

**Council**

**CNL(12)21**

*Annual Report  
on Actions Taken Under Implementation Plans*

*Norway*



## **Annual Report on actions taken under Implementation Plans for the Calendar Year 2011**

The Guidelines for the preparation of ‘Implementation Plans and for Reporting on Progress’, NSTF(06)10 (copy attached) indicate that the primary purpose of the annual reports is to provide a summary of all the actions that have been taken under the Implementation Plan in the previous year. In addition, details of any significant changes to the status of stocks, new factors affecting stocks, any changes to the management regime in place, and any changes to the Implementation Plan should be included in the report. Details of actions taken in accordance with Articles 14 and 15 of the Convention are also needed by the Council. **Please provide the following information to the Secretariat by 6 April 2012**

### **Section 1: Details of any significant changes to the management outlined in the introduction to the Implementation Plan.**

### **Section 2: A description of any significant changes in the status of stocks and information on catches. The Council has asked that the following information on catches be provided:**

- (a) the provisional catch of salmon in tonnes for 2011;**
- (b) the confirmed catch of salmon in tonnes for 2010;**
- (c) an estimate of unreported catch in tonnes for 2011;**
- (d) the number of salmon caught and released in recreational fisheries in 2011.**

**(a) the provisional catch of salmon in tonnes for 2011: 696 tonnes**

**(b) the confirmed catch of salmon in tonnes for 2010: 642 tonnes**

**(c) an estimate of unreported catch in tonnes for 2011: 298 tonnes**

**(d) the number of salmon caught and released in recreational fisheries in 2011: 14303**

**Section 3: A description of any new factors which may significantly affect the abundance of salmon stocks.**

**Section 4: An account of all actions taken under the Implementation Plan with regard to the management of salmon fisheries; habitat protection and restoration; aquaculture and related activities; and other influences affecting salmon abundance or diversity (including the marine environment).**

Management Action	Reporting Update	Achieved Management Action (Yes, No, Ongoing, Completed)
<b>Fisheries Management</b>		
Adjustment in regulatory regime	New regulations in some rivers	yes
Review of the status of stocks	Status for all rivers updated	yes
Second generation spawning targets		Ongoing
<b>Habitat Protection and Restoration</b>		
Continuing liming of salmon rivers	Liming of 21 Salmon rivers continues. About 10 % of salmon catches in Norwegian river are from limed rivers.	Ongoing

<b>Habitat impact and restoration</b>	<b>Measures concerning salmon in regulated rivers have been identified in the Water Framework Directive plans of measures. This first phase cover 20 % of water management areas in Norway. Measures will be starting up before 2013.</b>	<b>Ongoing</b>
<b>Plan for restoration of fish ladders</b>	<b>Plan for restoration of salmon fish ladders (2011-2015) established in 2011.</b>	<b>yes</b>
<b>Aquaculture and related activities</b>		
<b>Development of regulations</b>  (See attachment)	<ul style="list-style-type: none"> <li>• <b>In august 2011 new and stricter requirements for fish farms were introduced and will come into force on 1 January 2013(NYTEK Regulations).</b></li> <li>• <b>In December 2011 a new regulation limited the number of salmon that could be kept in one cage.</b></li> <li>• <b>The ministry has launched a program to develop indicators that will detect negative effects on wild salmonids caused by escaped salmon and dispersion of sea lice from fish farms. This</b></li> </ul>	

	<p>effort is a part of the program to accomplish the strategic aims defined by the Ministry of Fisheries and Coastal Affairs in the “Strategy for an Environmentally Sustainable Norwegian Aquaculture Industry”.</p> <ul style="list-style-type: none"> <li>• Stopped allocation of new licenses for salmon farming.</li> <li>• The Directorate of Fisheries has intensified inspections regarding fish farms.</li> </ul>	
<b>Regulation: Coordination of delousing in spring 2012</b>	2011	Completed
<b>Evaluation of Local regulation regarding salmon lice</b>	2011	On going
<b>Revision of the salmon lice regulations</b>	2011	On going
<b>Other influences affecting salmon abundance or diversity (including marine environment)</b>		
<b><i>G. salaris</i> – The Vefsna region</b>	<p>Preparation, hearing and implementation of regional regulation for the Vefsn region.</p> <p>Combating of <i>G. salaris</i> in 10 infected rivers in Vefsna region began in 2011 and will be completed in 2012.</p>	<p>Completed</p> <p>On going</p>
<b><i>G. salaris</i> – The Steinkjer region</b>	Surveillance program will be launched and implemented from the Autumn of 2011.	On going

<b><i>G. salaris</i> – The Driva region</b>	<b>Preparation, hearing and implementation of regional regulation for the Driva region. As a part of combating <i>G. salaris</i> in River Driva, a fish barrier is designed. The fish barrier should be in place before salmon start to migrate upstream in spring 2014.</b>	<b>On going</b>  <b>On going</b>
<b><i>G. salaris</i> – The Lærdal region</b>	<b>In River Lærdalselva, a project to eradicate <i>G. salaris</i> by using acidic aluminium as the main chemical is in progress. The first treatment was completed in 2011, and the final treatment is planned in 2012.</b>	<b>On going</b>
<b><i>G. salaris</i> – The Rauma region</b>	<b>In 4 infected rivers in Rauma region, mapping and planning for the parasite eradication is carried out with the aim of combating in 2013 and 2014.</b>	<b>On going</b>

**Section 5: Details of any proposed revisions to the Implementation Plan.**

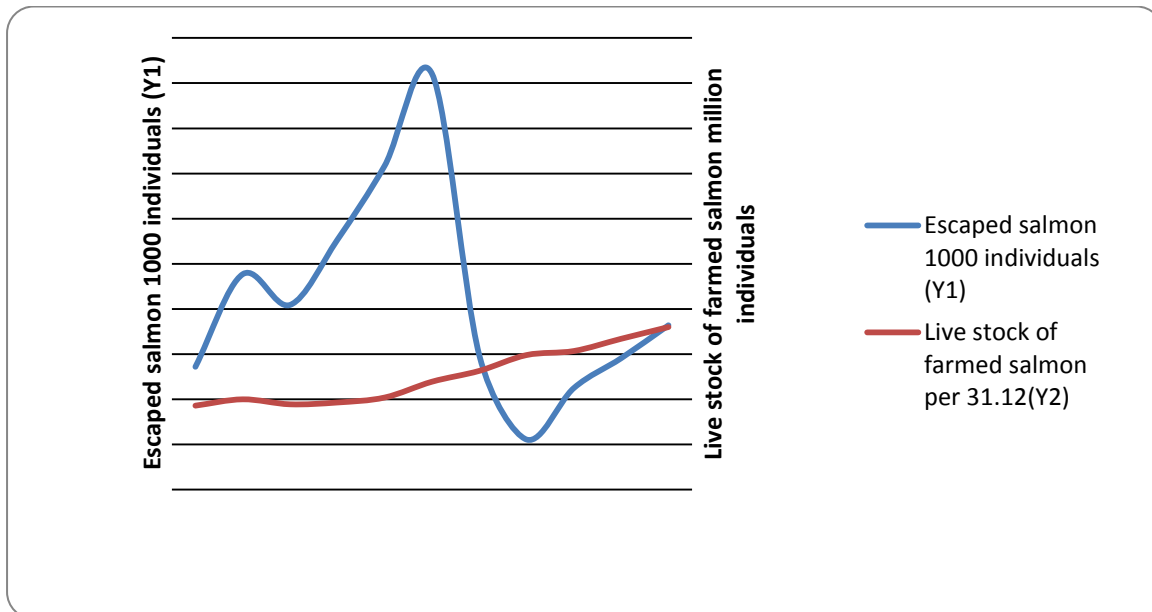
Fisheries regulation. Milestone 11: A new regulatory regime will be introduced in 2012.





## Norwegian aquaculture and escapees - state of affairs.

### Live stock and escapes of farmed salmon in Norway



**\*) Preliminary figures**

*Comments:* The figure shows that there has been an increase in the number of reported escaped salmons and in the number of farmed salmon in sea. In 2011 there was less incidents reported than earlier (2010: 37 episodes, 2011: 17 episodes), but due to three large escapes, the total figure was higher.

Generally the technical standard of Norwegian fish farms has improved considerably the last years, but human failure is a risk factor and caused the mentioned severe episodes.

### Implementation of The Willamsburg Resolution

According to the Williamsburg Resolution member states shall minimize escapes of farmed salmon to a level that is as close as practicable to zero through the development and implementation of action plans as envisaged under the Guidelines on Containment of Farm Salmon.

### Goals and surveillance.

In 2009 The Norwegian government decided a “Strategy for an Environmentally Sustainable Norwegian Aquaculture Industry”. To accomplish this strategy it has been essential to find out more about negative effects of the fish farming industry and the present environmental status. The Ministry of Fisheries and Coastal Affairs therefore asked The Institute of Marine Research to make a risk assessment concerning environmental impacts of Norwegian fish farming.

Based on scientific data the report suggests and evaluates specific environmental goals for infection rates, genetic impact on wild fish, eutrofication, organic and use of medicines. A county-by-county assessment is carried out in order to find the current environmental footprints regarding wild fish and the ecosystem in general. See figures on the next page.

For a more thorough description see:

[http://www.imr.no/filarkiv/2011/08/risk\\_assessment\\_engelsk\\_ersjon.pdf/en](http://www.imr.no/filarkiv/2011/08/risk_assessment_engelsk_ersjon.pdf/en)

Summary of probability of negative environmental effects of salmon farming at a county level from Rogaland to Finnmark (based mainly on data from 2009–2010). Colour code (green = low, yellow = moderate, red = high, blue = lack of data) indicates our assessment of the probability of being in conflict with goals defined in “Strategy for an environmentally sustainable aquaculture industry”.

	Goal 1	Goal 1	Goal 2	Goal 3	Goal 3	Goal 3	Goal 3
	Salmon lice	Other diseases*	Genetic impact	Nutrients		Organic load	Drugs*
				Eutrophication in the free water masses	Local effect on vegetation*		
Finnmark	Green	Blue	Green	Green	Blue	Green	Blue
Troms	Yellow**	Blue	Yellow	Green	Blue	Green	Blue
Nordland	Red	Blue	Yellow	Green	Blue	Green	Blue
Nord-Trøndelag	Red	Blue	Yellow	Green	Blue	Green	Blue
Sør-Trøndelag	Yellow	Blue	Yellow	Green	Blue	Green	Blue
Møre og Romsdal	Yellow	Blue	Red	Green	Blue	Green	Blue
Sogn og Fjordane	Red	Blue	Red	Green	Blue	Green	Blue
Hordaland	Red	Blue	Red	Green	Blue	Green	Blue
Rogaland	Red	Blue	Red	Green	Blue	Green	Blue

\*For the effect of other diseases, local effect on vegetation and drugs there is not enough data to do a regional assessment.

\*\*For salmon lice there is not enough data for Troms in 2009–2010. The analysis is based on older data and modelling as described in the text.

**Table 5.6.2**

Probability score used in the county based assessment.

Where lack of data appears, see text.

High probability
Moderate probability
Low probability
Lack of data

**Status in 2011.** ( Text in Norwegian, but equivalent categories)

	Mål 1	Mål 1	Mål 2	Mål 3	Mål 3	Mål 3
	Lakselus*	Annen smitte	Genetisk påvirkning	Regional eutrofiering	Regional organisk belastning	Legemidler
Finnmark	Yellow	Blue	Yellow	Green	Green	Blue
Troms	Yellow	Blue	Yellow	Green	Green	Blue
Nordland	Red	Blue	Yellow	Green	Green	Blue
Nord-Trøndelag	Red	Blue	Yellow	Green	Green	Blue
Sør-Trøndelag	Yellow	Blue	Yellow	Green	Green	Blue
Møre og Romsdal	Yellow	Blue	Yellow	Green	Green	Blue
Sogn og Fjordane	Yellow	Blue	Red	Green	Green	Blue
Hordaland	Red	Blue	Red	Green	Green	Blue
Rogaland	Green	Blue	Yellow	Green	Green	Blue

According to the Institute of Marine Research we have seen some improvement when it comes to sea lice infection I 2011. But on the negative side there is some evidence of resistance to drugs used to cope with sea lice.

**Other governmental actions to reduce influence from fish farms to wild stocks.**

In 2011 The Norwegian Ministry of Fisheries and Coastal Affairs:

- Established new rules to make fish farming more sustainable.
  - In august 2011 new and stricter requirements for fish farms were introduced and will come into force on 1 January 2013(NYTEK Regulations).
  - In December a new regulation limited the number of salmon that could be kept in one cage.
- The ministry has launched a program to develop indicators that will detect negative effects on wild salmonids caused by escaped salmon and dispersion of sea lice from fish farms. This effort is a part of the program to accomplish the strategic aims defined by the Ministry of Fisheries and Coastal Affairs in the “Strategy for an Environmentally Sustainable Norwegian Aquaculture Industry”.
- Stopped allocation of new licenses for salmon farming.

The Directorate of Fisheries has intensified inspections regarding fish farms.