



**West Greenland Commission**

**WGC(16)3**

*Report on the Use of the Framework of Indicators in 2016  
(Revised 1 June 2016)*



## WGC(16)3

### *Report on the Use of the Framework of Indicators in 2016*

1. At its Thirty-Second (2015) Annual Meeting, the West Greenland Commission (WGC) adopted a Multi-Annual Regulatory Measure for Fishing for Salmon at West Greenland for 2015, 2016 and 2017, WGC(15)21. The Commission also adopted a Framework of Indicators (FWI), developed by ICES, in order to identify if there had been any significant change in previously provided multi-annual management advice for the West Greenland salmon fishery. Under the regulatory measure, the Framework of Indicators (FWI) will be applied in 2016 and 2017 to evaluate if a significant change is signalled by the indicators and, therefore, that a reassessment of the ICES advice is warranted.
2. The Commission agreed that the procedure used during the previous (2012 - 2014) regulatory measure, WGC(12)12, should again be used for applying the FWI under the new measure. Thus, each WGC Party was asked to nominate a representative to serve on the FWI Working Group in 2016. The representatives appointed were Gérald Chaput (Canada), Katrine Kærgaard (Denmark (in respect of the Faroe Islands and Greenland)), Niall Ó Maoiléidigh (European Union) and Rory Saunders (USA). Gérald Chaput served as the Group's Coordinator. The Group worked by correspondence to coordinate the data collection and apply the FWI and its report is attached.
3. The Group concluded that 'the FWI does not show that there has been a significant change in the indicators used, and therefore a re-assessment of the ICES management advice for the 2016 fishery is not required'. In accordance with the request for scientific advice adopted by the Council in 2015, CNL(15)11, ICES has been advised that it does not need to provide catch options or alternative management advice for either the NAC or WGC areas.
4. This arrangement for applying the FWI again appeared to work well and within the timescale proposed by the Commission. We are grateful to the Group for its work.

Secretary  
Edinburgh  
1 June 2016



# NASCO - WEST GREENLAND COMMISSION

## REPORT OF THE FRAMEWORK OF INDICATORS WORKING GROUP 2016

### **Introduction:**

At its Annual Meeting in Goose Bay (Labrador, Canada) in June 2015, the West Greenland Commission adopted a multi-annual regulatory measure for the West Greenland salmon fishery for the years 2015, 2016 and 2017 (WGC(15)21). This regulatory measure applied to the fishery in 2015 and would be carried forward to 2016 and 2017 unless application of the Framework of Indicators (FWI) shows that there has been a significant change in the indicators used and, therefore, that a full reassessment of the management advice is required.

The Commission agreed that the same procedure used in previous years (2008, 2010, 2011, 2013, and 2014) should again be used in applying the FWI in 2016. Thus, a small group comprising one representative from each member of the Commission was appointed to work by correspondence to collect the data and apply the FWI (Annex 1 and 2). The Working Group comprised:

Gérald Chaput	Canada
Katrine Kærgaard	Denmark (in respect of the Faroe Islands and Greenland)
Niall Ó Maoiléidigh	European Union
Rory Saunders	USA

The Group was asked to complete their tasks by January 31 2016 and to liaise with the NASCO Secretariat who would present their findings to the Parties and to ICES.

### **Work of the Working Group:**

Gérald Chaput agreed to act as coordinator of the FWI Working Group for 2016 (Annex 3). Annex 4 summarizes the chronology of the work undertaken by the Group. A request for data to populate the FWI was circulated to representatives from each of the North American Commission “management units,” and returns were sent to the coordinator. The coordinator then circulated the completed FWI worksheet for 2016 (Annex 5 and 6) and the draft report to the Working Group for their review and agreement.

### **Framework of Indicators Analysis – 2016:**

ICES updated the FWI at the March 2015 meeting of the Working Group on North Atlantic Salmon and presented the updated framework analysis at the West Greenland Commission during the 2015 annual meeting of NASCO.

The FWI worksheet includes data from four North American Commission “management units”: USA, Scotia-Fundy, Gulf, and Quebec. Each Working Group member has reviewed the raw data and the FWI assessment spreadsheet and confirmed their agreement with the following summary of the findings for the return year 2015.

One indicator stock for the Quebec region did not have a value to populate the FWI; no data were available from Grande Riviere in 2015. All indicators for the 2015 return year for the USA, Scotia-Fundy and Gulf management areas were below their threshold values, averaging 26%, 17%, and 72%, respectively. In the Quebec management area, 5 of 11 indicators had

values in 2015 which exceeded the indicator specific thresholds however the overall indicator score for the area was negative (-0.12).

The assessment indicates that the Management Objectives are not expected to have been met in the four management areas included in the FWI.

**Conclusions:**

The overall conclusion of the FWI Working Group is that the FWI does not show that there has been a significant change in the indicators used, and therefore a re-assessment of the ICES management advice for the 2016 fishery is not required.

**FWI Working Group  
29 January 2016**

**Annex 1. Initial communication from NASCO to Heads of West Greenland Commission regarding application of the Framework of Indicators for 2016.**

**From:** NASCO [<mailto:hq@nasco.int>]

**Sent:** November-27-15 5:54 AM

**To:** [EMANUEL@nanog.gl](mailto:EMANUEL@nanog.gl); Daniel Morris - NOAA Federal ([daniel.morris@noaa.gov](mailto:daniel.morris@noaa.gov)); Wenghofer, Cal; Francesca Arena ([Francesca.ARENA@ec.europa.eu](mailto:Francesca.ARENA@ec.europa.eu))

**Cc:** Katrine Kaergaard ([kake@nanog.gl](mailto:kake@nanog.gl)); Rory Saunders ([rory.saunders@noaa.gov](mailto:rory.saunders@noaa.gov)); Chaput, Gerald; [carl\\_mclean@nunatsiavut.com](mailto:carl_mclean@nunatsiavut.com); Ted Potter (Cefas) ([ted.potter@cefas.co.uk](mailto:ted.potter@cefas.co.uk)); Stamatis Varsamos ([Stamatios.VARSAMOS@ec.europa.eu](mailto:Stamatios.VARSAMOS@ec.europa.eu))

**Subject:** Framework of Indicators – West Greenland Commission

**To: Heads of Delegations of the West Greenland Commission**

**From: Secretary**

**Re: Framework of Indicators – West Greenland Commission**

At the Thirty-Second Annual Meeting of the West Greenland Commission in Happy Valley-Goose Bay in June, a multi-annual Regulatory Measure was adopted for the West Greenland salmon fishery for the years 2015, 2016 and 2017, WGC(15)21. Under this measure, the updated Framework of Indicators (FWI) provided by ICES is to be applied in 2016 and 2017 to identify if there have been any significant changes to the indicators used and consequently that a reassessment of the multiannual advice is warranted.

When the FWI was run in previous years, a small Group comprising one representative of each member of the Commission worked by correspondence to collate the data and apply the FWI. This task needs to be completed by the end of January 2016 and the Secretariat will liaise with the Group and present the findings to the Parties and to ICES. The members of the Group, when it was last convened in 2014 were:

Gerald Chaput	Canada
Katrine Kærgaard	Denmark (in respect of the Faroe Islands and Greenland)
Ted Potter	European Union
Rory Saunders	US

We need to resolve the membership of the Group to apply the FWI for 2016 and I would be grateful, therefore, if you could advise me of the name of your representative **by 11 December**. Once the membership is resolved, the Group will be able to assemble the data and conduct its assessment.

Best regards

Peter Hutchinson  
Secretary

WGC14.667

## **Annex 2. Notification of representation on the FWI Working Group 2016.**

**From:** NASCO [mailto:hq@nasco.int]

**Sent:** December-17-15 6:19 AM

**To:** Katrine Kaergaard (kake@nanoq.gl); Chaput, Gerald; Niall Ó Maoiléidigh (niall.omaileidigh@marine.ie); Rory Saunders (rory.saunders@noaa.gov)

**Subject:** West Greenland Commission Framework of Indicators Working Group

Dear All,

Thank you for agreeing to serve on the West Greenland Commission's Framework of Indicators Working Group. There is one change from the 2014 participants, with Niall Ó Maoiléidigh replacing Ted Potter as the EU representative on the Group.

For 2016 the members of the Group are as follows:

Canada	Gérald Chaput
Denmark (in respect of the Faroe Islands and Greenland)	Katrine Kærgaard
European Union	Niall Ó Maoiléidigh
USA	Rory Saunders

I would ask that you appoint a Coordinator to liaise with the NASCO Secretariat and that the Group's findings be reported to us no later than 31 January 2016 so that we can inform the Parties to the West Greenland Commission and ICES of your findings. Rory Saunders served as Coordinator for the Group's work in 2014 (report attached).

With best wishes for Christmas and the New Year.

Peter Hutchinson

Secretary

WGC14.685



### **Annex 3. Agreement on tasks and coordination of the FWI Working Group 2016.**

**From:** Katrine Kærgaard [mailto:kake@nanoq.gl]  
**Sent:** December-30-15 3:02 PM  
**To:** Rory Saunders (rory.saunders@noaa.gov; Niall O Maoileidigh  
**Cc:** Chaput, Gerald  
**Subject:** Sv: West Greenland Commission Framework of Indicators Working Group (Nanoq - ID nr.: 1883440)

It all sounds good to me

Katrine

**Til:** Niall O'Maoileidigh (Niall.O'Maoileidigh@marine.ie)  
**Cc:** Katrine Kærgaard (kake@nanoq.gl), Chaput, Gerald (Gerald.Chaput@dfo-mpo.gc.ca)  
**Fra:** Rory Saunders - NOAA Federal (rory.saunders@noaa.gov)  
**Titel:** Re: West Greenland Commission Framework of Indicators Working Group  
**Sendt:** 30-12-2015 13:54:01

This all sounds good. Thanks for agreeing to coordinate the work of the group, Gerald. As you say, it is pretty straightforward. I do like your suggestion of trying to get all the pieces in place by Jan 25.

RS

**From:** Chaput, Gerald [mailto:[Gerald.Chaput@dfo-mpo.gc.ca](mailto:Gerald.Chaput@dfo-mpo.gc.ca)]  
**Sent:** 30 December 2015 13:41  
**To:** Niall O'Maoileidigh; Katrine Kaergaard ([kake@nanoq.gl](mailto:kake@nanoq.gl)); Rory Saunders ([rory.saunders@noaa.gov](mailto:rory.saunders@noaa.gov))  
**Subject:** RE: West Greenland Commission Framework of Indicators Working Group

Short answers, it will be straightforward to coordinate this. As the indicators are all from North American stocks, mostly Canadian, one of us from North America can look after coordination – Rory coordinated the group when the FWI was last run in 2014 so I don't mind doing it this year. The process is fairly easy for the group. When the spreadsheet of indicators is compiled and a brief report prepared by the coordinator, it is circulated to the group for comment and approval. The chair of the ICES Working Group does not / has not been involved, this is a NASCO led task. The group is asked to report to NASCO by Jan. 31, 2016 so we should work to have the data compiled and the draft report for circulation to the working group by Jan. 25 (Monday).

Gérald Chaput

**From:** Niall O'Maoileidigh [mailto:[Niall.O'Maoileidigh@Marine.ie](mailto:Niall.O'Maoileidigh@Marine.ie)]  
**Sent:** December-30-15 8:40 AM  
**To:** Katrine Kaergaard ([kake@nanoq.gl](mailto:kake@nanoq.gl)); Chaput, Gerald; Rory Saunders ([rory.saunders@noaa.gov](mailto:rory.saunders@noaa.gov))  
**Subject:** RE: West Greenland Commission Framework of Indicators Working Group

As the Newbie I'm happy to leave it to one of the more experienced framework people to do the coordinating role. Not sure how you have handled this in the past but is the chair of the wgnas involved as well ?

Regards  
NÓM

#### **Annex 4. Summary of Correspondence by FWI Working Group 2016**

<b>Date</b>	<b>Contact</b>	<b>Action</b>
27-Nov-15	Secretariat	Request to Heads of WGC for nominations to the FWI Working Group
17-Dec-15	Secretariat	Confirmation of membership and responsibilities of FWI Working Group
30-Dec-15	Group	Agreement on coordinator and tasks
15-Jan-16	Chaput	Request for data inputs sent to Canadian and USA contacts
22-Jan-16	Oliver Cox	Data submitted to coordinator for USA indicators
25-Jan-16	J. April, C. Breau, S. Douglas, R. Jones, A. Levy	Data submitted to coordinator for Canadian indicators
25-Jan-16	Chaput	Completed FWI worksheet and prepared draft report.
25-Jan-16	Chaput	Draft report circulated to FWI-WG for approval including FWI input data, FWI worksheet and draft conclusions of assessment.
28-Jan-16	Kærgaard	Confirmed agreement with assessment and report on behalf of Denmark (in respect of the Faroe Islands and Greenland)
28-Jan-16	Ó Maoiléidigh	Confirmed agreement with assessment and report on behalf of EU
28-Jan-16	Saunders	Confirmed agreement with assessment and report on behalf of US
29-Jan-16	Chaput	Agreed Report of FWI-Working Group sent to Peter Hutchinson, NASCO

**Annex 5. Data inputs to 2015 for the 2016 Indicator Framework (including comments by data providers).**

Contact / Contacte	Geographic Area / Région	River and Indicator / Rivière et indicateur	Units / Unités	2015 value	Comments from data providers for 2015
Rory Saunders	USA	Penobscot 2SW Returns	Number of 2SW fish (wild & hatchery)	604	
Ross Jones (DFO) or Alex Levy (DFO)	Scotia-Fundy	Saint John Return Large	Number of large salmon (wild)	59	
		Lahave Return Large	Number of large salmon (wild)	37	
		North Return Large	Number of large salmon (wild)	175	Estimated from dive counts not rec. catch
		Saint John Survival Hatchery 2SW (%)	Return rate (%) of hatchery smolts to 2SW fish	0.022	
		Saint John Survival Hatchery 1SW (%)	Return rate (%) of hatchery smolts to 1SW fish	0.176	
		Saint John Return 1SW	Number of small salmon (wild)	400	
		LaHave Return 1SW	Number of small salmon (wild)	314	
Scott Douglas (DFO) or Cindy Breau	Gulf	Miramichi Return 2SW	Number of 2SW fish	10,867	
		Miramichi Return 1SW	Number of 1SW fish	26,120	
		Margaree Return Large	Number of large salmon (all)	2,800	preliminary results as of Jan. 25, 2016; based on 391 stubs
Julien April	Quebec	Bonaventure (Q1) Return Large	Retour de pluribermarin / number of large salmon	1694	
		Grande Rivière (Q2) Return Large	Retour de pluribermarin / number of large salmon		no data for 2015
		Saint-Jean (Q2) Return Large	Retour de pluribermarin / number of large salmon	744	
		Dartmouth (Q2) Return Large	Retour de pluribermarin / number of large salmon	635	
		Madeleine (Q3) Return Large	Retour de pluribermarin / number of large salmon	546	
		Sainte-Anne (Q3) Return Large	Retour de pluribermarin / number of large salmon	603	
		Mitis (Q3) Return Large	Retour de pluribermarin / number of large salmon	558	
		De la Trinite (Q7) Return Large	Retour de pluribermarin / number of large salmon	140	
		Madeleine (Q3) Return Small	Retour de madeleineau / return of small salmon	807	
		De la Trinite (Q7) Return Small	Retour de madeleineau / return of small salmon	571	
		De la Trinite (Q7) Survival 1SW (%)	Taux de retour (%) unibermarin / return rate (%) 1SW salmon	1.87	
		De la Trinite (Q7) Survival 2SW (%)	Taux de retour (%) dibermarin / return rate (%) 2SW salmon	0.26	

**Annex 6. Indicator Framework sheet with 2015 indicators analysis.**

	<b>Catch Advice</b>	<b>Catch option &gt; 0 (Yes = 1, No = 0)</b>								
	<b>Overall Recommendation</b>									
	<b>No Significant Change Identified by Indicators</b>									
Geographic Area	River/ Indicator	2015 Value	Ratio Value to Threshold	Threshold	True Low	True High	Indicator State	Probability of Correct Assignment	Indicator Score	Management Objective Met?
<b>USA</b>	Penobscot 2SW Returns	604	26%	2,368	100%	100%	-1	1	-1	
	<i>possible range</i>				-1.00	1.00				
	<b>Average</b>		26%						<b>-1.00</b>	<b>No</b>
<b>Scotia-Fundy</b>	Saint John Return Large	59	2%	3,329	96%	100%	-1	0.96	-0.96	
	Lahave Return Large	37	13%	285	79%	85%	-1	0.79	-0.79	
	North Return Large	175	28%	626	96%	96%	-1	0.96	-0.96	
	Saint John Survival 2SW (%)	0.02	17%	0.131	96%	81%	-1	0.96	-0.96	
	Saint John Survival 1SW (%)	0.18	23%	0.763	88%	73%	-1	0.88	-0.88	
	Saint John Return 1SW	400	18%	2,276	88%	80%	-1	0.88	-0.88	
	LaHave Return 1SW	314	19%	1,679	95%	67%	-1	0.95	-0.95	
	<i>possible range</i>				-0.91	0.83				
	<b>Average</b>		17%						<b>-0.91</b>	<b>No</b>
<b>Gulf</b>	Miramichi Return 2SW	10,867	74%	14,695	100%	82%	-1	1.00	-1.00	
	Miramichi Return 1SW	26,120	63%	41,588	90%	68%	-1	0.90	-0.90	
	Margaree Return Large	2,800	81%	3,471	86%	56%	-1	0.86	-0.86	
	<i>possible range</i>				-0.92	0.69				
	<b>Average</b>		72%						<b>-0.92</b>	<b>No</b>
<b>Quebec</b>	Bonaventure Return Large	1,694	113%	1,493	81%	73%	1	0.73	0.73	
	Grande Rivière Return Large			442	100%	82%				
	Saint-Jean Return Large	744	73%	1013	77%	100%	-1	0.77	-0.77	
	Dartmouth Return Large	635	84%	756	82%	79%	-1	0.82	-0.82	
	Madeleine Return Large	546	79%	693	93%	81%	-1	0.93	-0.93	
	Sainte-Anne Return Large	603	103%	584	88%	80%	1	0.8	0.8	
	Mitis Return Large	558	151%	369	89%	59%	1	0.59	0.59	
	De la Trinité Return Large	140	36%	385	84%	92%	-1	0.84	-0.84	
	Madeleine Return Small	807	135%	600	79%	82%	1	0.82	0.82	
	De la Trinité Return Small	571	60%	949	77%	100%	-1	0.77	-0.77	
	De la Trinité 1SW Survival	1.87	126%	1.49	78%	80%	1	0.8	0.8	
	De la Trinité 2SW Survival	0.26	48%	0.54	92%	73%	-1	0.92	-0.92	
	<i>possible range</i>				-0.84	0.82				
	<b>Average</b>		92%						<b>-0.12</b>	<b>No</b>
<b>Newfoundland</b>										
	<i>possible range</i>									
	<b>Average</b>								<b>NA</b>	<b>Unknown</b>
<b>Labrador</b>										
	<i>possible range</i>									
	<b>Average</b>								<b>NA</b>	<b>Unknown</b>
<b>Southern NEAC</b>										
	<i>possible range</i>									
	<b>Average</b>								<b>NA</b>	<b>Unknown</b>