



West Greenland Commission

WGC(17)3

Report on the Use of the Framework of Indicators in 2017

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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) would be applied in 2016 and 2017 to evaluate if a significant change is signalled by the indicators and, therefore, that a re-assessment of the ICES advice is warranted.
2. The Commission agreed that each WGC Party should again nominate a representative to serve on the FWI Working Group in 2017. The representatives appointed were Gérald Chaput (Canada), Esben Ehlers (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 Co-ordinator. The Group worked by correspondence to co-ordinate the data collection and apply the FWI and its report is attached.
3. 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 2017 fishery is not required'.
4. In light of the Group's conclusions, ICES has been informed that the items relating to the provision of catch options or alternative management advice (items 3.4 (NAC) and 4.3 (WGC)) and updating of the Framework of Indicators (items 3.5 (NAC) and 4.4 (WGC)) of the Request for Scientific Advice from ICES, CNL(16)12, do not need to be addressed in 2017.
5. The arrangement for applying the FWI again appeared to work well and within the timescale proposed by the Commission. We are grateful to the FWI Working Group for its work in 2017.

Secretary
Edinburgh
7 April 2017

NASCO - WEST GREENLAND COMMISSION

REPORT OF THE FRAMEWORK OF INDICATORS WORKING GROUP 2017

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, 2014, and 2016) should again be used in applying the FWI in 2017. 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
Esben Ehlers	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, 2017 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 2017 (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 2017 (Annex 5 and 6) and the draft report to the Working Group for their review and agreement.

Framework of Indicators Analysis – 2017

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 2016.

Data for 2016 were available and provided for all the indicators in the spreadsheet. All indicators for the 2016 return year for the USA, Scotia-Fundy and Gulf management areas were below their threshold values, averaging 12%, 22%, and 70%, respectively. In the

Quebec management area, 3 of 12 indicators had values in 2016 which exceeded the indicator specific thresholds however the overall indicator score for the area was negative (-0.45).

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 2017 fishery is not required.

The working group acknowledges the contributions of the data providers: Vanessa Cauchon (Province of Quebec, Ministry of Forestry, Fauna, and Parks), Alex Levy, Ross Jones, Scott Douglas and Sophie LeBlanc (Fisheries and Oceans Canada), and Rory Saunders (USA).

FWI Working Group
1 February 2017

Annex 1. Initial communication from NASCO to Heads of West Greenland Commission regarding application of the Framework of Indicators for 2017.

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

Sent: December-21-16 1:10 PM

To: EMANUEL@nanoq.gl; Daniel Morris - NOAA Federal (daniel.morris@noaa.gov); Lapointe, Sylvie; Francesca Arena (Francesca.ARENA@ec.europa.eu)

Cc: Esben Ehlers; Rory Saunders (rory.saunders@noaa.gov); Chaput, Gerald; Carl McLean; Stamatios Varsamos (Stamatios.VARSAMOS@ec.europa.eu); Milburn, Derrick

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 2015, 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 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 Working 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 2017 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 2016 were:

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

We need to resolve the membership of the Group to apply the FWI in 2017, including appointing replacements for Ted Potter and Katrine Kærgaard. I would be grateful, therefore, if you could advise me of the name of your representative **by 6 January**. Once the membership is resolved, the Group will be able to assemble the data and conduct its assessment.

Best regards

Peter Hutchinson
Secretary

WGC14.747

NASCO
11 Rutland Square
Edinburgh
EH1 2AS
UK

Annex 2. Notification of representation on the FWI Working Group 2017.

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

Sent: January-13-17 7:27 AM

To: Chaput, Gerald; Esben Ehlers; Niall Ó Maoiléidigh (niall.omaileidigh@marine.ie); Rory Saunders (rory.saunders@noaa.gov)

Subject: 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 2016 participants, with Esben Ehlers replacing Katrine Kærgaard as the Denmark (in respect of the Faroe Islands and Greenland) representative on the Group.

The members of the Group for the 2017 assessment are as follows:

Canada	Gérald Chaput
Denmark (in respect of the Faroe Islands and Greenland)	Esben Ehlers
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 2017 so that we can inform the Parties to the West Greenland Commission and ICES of your findings. Gérald Chaput served as Coordinator for the Group's work last year (report attached).

Best regards

Peter Hutchinson
Secretary

WGC14.756

NASCO
11 Rutland Square
Edinburgh
EH1 2AS
UK

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

From: Chaput, Gerald
Sent: January-16-17 7:13 PM
To: 'NASCO'; Esben Ehlers; Niall Ó Maoiléidigh (niall.omaileidigh@marine.ie); Rory Saunders (rory.saunders@noaa.gov)
Subject: RE: Framework of Indicators Working Group

Hello to everyone, and best wishes for 2017. I hope you are all well.
If someone wants to coordinate this work, please feel free to offer. Otherwise I would be happy to do so.
I will send around the request for data shortly, all the data series are from Canada except one which is the 2SW returns to Penobscott River.
Talk to you soon,

Gérald Chaput
Coordinator, Centre for Science Advice, Gulf Region
Fisheries and Oceans Canada/Government of Canada

From: Niall O'Maoileidigh [mailto:Niall.O'Maoileidigh@Marine.ie]
Sent: January-17-17 6:30 AM
To: Chaput, Gerald; NASCO; Esben Ehlers; Rory Saunders (rory.saunders@noaa.gov)
Subject: RE: Framework of Indicators Working Group

Hi Gerald
I am very happy for you to co-ordinate given your familiarity with the process and the data.
Regards
NOM

From: Rory Saunders - NOAA Federal [mailto:rory.saunders@noaa.gov]
Sent: January-17-17 10:20 AM
To: Chaput, Gerald
Cc: NASCO; Esben Ehlers; Niall Ó Maoiléidigh (niall.omaileidigh@marine.ie)
Subject: Re: Framework of Indicators Working Group

Thanks very much, Gerald, for your offer to coordinate the work of the group. I will get the Penobscot River data to you as soon as I can. Thanks very much.
RS

From: Esben Ehlers [mailto:eseh@nanoq.gl]
Sent: January-17-17 4:37 PM
To: hq@nasco.int; Niall Ó Maoiléidigh (niall.omaileidigh@marine.ie); Chaput, Gerald; Rory Saunders (rory.saunders@noaa.gov)
Subject: Sv: Framework of Indicators Working Group (Nanoq - ID nr.: 4366333)

Hello everybody
Well, since I am the new guy in this WG I would very much appreciate that Gérald (or just someone else than me) took the coordination-task on his shoulders. So, thank you very much, Gérald. See you all sooner or later
Best regards,
Esben

Annex 4. Summary of Correspondence by FWI Working Group 2016

Date	Contact	Action
21-Dec-16	Secretariat	Request to Heads of WGC for nominations to the FWI Working Group
13-Jan-17	Secretariat	Confirmation of membership and responsibilities of FWI Working Group
17-Jan-17	Group	Agreement on coordinator and tasks
17-Jan-17	Gérald Chaput	Request for data inputs sent to Canadian and USA contacts
17-Jan-17	Rory Saunders	Data submitted to coordinator for USA indicator
19-Jan-17	Ross Jones	Data submitted to coordinator for Scotia-Fundy indicators of Saint John
25-Jan-17	Alex Levy	Data submitted to coordinator for Scotia-Fundy indicators of Nova Scotia
26-Jan-17	Vanessa Cauchon	Data submitted to coordinator for Quebec indicators
27-Jan-17	Gérald Chaput	Data compiled from inputs for Gulf indicators
28-Jan-17	Gérald Chaput	Completed FWI worksheet and prepared draft report.
28-Jan-17	Gérald Chaput	Draft report circulated to FWI-WG for approval including FWI input data, FWI worksheet and draft conclusions of assessment.
30-Jan-17	Saunders	Confirmed agreement with assessment and report on behalf of US
31-Jan-17	Esben Ehlers	Confirmed agreement with assessment and report on behalf of Denmark (in respect of the Faroe Islands and Greenland)
1-Feb-17	Niall Ó Maoiléidigh	Confirmed agreement with assessment and report on behalf of EU
1-Feb-17	Gérald 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	2016 value	Comments from data providers for 2016
Rory Saunders	USA	Penobscot 2SW Returns	Number of 2SW fish (wild & hatchery)	286	
Ross Jones (DFO) and Alex Levy (DFO)	Scotia-Fundy	Saint John Return Large	Number of large salmon (wild)	65	
		Lahave Return Large	Number of large salmon (wild)	88	
		North Return Large	Number of large salmon (wild)	173	Estimated from early Oct. dive count and max. observation rate.
		Saint John Survival Hatchery 2SW (%)	Return rate (%) of hatchery smolts to 2SW fish	0.088	
		Saint John Survival Hatchery 1SW (%)	Return rate (%) of hatchery smolts to 1SW fish	0.105	
		Saint John Return 1SW	Number of small salmon (wild)	195	
		LaHave Return 1SW	Number of small salmon (wild)	45	
Scott Douglas (DFO) and Sophie LeBlanc	Gulf	Miramichi Return 2SW	Number of 2SW fish	10,908	median estimate of 18180 large salmon, at 60% 2SW salmon
		Miramichi Return 1SW	Number of 1SW fish	15,160	median estimate of small salmon from model run dec 2016
		Margaree Return Large	Number of large salmon (all)	2,498	preliminary estimate based on model run jan 27 2017
Vanessa Cauchon	Quebec	Bonaventure (Q1) Return Large	Retour de pluribermarin / number of large salmon	716	
		Grande Rivière (Q2) Return Large	Retour de pluribermarin / number of large salmon	316	estimated from half-season dive count
		Saint-Jean (Q2) Return Large	Retour de pluribermarin / number of large salmon	662	
		Dartmouth (Q2) Return Large	Retour de pluribermarin / number of large salmon	655	
		Madeleine (Q3) Return Large	Retour de pluribermarin / number of large salmon	652	
		Sainte-Anne (Q3) Return Large	Retour de pluribermarin / number of large salmon	797	
		Mitis (Q3) Return Large	Retour de pluribermarin / number of large salmon	835	
		De la Trinite (Q7) Return Large	Retour de pluribermarin / number of large salmon	221	
		Madeleine (Q3) Return Small	Retour de madeleineau / return of small salmon	505	
		De la Trinite (Q7) Return Small	Retour de madeleineau / return of small salmon	578	
		De la Trinite (Q7) Survival 1SW (%)	Taux de retour (%) unibermarin / return rate (%) 1SW salmon	1.22	
		De la Trinite (Q7) Survival 2SW (%)	Taux de retour (%) dibermarin / return rate (%) 2SW salmon	0.64	

Annex 6. Indicator Framework sheet with 2016 indicators analysis.

	Catch Advice	Catch option > 0 (Yes = 1, No = 0)								
	Overall Recommendation									
	No Significant Change Identified by Indicators									
Geographic Area	River/ Indicator	2016 Value	Ratio Value to Threshold	Threshold	True Low	True High	Indicator State	Probability of Correct Assignment	Indicator Score	Management Objective Met?
USA	Penobscot 2SW Returns	286	12%	2,368	100%	100%	-1	1	-1	
	<i>possible range</i>				-1.00	1.00				
	Average		12%						-1.00	No
Scotia-Fundy	Saint John Return Large	65	2%	3,329	96%	100%	-1	0.96	-0.96	
	Lahave Return Large	88	31%	285	79%	85%	-1	0.79	-0.79	
	North Return Large	173	28%	626	96%	96%	-1	0.96	-0.96	
	Saint John Survival 2SW (%)	0.09	67%	0.131	96%	81%	-1	0.96	-0.96	
	Saint John Survival 1SW (%)	0.11	14%	0.763	88%	73%	-1	0.88	-0.88	
	Saint John Return 1SW	195	9%	2,276	88%	80%	-1	0.88	-0.88	
	LaHave Return 1SW	45	3%	1,679	95%	67%	-1	0.95	-0.95	
	<i>possible range</i>				-0.91	0.83				
	Average		22%						-0.91	No
Gulf	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	2,498	72%	3,471	86%	56%	-1	0.86	-0.86	
	<i>possible range</i>				-0.92	0.69				
	Average		70%						-0.92	No
Quebec	Bonaventure Return Large	716	48%	1,493	81%	73%	-1	0.81	-0.81	
	Grande Rivière Return Large	316	71%	442	100%	82%	-1	1.00	-1.00	
	Saint-Jean Return Large	662	65%	1013	77%	100%	-1	0.77	-0.77	
	Dartmouth Return Large	655	87%	756	82%	79%	-1	0.82	-0.82	
	Madeleine Return Large	652	94%	693	93%	81%	-1	0.93	-0.93	
	Sainte-Anne Return Large	797	136%	584	88%	80%	1	0.8	0.8	
	Mitis Return Large	835	226%	369	89%	59%	1	0.59	0.59	
	De la Trinité Return Large	221	57%	385	84%	92%	-1	0.84	-0.84	
	Madeleine Return Small	505	84%	600	79%	82%	-1	0.79	-0.79	
	De la Trinité Return Small	578	61%	949	77%	100%	-1	0.77	-0.77	
	De la Trinité 1SW Survival	1.22	82%	1.49	78%	80%	-1	0.78	-0.78	
	De la Trinité 2SW Survival	0.64	119%	0.54	92%	73%	1	0.73	0.73	
	<i>possible range</i>				-0.85	0.82				
	Average		94%						-0.45	No
Newfoundland	<i>possible range</i>									
	Average								NA	Unknown
Labrador	<i>possible range</i>									
	Average								NA	Unknown
Southern NEAC	<i>possible range</i>									
	Average								NA	Unknown