by the order of the Ministry of Agriculture of the Russian Federation No. 292 of 13/05/2021. Existing fisheries regulation measures for salmon conservation and management were revised and new measures were introduced. The current restrictions on Atlantic salmon fishing include:
- the ban on salmon fishing in the Barents Sea;
- the ban on Atlantic salmon fishing in certain areas of the White Sea;
- the ban on salmon fishing in certain areas and periods for coastal and inland fisheries;
- the ban on net fisheries in certain areas and periods for coastal and inland fisheries;
- the ban on all fisheries closer than 500 m to salmon river outlets;
- the ban on ice-fishing in certain areas of the White Sea rivers with autumn run salmon stocks;
- the ban on Atlantic salmon by-catch.

Veterinary rules for keeping fish and other aquatic animals in an artificially created habitat for the purpose of their breeding, rearing, sale and acclimatization were developed and came in force in 2021 by the order of the Ministry of Agriculture of the Russian Federation No. 782 of 23/12/2020.

Rules for establishing coastlines (boundaries of water bodies) and (or) boundaries of parts of water bodies, areas of the continental shelf of the Russian Federation and areas of the exclusive economic zone of the Russian Federation recognized as aquaculture areas adopted by the Decree of the Government of the Russian Federation No. 1183 of 11/11/2014 were revised in 2021. The procedure of establishing the boundaries of aquaculture areas in the Northern fisheries basin was changed and became the same as for the Far Eastern fishery basin. Measures

for salmon conservation in the Northern fisheries basin now include the ban on establishing boundaries of aquaculture areas closer than 2 km to salmon river outlets and a minimal distance of 5 km between boundaries of aquaculture areas.
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.
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.
North American Commission Members only:
4.6 Details of any new measures to minimise bycatches of salmon originating in the rivers of the other member.
4.7 Details of any alteration to fishing patterns that result in the initiation of fishing or increase in catches of salmon originating in the rivers of another Party except with the consent of the latter.