Agenda item 6.3
For information

Council

CNL(17)25

Annual Progress Report
on Actions Taken Under the Implementation Plan for the Calendar Year 2016

Norway

CNL(17)25

Annual Progress Report on Actions taken under the Implementation Plan for the Calendar Year 2016

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 24 March 2017**.

Party:	**Norway**
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 December).*

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

104 salmon populations were classified according to the National Quality Norm for Wild Salmon. The classification includes nearly all of the most important Norwegian salmon rivers representing 76 % of the total combined Norwegian spawning target (reported in CNL(16)19).

Genetic integrity		Conservation limit attainment and harvest potential					
		Very poor	Poor	Moderate	Good	Very good	Sum
	Very poor	11	2	1	5	6	25
	Poor	1	1	2	1	3	8
	Moderate	4	5	5	7	14	35
	Very good /good	10	0	3	3	20	36
	Sum	26	8	11	16	43	104

The Norwegian Quality norm classification system used to classify 104 rivers. Note that the worst classification in any of the dimensions determines the final classification of the stock.

Management targets, based on spawning target attainment alone, were achieved for 82 of the 104 classified stocks in the period 2010 - 2014. However, only 23 of the 104 stocks reached the goal *good* or *very good* quality according to the norm, 29 stocks had moderate quality, and 52 stocks (50 % of those assessed) were classified as poor or very poor.

45 stocks did not reach the goal for the *Conservation limit attainment and harvest potential dimension*. 68 stocks did not reach the goal according to the *Genetic integrity dimension;* the overall quality status for 36 stocks was determined by influences from farmed salmon. For 32 stocks the status was worse than good for both dimensions.

With the goal of improving the status of the stocks, the Parliament has asked for an action plan where impacts on the stocks are assessed, and relevant measures identified.

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.

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').*

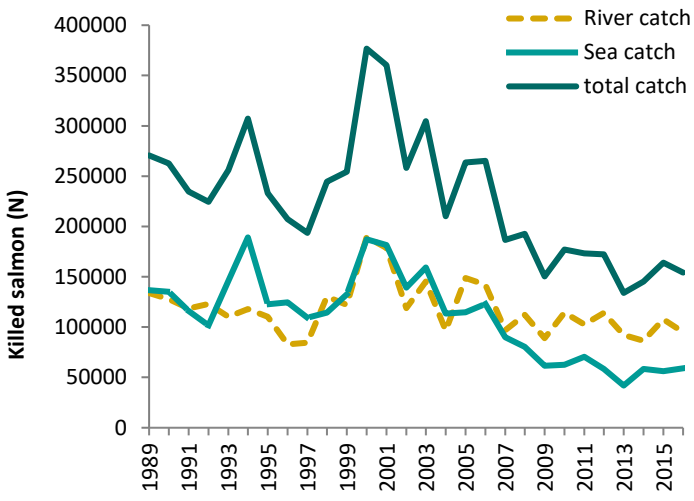
	In-river	Estuarine	Coastal	Total
(a) provisional nominal catch (which may be subject to revision) for 2016 (tonnes)	343		269	612
(b) confirmed nominal catch of salmon for 2015 (tonnes)	352		233	585
(c) estimated unreported catch for 2016 (tonnes)	65		197	262
(d) number and percentage of salmon caught and released in recreational fisheries in 2016	25206, 14%			

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.*

	Description of Action	Annual assessments of the management target

Action F1:	(*as submitted in the IP*)	achievement for the previous 4-5 year period are made by The Norwegian Scientific Committee for Atlantic Salmon Management (SACAS). In response to advice from the committee regulatory measures will be introduced normally every four or five years or if necessary annually or within season, as described in section 2.2. Special caution is exercised when regulating the fishery in areas with the risk of impacts from aquaculture. Fishing season, in sea and river fisheries will be used as a primary means to reach the management targets. Pre-agreed regulatory measures are implemented in rivers if there is a risk that spawning targets are not met.
	Expected Outcome (*as submitted in the IP*)	Increase in number of stocks reaching management targets.
	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.)*	In 2016, SACAS assessed that out of 186 salmon stocks with sufficient information, managing target were achieved in 87% of them. This is the best result since SACAS first assessments in 2009. In response to SACASs advices, new regulatory measures were introduced in 2016 in sea and river fisheries. The fishing season in 2016 resulted in a small increase in caught salmon (N) in the sea fisheries, and a small decline in the numbers of salmon caught in the river fisheries (figure 1). The mean size of the caught salmon have increased compared to 2015 in both fisheries. No regulatory adjustments within fishing season were necessary in 2016.  Figure 1. Annual killed salmon in sea- and angling fisheries.
	Current Status of Action	Ongoing

	If 'Completed', has the Action achieved its objective?	
Action F2:	Description of Action (*as submitted in the IP*)	Introduction of mandatory mid-season assessment of the fishery and salmon run and pre-agreed measures in more rivers. Consider the introduction of similar requirements for sea-fisheries. Further develop the specific toolkit, consisting of a procedural memo and specially adapted spread sheets for each individual river.
	Expected Outcome (*as submitted in the IP*)	Increase in number of stocks reaching management targets.
	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.)*	An evaluation of mid-season assessments has been conducted to reveal to which extent local managers run their pre-agreed measures according to the results of their assessments. The evaluation revealed that the feedback from local managers to regional authorities was random. This indicates that reporting procedures do not work as intended. The evaluation also revealed that very few run their pre-agreed measures when the assessment indicate immediate angling restrictions. Adjustments in the arrangement of mandatory mid-season assessment is needed. Better and stricter reporting routines from local managers to regional authorities should be established.
	Current Status of Action	Ongoing
	If 'Completed', has the Action achieved its objective?	
Action F3:	Description of Action (*as submitted in the IP*)	Introduction of "second" generation spawning targets.
	Expected Outcome (*as submitted in the IP*)	More precise spawning targets and better stock management.
	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.)*	In March 2016 a workshop were held reviewing all the spawning targets in Nordland County (N=114) based on detailed information about productive area, habitat classification, historical catches etc. A report from the Norwegian Institute for Nature Research describing progress on a new method to calculate spawning targets is in process.
	Current Status of Action	Ongoing
	If 'Completed', has the Action achieved its objective?	
Action F4:	Description of Action (*as submitted in the IP*)	Negotiate a new regulatory regime for the river Tana with Finland, and introduce a stock rebuilding program in collaboration with Finland.

	Expected Outcome (*as submitted in the IP*)	A new agreement in 2016, followed by stock-rebuilding up to spawning target achievement in the river Tana.
	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.)*	An agreement is reached, and the parliaments of Norway and Finland have approved the agreement
	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*)	Liming of 22 acidified salmon rivers and if feasible include five additional rivers in the long-term liming program.
	Expected Outcome (*as submitted in the IP*)	Restored salmon stocks and fishing possibilities.
	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.)*	At present, 22 Norwegian salmon rivers are included in the national liming program. "New" salmon stocks have been re-established in rivers whose stocks were lost due to acid rain. Salmon catches in limed rivers have increased from about 10 tons in the 1980s to 40 - 60 tons today, and at present this makes up for 10-14 % of total salmon catches in Norwegian rivers. The liming of 22 rivers is paid by the Norwegian Government, and the yearly cost is about 45 mill NOK (2016).
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	
Action H2:	Description of Action (*as submitted in the IP*)	All rules of operations for the largest and oldest hydropower plants are subject to revision within 2022. A major challenge is how the water needed for reintroduction of Atlantic salmon and other environmental improvements shall be weighed in relation to the goals for producing renewable energy (the RES Directive). Measures in National Salmon Rivers will be given high priority. Positive and negative effects will be evaluated. If the positive values turns up to exceed the negative values new conditions will be set.

		Other actions are habitat improvements, fish-ladders, adjustment in the manoeuvring regimes etc.
	Expected Outcome (*as submitted in the IP*)	In general, an increase in water discharge in dewatered areas, no ramping, less fluctuations in water levels, and more environmentally friendly allocation of water and habitat improvements in critical periods of the salmon life cycle will be evaluated in each specific river.
	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.)*	Revisions of licence conditions and rules of operations have been addressed in 5 river systems by January 31. 2017. Of these, Atlantic salmon will be of great interest in 1 river. At present, revision of licence conditions has only been applied for one river – River Årdal in Rogaland county. The process to revise licence conditions and rules of operation is time consuming due to the fact that several considerations are addressed and involvement of stakeholders with different agenda
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	
Action H3:	Description of Action (*as submitted in the IP*)	Removal or reconstruction of artificial migration obstacles such as pipes and culverts through roads.
	Expected Outcome (*as submitted in the IP*)	Effective fish passages increase available nursery habitats in upper reaches of salmon rivers - removal of migration obstacles increases available habitat in tributaries of larger salmon rivers and in smaller coastal streams.
	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.)*	The road authorities have removed 22 migration obstacles for salmon and sea trout in 2016. Regional plans, with environmental objectives and prioritizing of habitat improvements in all river basin, were finished in 2015 as part of the implementation of EUs Water Framework Directive. Measures to mitigate barriers caused by roads are planned in prioritized rivers by the road authorities. New program of measures will be in operation within 2018.
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	
Action H4:	Description of Action (*as submitted in the IP*)	a) Increased focus on enforcing the current legislation against habitat deterioration, to avoid further negative impact on salmon nursery habitat. Special focus will be on National Salmon Rivers, in which there are particular restrictions against most types of habitat encroachment. An important part of this initiative is to bring updated information on the

		new regime to important stakeholders such as landowners and road constructors. b) Habitat restoration and biotope adjustments. A lot of weirs have been constructed throughout the country. In later years several of these have been reconstructed to improve the passage of migrating anadromous salmonids. In Northern Norway in particular several actions have taken place to improve the salmon habitat. Several rivers that were channelized in the 1990'ies have achieved improvements by opening of river reaches to be active during floods, placement of large stones to increase habitat heterogeneity, rebuilding of flood protection works, including jacks and other constructions to increase hydraulic heterogeneity.
	Expected Outcome (*as submitted in the IP*)	Increased productivity in nursery habitats for Atlantic salmon due to decreased habitat degradation and increased connectivity in salmon river systems.
	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.)*	Due to delay in reporting procedures, the present status report actions carried out in 2015. In one river in northern Norway, Austertana, old flood and erosion protection measures were reconsidered. This implied revitalizing of the tributary Petter Morsobekken by removal of tube and a migration barrier at the lover part. Erosion protection often result in lowering river bed and create migration barrier for fish entering tributaries for spawning and rearing. In two rivers in Central Norway, Namsen and Stjørdal, such migration barriers have been replaced by small weirs and ponds in four tributaries.
	Current Status of Action	Choose an item.
	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*)	A regional carrying capacity model for sea lice is now being developed.
	Expected Outcome (*as submitted in the IP*)	Based on farmed salmon biomass and other parameters in a region, the numbers of sea lice copepodites in the area can be estimated. Taking into account the dispersion patterns for selected times the copepodite transmission within the region can be determined. Adaptive management in response to monitoring results will then be possible.
	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.)*	The parliament has decided that growth or reductions in production capacity within each of the designated production areas along the coast should be regulated in accordance with the effects of sealice on Wild Salmon Stocks. Research on and modelling of how sea lice copepodites from salmon farms affect wild salmonids have been refined in 2016.
	Current Status of Action	Will be effective in 2017
	If Completed, has the Action achieved its objective?	
Action A2:	Description of Action (*as submitted in the IP*)	1. Further improvement of precautionary measures e.g : - Site based technical certificate for every fish farm in sea. - Stricter requirements concerning mesh size and number of fish held in one cage. - A public consultation on amendments of the The Norwegian Aquaculture Act to improve legal base for environmental measures has been undertaken. 2. Research on sterile farmed salmon to reduce genetic and ecological threats to wild salmon populations. 3. Additional long-term monitoring programs and studies of ecological processes and the environmental impacts of fish farming. 4.Test of resistance board weirs etc. to monitor and remove escaped salmon from Norwegian rivers. 5. Search for better methods and technical solutions tracing the origin of farmed Atlantic salmon escapees.

		(This can be done by using DNA Parentage Assignment (industry based project) or other suitable methods.
	Expected Outcome (*as submitted in the IP*)	1. Reduced genetic interaction between farmed and wild Atlantic salmon. 2. Reduced spawning activity of farmed salmon in rivers. 3. -4. Get better knowledge and measures to cope with escaped Atlantic salmon. 5. Methods for immediate identification of escaped Atlantic salmon and basis for action against leaking sites. Secure identification of the guilty polluter.
	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.)*	1. Ongoing In 2016, the Aquaculture industry removed a total of 521 farmed fish from 37 salmon rivers to reduce the risk of genetic interaction with wild stocks. 2. Research are still ongoing to evaluate animal welfare considerations as well as performance in relation to various environmental factors. Consequently research licences are currently using triploid fish. Also several commercial salmon-farmers have started up using triploid fish as in "green" salmon farm licenses. 3. The national program for monitoring escaped salmon will finish its third year report in april 2017. This will be continued on a yearly basis, with addition of new ricer-systems as high quality assesments are available. To ensure reliable results from the monitoring program, there has been developed a Field "handbook", attempting to standardize the various method used in the programme. As a part of this standardizing, there has been conducted several field experiments to compare different methods, thus aiming to optimize the choice of method(s) in the individual riversystems. The Field "Hand-book" will be updated continiuously when new knowledge are available. In 2016, The Directorate of Fisheries did a pilot-project with funding available for immediate removal of escaped fish in the monitoring period. This project will be evaluated this year.

		4. At the moment the institute of Marine Research are continuing, and funding the works on two traps in Hardanger for research purposes. 5. Several projects are working on identifying escaped salmon back to escape site. There is one project testing use of rare earth elements in tracing salmon back to its origin. This project along with several DNA-projects are ongoing.
	Current Status of Action	1-5 Ongoing
	If Completed, has the Action achieved its objective?	
Action A3:	Description of Action (*as submitted in the IP*)	Proposal for a new action plan for the control of *Gyrodactylus salaris* is being developed.
	Expected Outcome (*as submitted in the IP*)	To combat the parasite in two regions, Rauma region consisting of 5 infected rivers, and Skibotn region consisting of two infected rivers. In addition, there are plans to build a long-term fish barrier in the River Driva.
	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.)*	Efforts to combat the parasite in the 5 infected rivers in Rauma region was finalized in 2014. These rivers will be monitored for a 5 years period before clean bill. The two infected rivers in Skibotn region was treated in 2015 and 2016. Some small following up treatments will take place in spring 2017. We started the building of a long-term fish barrier in the River Driva in January 2016, and the work will be completed before the salmon migration in spring 2017.
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	
Action A4:	Description of Action (*as submitted in the IP*)	It is prepared an action plan to reduce the impact of pink salmon in the rivers in the county of Finnmark, the northernmost county in Norway. The plan includes monitoring and removal of pink salmon in rivers. There is also a plan to reduce minnow impact on native fish populations in the river Namsen in the middle part of Norway. Currently, minnow are not spread to the Atlantic salmon distribution area. Monitoring is therefore the most important action so far.
	Expected Outcome (*as submitted in the IP*)	The aim is to reduce the breeding population of pink salmon to a minimum.

	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 surveillance program has been established to identify self-reproducing pink salmon in rivers in the county of Finnmark. Removal efforts of pink salmon to reduce the extent of spawning are carried out.
	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.
The national regulation on angling for salmon, sea trout and sea run arctic char in rivers and the national regulation on fishing for anadromous salmonids with bag- and gill net in sea were revised in 2016
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.
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4.3 Details of any new actions to prohibit fishing for salmon beyond 12 nautical miles.
MILJØ
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.
MILJØ
4.5 Details of any actions taken to implement regulatory measures under Article 13 of the Convention including imposition of adequate penalties for violations.
MILJØ