West Greenland Commission
Inter-Sessional Meeting

WGCIS(17)11rev

Responses from the Parties/jurisdictions to the questions relating to the Self-assessments Using the Six Tenets for Effective Management of an Atlantic Salmon Fishery

Note:

This revised version includes responses from EU-Denmark and EU-France. It also includes responses from EU-UK (England and Wales) which were omitted in the document initially submitted by the EU. There has also been a small change for clarification in the response from EU-Germany.

WGCIS(17)11rev

Responses from the Parties/jurisdictions to the questions relating to the Self-assessments Using the Six Tenets for Effective Management of an Atlantic Salmon Fishery

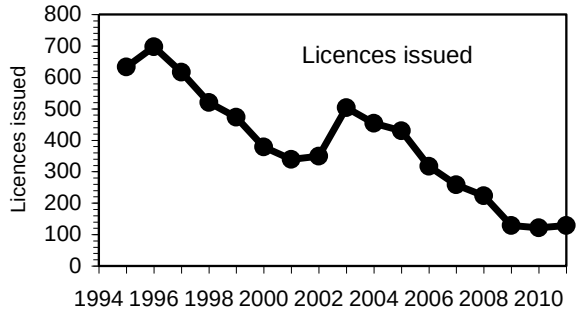
Canada

Source of Questions - United States

Recreational

Tenet 1: It would be helpful if Canada could provide information on why there is no salmon license in PEI.

Prince Edward Island is the smallest province of eastern Canada, both in terms of geographic area and population. Recreational salmon licencing is administered by the Province of Prince Edward Island, which may impose additional restrictions on salmon angling. Until 2011, recreational salmon anglers on PEI were required to first obtain a trout angling licence, and then purchase a salmon licence. Beginning in 2009, all recreational salmon angling on PEI has been catch-and-release only with a daily catch limit of two released salmon. As abundance of Atlantic salmon in PEI is low to begin with, and as abundance declined and additional restrictive management measures were put in place, the number of Atlantic salmon angling licences sold declined as well, from a peak of 697 licences in 1996 to a low of 121 licences in 2010. In 2011, the number of Atlantic salmon licences sold in PEI was 129.



Beginning in 2012, separate salmon licences were no longer issued due to the low number of salmon licences sold and the administrative costs of printing and selling such as small number of licences. The provincial angling licence confers recreational fishing access to Atlantic salmon, as well as to brook trout, rainbow trout, and white perch. Although the provincial angling licence permits salmon fishing in all waters that are legal for angling, in practice, recreational salmon fishing is limited to those rivers where the legal season overlaps with the run-timing of returning fish. For the period 2007-2011, recreational salmon catches were reported in only three rivers. In the three other rivers which have early-run components of salmon, no salmon catches were reported. For PEI as a whole, mean estimated recreational catches for 2007-2011 were 122 salmon per year of which 73 were small and 68 were large (Cairns et al. 2012).

References:

Cairns, D.K., MacFarlane, R.E., Guignion, D.L., and Dupuis, T. 2012. The status of Atlantic salmon (*Salmo salar*) on Prince Edward Island (SFA 17) in 2011. DFO Can. Sci. Advis. Sec. Res. Doc. 2012/090.

Cairns, D.K., and MacFarlane, R.E. 2015. The status of Atlantic salmon (*Salmo salar*) on Prince Edward Island (SFA 17) in 2013. DFO Can. Sci. Advis. Sec. Res. Doc. 2015/019. iv + 25 p.

Tenet 3: In Newfoundland, Labrador, and Nova Scotia, there is mandatory reporting, but Canada indicated that the reporting rate is 50%. Please explain the gap in required versus actual reporting. Are there penalties for those who do not report and if so, what are they? Additionally, it is stated that the tracking system needs electronic upgrades. Are these updates planned and, if so, when will they be implemented?

In Nova Scotia and in Newfoundland and Labrador, the issuance of angling licences is governed by the provinces. The angling report requirements attached to each licence are described in the respective provincial angling guides.

Nova Scotia: "By law, the stub return on the salmon licence must be properly filled out and mailed within seven days of the close of the season or fishing privileges may be suspended. This applies even if you didn't catch anything. If no Atlantic salmon were released, you should still record the date and rivers fished. If you did not fish for Atlantic salmon this should be indicated on the card, before mailing it to the Nova Scotia Department of Fisheries and Aquaculture. No stamp is required. This information is critical to the management of Atlantic salmon in our rivers, so your cooperation is extremely important."

Since the initiation of the licence stub reporting system, the return rate from licensed anglers has never been 100%. Catches from the fishery are estimated by raising the reported catches and effort to the total licences sold in any year.

An electronic tracking system would be required to enforce the mandatory compliance. Until this is done, it is not possible to track and enforce the return of an angling report in order to purchase an angling licence in the subsequent year. Planned upgrades to the system are ongoing.

It is the same situation for Newfoundland and Labrador.

This compliance to reporting before obtaining a licence resembles the issue of tracking unpaid parking tickets for example in order to renew a vehicle registration. With electronic registration systems, the issue of unpaid traffic violations has been resolved and the same system is envisaged for angling systems.

***Tenet 3: In New Brunswick, it was reported that there is no harvest and, thus, no reporting. Is there is a system in place to estimate effort or post-release mortality? If not, are there any plans to address this and if so, what are they*?**

In New Brunswick in 2015 and 2016, in rivers where directed Atlantic salmon angling was allowed, mandatory catch and release measures were put in place for all sizes of salmon.

Therefore, the harvest of Atlantic salmon in recreational fisheries was zero. The only areas of New Brunswick in which directed Atlantic salmon angling was allowed was in Salmon Fishing Area 15 (northeast New Brunswick) and in the portion of Salmon Fishing Area 16, which is in the Miramichi River area. Estimates of the number of catch and released fish for Salmon Fishing Area 15 were obtained from angling catch and effort data from private lodges and leases in the Restigouche River, from provincial Crown Reserve Angling reports, and estimates of catches and effort were provided by the local watershed association on the other principal angling river in this area, the Nepisiquit River. Very little other angling data has been missed from the smaller rivers or from waters of the Restigouche River that are open to public fishing. For the Miramichi River area of SFA 16, angling catch data are available from the provincial Crown Reserve waters. For the remainder of the public access waters of the Miramichi, there are no catch reports of released fish. Estimates of catch and released fish are based on the estimates of total returns to the river and estimates of exploitation rates derived from the earlier years for which estimates of angling catches (both retained and released) were available.

In the river-specific assessments of the attainment of conservation requirements, mortality from catch and release is accounted for (DFO 2014). The catch and release mortality rates were derived in the late 1980s and early 1990s based on studies on mortality of released fish and informed by scientific studies on the mortality rates from catch and release fishing (DFO 1998; Dempson et al. 2002; Thorstad et al. 2008). The rates from catch and release mortality vary by geographic area (DFO 2014). A rate of 6% is assumed for Salmon Fishing Area 15 (early running salmon, history of furunculosis in the population) and 3% is assumed for Salmon Fishing Area 16 (angling fishery occurs from June to October, less concern for disease). The application of catch and release mortality in assessments were reviewed by ICES (2009) and presented to NASCO in 2009.

References:

Dempson, J. B., Furey, G. and Bloom, M. 2002. Effects of catch and release angling on Atlantic salmon, Salmo salar L., of the Conne River, Newfoundland. Fisheries Management and Ecology 9: 139–147.

DFO. 1998. Effects of hook and release angling practices. DFO Can. Stock Assess. Secr. Science Stock Status Report D0-03 (1998).

DFO. 2014. Stock status of Atlantic salmon (*Salmo salar*) in DFO Gulf Region (Salmon Fishing Areas 15 to 18) to 2013. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2014/057.

ICES. 2009. Report of the Working Group on North Atlantic Salmon (WGNAS), 30 March–8 April, Copenhagen, Denmark. ICES CM 2009/ACOM:06. 282 pp.

Thorstad, E. B., Næsje, T. F., Mawle, G. W. and Policansky, D. 2008. The Atlantic salmon C&R story. (I: Global challenges in recreational fisheries pp. 219–222. Redigert av Aas, Ø.) Blackwell Publishing.

Subsistence

Tenet 3: Although the commercial salmon fishery is closed, is there bycatch of salmon in other fisheries and, if so, must it be reported? Are there penalties for non-reporting of salmon in directed subsistence fisheries or when it is taken as bycatch? If so, please

describe the range of penalties available and used and whether they are adequate in deterring violations?

NASCO, CNL(93)51, referring to the minimum standards for catch statistics, indicates that Atlantic Salmon Catch Statistics of the Parties to the NASCO Convention should include catches from all components of the salmon fisheries where these catches are retained, including salmon caught in non-salmon gear where retention of fish caught in this way is legal.

It is illegal in Canada to retain salmon from fishing gear other than those directed at Atlantic salmon. There are no commercial fisheries in eastern Canada. The sale of Atlantic salmon captured in any fishing gear in Canada is illegal.

NASCO defines catches as retained fish, and unreported catch as retained fish that are not in national reported statistics. Salmon that are caught in other gears but that are otherwise returned to the water, either alive or dead, are not considered as catches. As in all jurisdictions in which there are active fisheries that overlap with downstream migrating salmon or adult returning salmon, there is potential of salmon to be caught in these gears. Canada has previously noted instances of salmon being intercepted in various fishing gears but it is illegal to retain these fish and the salmon must be immediately returned to the water. It is not a requirement in most fisheries to report the catch of Atlantic salmon that is returned to the water (i.e. not retained).

Prosecutions for the illegal retention of salmon have occurred in 2016 and penalties have ranged from $300 to $5,000 to jail time in two cases.

Source of Questions - NGOs

The Working Group Report (WGCIS(16)2) states in 7.1 that 'The Working Group noted that it had also been requested to advise on whether reporting should be at the national or sub-national level. It considered that this would be a matter for the Parties/jurisdictions concerned, but where different management regimes operate in different provinces or regions, separate sub-national assessments should be considered in order to provide a clear picture of the status of those management regimes.' In the self-assessments provided, Spain (with very few and small salmon rivers) has reported on four separate jurisdictions and the UK has reported on three jurisdictions. Why did Canada, with its large salmon resource and five different recreational and subsistence fisheries management jurisdictions (provinces), decide not to follow the guidance provided by the Working Group?

The governance of Atlantic salmon fisheries in eastern Canada is overseen by Government of Canada legislation with some authorities delegated to provinces. In large part, most aspects of legislation and regulation are governed by federal acts and regulations. When appropriate, descriptions of provincial differences in governance authorities, management, licensing authorities, reporting, etc. were presented, which provides a sufficient description of the shared responsibilities of the management structure for Canada.

How did Canada decide on colour coding of a tenet when different coding may have been appropriate for the different provinces, e.g. if one was green, one was yellow and one was red, how would it be coded?

Essentially, the colour score associated with a tenet category is determined as a weighting across provinces and jurisdictions. For example, a region in which there is very good reporting of recreational catches and a large share of the recreational catch, as is the case for the province of Quebec contributes more weight to the overall score than a jurisdiction such as Prince Edward Island which does not have a dedicated angling licence for salmon, where salmon cannot be retained, consequently has zero catch, and therefore contributes essentially no weight to the overall score.

The scoring is also qualitative thus the green colour signifies that the expectations of the tenet are met, though not necessarily perfectly. In a similar way, a red colour does not represent complete absence of any consideration of the tenet expectations.

Tenet 3: It is estimated that poachers in Canada take 24 tonnes of salmon per year, yet control and enforcement is given a consistent "green" rating across fisheries. How is it that an enforcement system that allows 24 tonnes of salmon to be taken illegally is considered "good"?

Unreported catches as provided by experienced and knowledgeable field personnel have been reduced substantially over the time series in Canada. An unreported catch value of less than 30 tons represents less than 25% of the reported harvests. As fisheries progressively close and access to retention is decreased, there may well be additional illegal fishing taking place.

NGO Questions by Province

The majority of the questions from NGOs are repeated by province. The answers provided are in the context of eastern Canada and when addressed for the first time, it is simply referred to in subsequent duplicate questions. As previously indicated, salmon management is a shared responsibility with the provinces. The management of indigenous peoples' fisheries is undertaken by the Government of Canada. As indicated above, no province specific colours area attributed, rather the score is a weighted value over all jurisdictions.

<u>Recreational fishing</u>

The number of recreational fishing permits is not limited in any province. Any individual who wishes to purchase a permit is allowed to do so. Individuals can also purchase permits in any province and so have multiple permits for fishing salmon. The list of permitted individuals is known by the end of the season and is known across years.

- Various reporting mechanisms are in place
- Where salmon can now be retained, incomplete reports from anglers are raised to the entire licensed fishing pool based on returned information

<u>Subsistence fisheries</u>

In eastern Canada, the indigenous peoples' fisheries are managed by the Government of Canada, with shared responsibility in Quebec with the province of Quebec. Reporting of catches are conditions in agreements and reports are submitted by some indigenous community groups, but not all.

- It is a condition of agreements to report and there are funding conditions associated with reporting
- Proportion of aboriginal communities with fishing agreements for salmon that report catches is in the range of 66% to 100%.
- With decreased abundance of salmon in Canada, access for indigenous peoples to salmon has become more restricted.

Enforcement activities vary by province and are undertaken by federal (DFO), provincial and indigenous agencies/groups. Prosecutions and convictions are pursued by each as appropriate.

Quebec - Recreational

Tenet 2: In Quebec, permits are issued electronically and hence are not restricted to the number printed annually as stated.

Addressed in general comment

Tenet 3: As reporting of harvest is mandatory in Quebec, the colour coding for this province should likely be green, although reporting of released salmon is voluntary.

No provincial specific colours are attributed, but provincial contributions are weighted relative to the portion of the total catch they represent.

Tenet 4: For Quebec, fishing guides and plans are not provided with each license as they are no longer being produced in printed form, only electronically.

Fishing regulation is available electronically and while a printed version is not systematically provided with license, it is send by mail when requested. Information about regulation can also be obtained in a document printed by a non-governmental organisation and at the gates of controlled wildlife territories, where most of salmon angling activities occur in Quebec.

Quebec - Subsistence

Tenet 2: Does carcass tagging for retained salmon occur in Quebec?

Yes, carcass tagging occurs for community with Aboriginal communal fishing licence.

Tenet 3: What portion of licenses report their harvest in Quebec and are there any assessments to determine the accuracy of the catches that are reported? For Quebec, the coding as yellow is likely not appropriate and should be changed to red (tenet is not currently being met and significant improvement is needed to the current management regime).

The number of licenses reporting their harvest varies annually, but usually remains over 50%. For some rivers, the accuracy of the catches that are reported is assessed by governmental employees or by first nation wildlife protection groups.

Tenet 4: Are FSC licenses in Quebec negotiated annually by the Federal government, as stated?

No, FSC licenses in Quebec are negotiated by the Provincial government.

Tenet 6: Are there any scientific fishery sampling programs in Quebec? The coding as yellow is likely not appropriate and should be changed to red (tenet is not currently being met and significant improvement* is *needed to the current management regime).

Yes, there is some sampling that takes place in some fisheries within communities, but not all.

New Brunswick - Recreational

Tenet 3: What assessment is done to confirm the accuracy of catch returns? As noted, there is a very low return rate of catch information such that alternate methods are used to guesstimate the harvests and released salmon. This method of guesstimating the angling catch in New Brunswick is totally inadequate and the coding here should be red (tenet is not currently being met and significant improvement is needed to the current management regime).

The word guesstimate is not accurate for how catch information is provided. See response to question from US specific to how angling catches are tabulated.

Tenet 4: As regulatory changes in NB are not being announced in a timely fashion (often after the season has begun), the colour coding here should be yellow at best.

There are no examples for which regulations that affect the fishery were announced after the start of the season. Regulations in place from the previous year remain in effect until a change is announced; there is no retroactivity to regulations. In eastern Canada, there are very limited annual changes in fishing regulations. The only fishing conditions that have changed are related to the number of annual tags issued with a licence or the introduction of mandatory catch and release measures in recent years. These changes can be quickly incorporated through variation orders.

Tenet 5: Considering the magnitude of the recreational fishery in New Brunswick, one would expect that, if an enforcement regime was as efficient as noted in the text, there would be numerous prosecutions and convictions for illegal angling activity. How many prosecutions and convictions occur annually in New Brunswick? As there is likely much room for improvement, the colour coding here should be yellow at best.

DFO has moved to an intelligence enforcement system rather than compliance system, and enforcement personnel from DFO work in collaboration with provincial wildlife authorities and police forces in shared intelligence and enforcement. Information gathered indicates that the majority of licensed anglers in the province respect the regulations in place. Other measures that rely on public reporting of illegal activities, such as Crime Stoppers and Dial-a-poacher, are measures to reduce the attractiveness of illegal fishing activities.

As reported in Canada's Annual progress report, here are the statistics for detected violations Canada in 2016:

Region	Total
GULF / GOLFE	30
MARITIMES	37
NEWFOUNDLAND & LABRADOR	170
QUEBEC	135
Grand Total	242

by Action Taken	Total
CHARGES LAID	178
CONVICTIONS	54
CHARGES NOT APPROVED	3
CHARGES PENDING/UNDER REVIEW	70
NATIVE PROTOCOL	4
SEIZURE(S) - PERSONS UNKNOWN	33
TICKET ISSUED	12
WARNING ISSUED	72
Grand Total	372

by Violation Type	Total
OTHER LEGISLATION	15
AREA / TIME	107
ASSAULT/ OBSTRUCT	5
GEAR - ILLEGAL/ USED ILLEGALLY	95
GEAR CONFLICT	0
HABITAT	3
ILLEGAL BUY/SELL/POSSESS	64
INSPECTION	0
REGISTRATION / LICENCE	80
QUOTA / BAG LIMIT	3
Grand Total	372

Tenet 6: As there is no biological sampling of harvests, how can the colour coding for this tenet be green for New Brunswick?

On the largest Atlantic salmon river in the Maritime provinces, DFO science operates monitoring facilities to sample and collect biological characteristics of the returning salmon. Sampling of aboriginal fisheries harvests also occurs in some fisheries and aboriginal fisheries trap nets in the Miramichi are also used to catch, sample, tag and release salmon as part of the annual assessment programs. Therefore, there is ample biological information on the characteristics of salmon from those fisheries.

New Brunswick - Subsistence

Tenet 3: What proportion of the FSC licenses are reported in New Brunswick each year and how are the reported catches used to determine total catch (assuming that there is not 100% reporting)?

In the Gulf Region, 100% of Aboriginal groups with Aboriginal Fisheries Strategy Agreements that include access to Atlantic salmon for food, social and ceremonial purposes

report their catches annually to the Department, as part of their reporting requirements under the said agreement.

***Tenet 3: What assessment is conducted in New Brunswick to determine the accuracy of these catch reports*?**

See general comments. In New Brunswick, sampling occurs collaboratively with several aboriginal communities

Tenet 5: How many prosecutions and convictions occur annually for these fisheries in New Brunswick? As there is likely much room for improvement, the colour coding here should be yellow at best.

See general response section.

Prince Edward Island - Recreational

Tenet 1: How does Canada determine the number of anglers fishing for salmon in PEI when there is not a separate licensing and how is the number of salmon released determined (as there is currently no retention allowed)? The colour coding here for this tenet and Tenet 3 should be red for PEI.

See response provided to question from US. No province specific assessment is made. As stated earlier, the fishery in PEI is very small, low levels of effort and therefore the consequence on knowing the number of individuals fishing for salmon in eastern Canada is negligible. But anyone fishing recreationally in PEI requires a licence so ultimately the pool of individuals who could incidentally hook and release a salmon is known.

Nova Scotia - Recreational

Tenet 1: While a salmon license is required when targeting wild Atlantic salmon, many anglers are using a general fishing license while salmon fishing, claiming to be fishing for other species i.e. trout, striped bass, etc. How does Canada therefore determine the entire pool of participants and also their catch and release (Tenet 3)?

The statement that many anglers are using a general fishing license while salmon fishing is not a verifiable statement and it is not information which Canada can reliably state. Anecdotal statements from certain conservation organizations have been made but not verified. In fact, there is no legislation that prevents a licensed recreational fisher fishing for other species from incidentally catching a salmon, but it is illegal to retain a salmon under these circumstances. As this fishery is not a directed salmon fishery, incidental catches that may occur are not considered in the estimates of catch and release that apply to directed fisheries on salmon. In some cases where this issue was known to have occurred, DFO addressed it by delaying season openings for other species and closing river sections and known salmon pools to angling for all species.

Tenet 3: Canada has noted that a license stub return is mandatory in Nova Scotia. What portion of licence stubs are actually returned in recent years and how does this compare to historical proportions of return?

The proportion of licensed salmon anglers in Nova Scotia that return licence stubs has varied over time. The return rate improves with issuance of reminder letters; the number of reminder letters has varied over time, and they were not sent in all years. Based on return rates and catch and effort associations between unprompted returns and returns with prompts, estimates of total catch and effort are derived. Based on the number of license stubs returned prior to sending reminder letters to anglers, the average return rate for the past five years (2011-2015) was 26%. This rate of license stub return prior to sending the reminder letters has generally declined over the time series (1983-2015) and averaged 43% during the 1983-1987 time period. During the last five years (2011-2015) one reminder letter was sent to anglers and this improved the average return rate from 26% to 39%. DFO is aiming to send reminder letters this year once vendor information has been submitted.

Nova Scotia - Subsistence

Tenet 3: What proportion of the FSC licenses are reported in Nova Scotia each year and how are the reported catches used to determine total catch (assuming that there is not 100% reporting)?

See general response section

Tenet 3: What assessment is conducted in Nova Scotia to determine the accuracy of these catch reports?

See general response section.

Tenet 5: How many prosecutions and convictions occur annually for these fisheries in Nova Scotia. As there is likely much room for improvement, the colour coding here should be yellow at best.

See general response section.

Newfoundland and Labrador - Recreational

Tenet 1: How can the entire pool of participants be available at any time when it depends on when vendors submit their information? For the recreational fishery, the participants are only known post-season.

While information on the pool of participants in the recreational fishery is not readily available until after the season, if there was a significant requirement to know this information during the season, it is possible (although a significant workload) to obtain. The total number of licences issued is fairly stable and does not change much year over year. Likewise, it is very likely a significant number of the licences issued in the current year are to individuals that held a licence in the previous year.

Tenet 3: Canada has noted that a license stub return is mandatory in Newfoundland and Labrador. What portion of license stubs are actually returned in recent years and how does this compare to historical proportions of return?

In Newfoundland and Labrador, an assessment of return rate, validity and potential biases of the licence stub return program was published by Vienott and Cochrane in 2014. Return rates show a decline from a higher level of >50% in the mid-1990s to 25% by 2012. Total catch and effort are estimated by raising to total licences sold.

Reference:

Veinott, G., and N. Cochrane. 2015. Accuracy and Utility of the Atlantic Salmon Licence Stub (Angler Log) Return Program in Newfoundland and Labrador. DFO Can. Sci. Advis. Sec. Res. Doc. 2014/035. v+ 14 p.

Newfoundland and Labrador - Subsistence

Tenet 3: What proportion of the FSC licenses are reported from Labrador each year and how are the reported catches used to determine total catch (assuming that there is not 100% reporting)?

See general response section.

Tenet 3: What assessment is conducted in Labrador to determine the accuracy of these catch reports?

See general response section.

Tenet 5: How many prosecutions and convictions occur annually for these fisheries in Labrador? As there is likely much room for improvement, the colour coding here should be yellow at best.

See general response section.

Tenet 5: Enforcement is thought to be lacking in Labrador as often Fishery Officer positions are left vacant in important FSC fishing areas such as Cartwright and Nain. What efforts are occurring to assure staff in these areas?

The Goose Bay Detachment encompasses the bulk of Labrador with the exception of the Labrador Straits (NAFO Division 4R). The Detachment is made up of 4 Satellite offices located in Nain (one FO), Makkovik (currently vacant), Cartwright (currently vacant), St. Lewis (4 FO's) and the Detachment Office at Goose Bay (4 FO's, Detachment Supervisor and Administrative Assistant). In addition, 3-4 seasonal fishery guardians are hired in support of enforcement operations within the detachment. On the southern portion of the Goose Bay Detachment support is provided by fishery officers from the Rocky Harbour Detachment.

In 2015, C&P implemented the Mid-shore Patrol Vessel Program (MSPV) within the Atlantic Region. These vessels enhanced the programs ability to provide enforcement coverage in remote coastal areas, particularly the north coast of Labrador during peak fishing periods.

These vessels can carry up to three fishery officers and have a fast rescue craft for boarding operations, providing the ability to quickly access remote areas and fill any gaps in our work plan with respect to FSC fisheries.

In addition, C&P are planning to implement transient housing and modified office space at Makkovik and Cartwright to facilitate the continuation of the Conservation and Protection program in the face of low staffing levels.

From a program performance perspective, feedback from user groups has indicated that the current enhancements to the program have greatly improved fishery officer visibility on the Labrador coast.

European Union

Questions to European Union - Denmark

Source of Questions - United States

Recreational

Tenet 1: We would appreciate more information on this tenet to support an amber rating. Is there is a mechanism in Denmark that the government can use to track total participation in the recreational fishery.

Yes: if required, total participation can be achieved from the local fishing clubs.

Tenet 2: Regarding question 1 of this tenet, we would appreciate more information on how catch limits and seasons are set, monitored, and closed. Regarding question two, we would appreciate more information on if and how management measures are consistent with NASCO guidelines.

Catch limits are set for each river. Quotas are set by two different size groups, over/under 75 cm to separate grilse and MSW. The quotas are based on biannually population estimated (mark/recapture), with specific focus on not overharvesting MSW fish. Registration on catches is mandatory, within 24 hours from catch time, of both released and kept fish. Registration is done by the local fishing club, and is available on the internet. Once number of kept fish in each size group is reached, release is mandatory.

Effects of management measures are assessed continuously, by biannually population estimates and by total yearly catch for each river system, consistent with the NASCO guidelines.

Tenet 3: We would appreciate additional information to support a green rating for this tenet. This tenet is designed to assess whether what is reported is an accurate assessment or not. Examples of achievement are provided by the working group (WGCIS(16)3)) and include license inspections, vessel inspections, among others. Please clarify what approaches or methods are in place to ensure the mandatory reporting of all salmon

catches is "accurate, effective, and timely reporting by all participants?" Regarding question 2, it would be helpful if Denmark could describe how assessments are conducted to confirm the accuracy of catch returns. Additionally, regarding question 3, we would appreciate an explanation on how the outputs from the first two questions in this tenet are used to set catch limits and effectively limit harvests.

Only a recreational rod fishery on salmon is allowed in Denmark, hence vessel inspections are redundant.

Registration on catches is mandatory, within 24 hours from catch time, of both released and kept fish. Registration is done by the local fishing club, and is available on the internet.

There is a high degree of "social control" on catches. Local anglers check licenses and catches regularly. Noncompliance with the rules results in immediate exclusion from the fishery and report to legal authorities. In addition, the control authorities also carry out random sampling

Tenet 4: Regarding question 2, additional information on precisely what information is shared in the constituent meetings would be helpful.

At the meeting total catches and total stockings in each river system are shared as well as relevant study results, e.g. if a smolt-run has been counted.

Tenet 5: Additional information on how much enforcement activity is undertaken would be helpful. We would also appreciate any additional information on the type and extent of available penalties (e.g., what is the range of fines that can be assessed, what is the process for excluding someone from the fishery if they do not have a government run licensing program?) and how often fines or other penalties have been used.

For rod fishery in 2016, the authorities issued 2.970 angling licenses and for the recreational fishery, 1.600 licenses. Licenses for salmon fishery are included in these figures, so no separate record is included for the salmon fishery. 3.6 % of the rod anglers controlled were fishing without a valid license and 2.3 % of the controlled recreational anglers had no valid license. The penalty sanction for being caught without a license is four times the price of the license. The penalty for fishing in closed areas or with unauthorized gears amounts to DKK 2.200 and in severe cases the license can be confiscated for certain time of period.

Tenet 6: We would appreciate additional information to support the green rating for this tenet given that information gathered by measuring spawning runs seems to us to be different than that gathered through a sampling program for a fishery. Further, it would be helpful if Denmark could provide further information as to how the information that is collected informs the Ministry about the status of Danish salmon runs and how the Ministry uses this information in setting fishery rules.

Only a recreational rod fishery on salmon is allowed in Denmark. The spawning runs are measured bi-annually in all salmon rivers and compared with mandatory report of catches. Both are done by DTU Aqua and are ongoing reported to the Ministry, which set fishery rules accordingly.

Questions to European Union - France

Tenet 1: We would appreciate clarification on how France knows the full participant pool for recreational fisheries in Brittany and Normandy since there is no licensing requirement. Further, how are TACs in these recreational fisheries monitored and controlled? For those fisheries that do require licenses, please describe how licenses are issued and controlled as well as how and when the licensing system allows France to know the pool of participants for those licensed fisheries.

Fishermen hold "all migratory fish" licenses.
They are not restricted
The declarations are mandatory and there is environmental police control fishermen on site.

Tenet 2: Regarding question 1 of this tenet, we would appreciate more information on what effort controls are used (such as bag limits) as well as how they are monitored. Regarding question 2, we would ask that information on how management measures are consistent with NASCO guidelines be included in the self-assessment rather than providing a reference to a separate document.

We will soon be able to have a clear view of the various police missions related to salmon poaching:

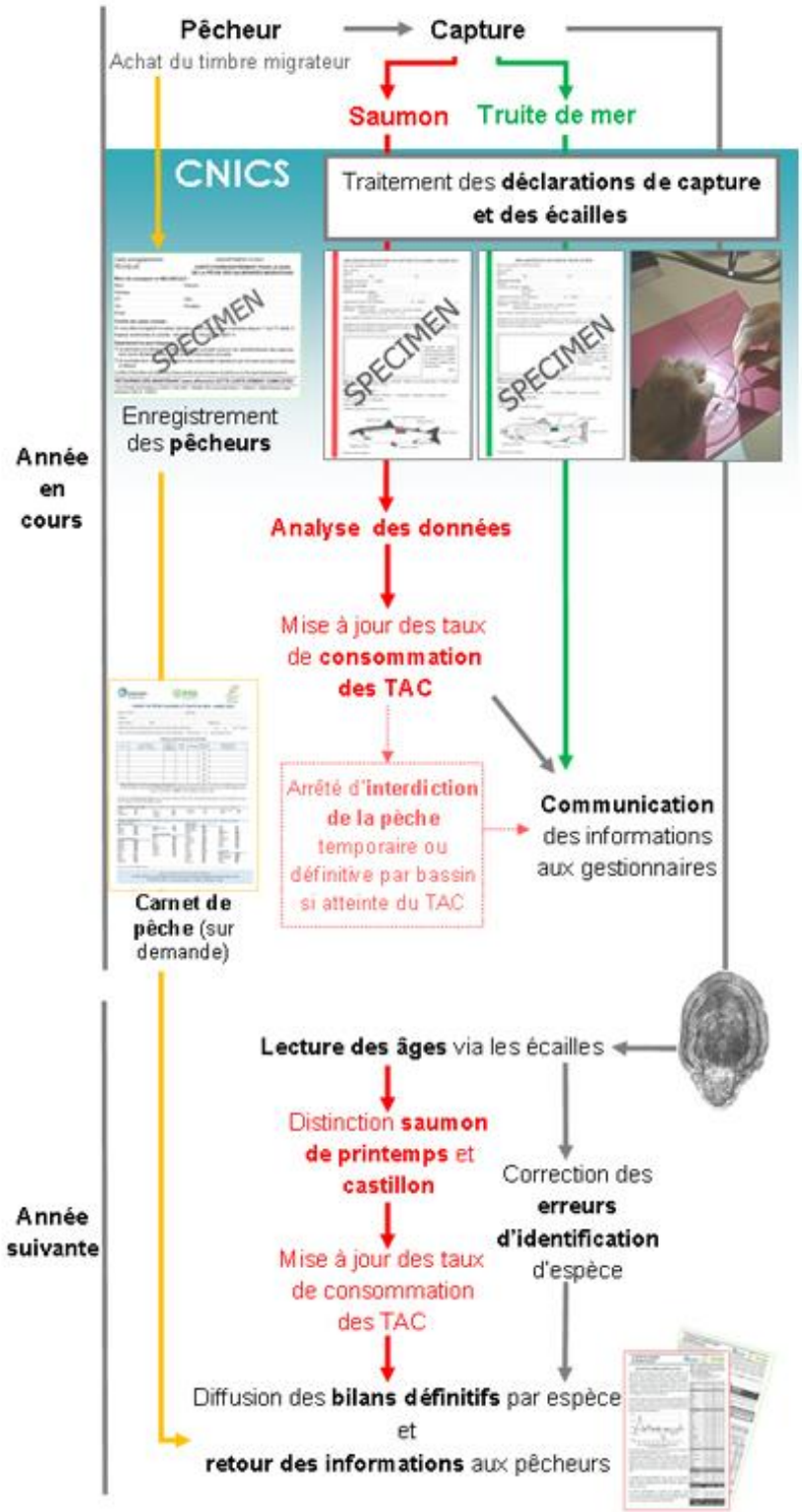
The OSCEAN project consists of developing an application and providing environmental screening officers and inspectors with assistance in carrying out their police activities and assisting with the drafting of police documents.

The main challenges of the project are:

- Enable the collection of information directly on the ground and thus limit the loss of time and the errors of re-entry
- Provide assistance in the drafting of police documents
- Improve process flow and data quality
- Allows linking to existing external applications or in the process of development (LICORNE, POSEIDON)
- Facilitate maintenance and future developments thanks to a tool developed on the basis of recent computer technologies

Tenet 3: Please explain what approaches or methods are in place to collect data, and describe the assessment process used to confirm the accuracy of catch returns. In addition, with regard to question 3, we would ask that information on how catch and assessment information are used to limit catch/harvest be included in the self-assessment rather than providing a reference to a separate document.

See diagram below


Pêcheur
Achat du timbre migrateur
Capture
Saumon
Truite de mer
CNICS
Traitement des déclarations de capture et des écailles
SPECIMEN
SPECIMEN
SPECIMEN
Enregistrement des pêcheurs
Année en cours
Analyse des données
Mise à jour des taux de consommation des TAC
Arrêté d'interdiction de la pêche temporaire ou définitive par bassin si atteinte du TAC
Communication des informations aux gestionnaires
Carnet de pêche (sur demande)
Lecture des âges via les écailles
Distinction saumon de printemps et castillon
Correction des erreurs d'identification d'espèce
Mise à jour des taux de consommation des TAC
Année suivante
Diffusion des bilans définitifs par espèce et retour des informations aux pêcheurs

Tenet 4: Please describe the measures that are in place to effectively communicate with all participants in the fishery in a timely fashion. Please also explain the methods/approaches used to communicate France's salmon fishery policies, rules, and regulations to commercial and recreational fishermen.

In addition to administrative measures such as bylaw, a highly organized territorial network translates through awareness-raising documents, the measures taken by the Cogépomi (local migratory fish management committee) which are local authorities.

Tenet 5: Additional information on how much enforcement activity is undertaken would be helpful. Please provide information on what control and enforcement measures are in place, why they are considered effective, what kinds of penalties are available to deter violations, and whether or not they are used.

All fishermen must respect the regulation of freshwater fishing (time and hours of prohibition, prohibited methods and methods of fishing, legal catch sizes, number of catches allowed ...), under penalty of penalties provided for in the code of the environment. These are primarily 3rd class fines with a fine of up to 450 euros (Article L.436-40 of the Environment Code).

Tenet 6: Please briefly describe your scientific fishery sampling programs and explain how the results of these programs are used to inform salmon fishery management.

See diagram above

More information on : http://www6.rennes.inra.fr/u3e/PRESENTATION/Organisation/Pole-Gest-Aqua/CNICS

Questions to European Union - Germany

Source of Questions - United States

All tenets should be rated on the "red, amber, green" scale, even if all fisheries are closed.

All tenets can be rated as "green".

Tenet 5: What is the range of fines and other penalties that can be levied on a fisherman who has illegally harvested salmon, and how frequently are they utilized?

Possible fines and penalties for the illegally catch of salmon and other fish species vary from one German federal state to the next. Penalties up to 5000 € are possible. The level of penalties is very dependent on the individual judge`s decision and the circumstances of the infringement. On the other hand, there are almost no cases known in Germany, where anglers or commercial fishermen have harvested salmon illegally and were caught red-handed.

Source of Questions - NGOs

There is no separate reporting here for commercial vs. recreational. Does that mean that this applies to both?

Yes, this applies to both. In Germany, both, commercial and recreational angling fishery are covered by the fisheries laws of the Länder and there are no new insights to be expected, by a separated reporting.

Questions to European Union - Ireland

Source of Questions - NGOs

Tenet R3: How does a return rate of 71% for salmon angling logbooks warrant a green score?

A green score is assigned to the question, "*Are assessments conducted to confirm the accuracy of catch returns?*"

Assessments are conducted to confirm the accuracy of catch returns as outlined in the response (e.g. local and regional fisheries managers validate catch returns where obvious discrepancies may arise).

It is considered that the return rate of 71% for salmon angling logbooks captures a significant portion of catches as returns are more likely to be made by regular anglers and less likely by intermittent or tourist anglers. Log book returns are one element of catch assessment and validation of fisheries catches are undertaken to verify and to avoid statistical incongruity. For this reason, the scoring grading in relation to the actual question posed is appropriate. Inland Fisheries Ireland (IFI) continues to encourage a higher rate of logbook returns by contacting all licence holders that do not submit returns, with corresponding prosecutions initiated for a proportion of this grouping.

Tenet R4: There is widespread incomprehension around both the TAC process and its outcomes. To credibly claim a green colour, how do you propose to simplify explanations to the wider public?

In response to the question, "*Does the communication process explain clearly to participants in the fishery the policies underpinning the management rules e.g. license obligations, sanctions, any in-season management adjustments and fishery closure information?*",

The assignment of a green score is considered appropriate taking into account all the supporting information provided to stakeholders. While the annually published Standing Scientific Committee on Salmon (SSCS) stock assessment reports are, by their nature, technical and extensive executive summary and worked examples in simpler language are included in the appendices to these reports in line with the Irish Government's "plain language" policy. In addition, the regulatory measures enacted to manage salmon stocks in Ireland are communicated *via* a variety of media channels in a concise and straightforward

format to stakeholders in advance of the fishing season each year following a detailed public consultation process.

Nevertheless, Ireland shares the view of the NGOs on the importance in terms of stakeholder and public engagement and also in the context of the Irish Government's "plain language" policy. In that regard IFI will consider the production of some additional information to augment stakeholder understanding of the processes involved in setting conservation limits, determining their attainment and identifying how the TAC is set. It is envisaged that this supporting information would be presented in a non-technical, concise and simplified format (e.g. infographics, pamphlets) and complement the existing literature produced by IFI and the SSCS.

Tenet R5 and C5: Since this report was prepared, it has emerged that there are disturbing doubts about the prosecution powers of Inland Fisheries Ireland due to omission in the Inland Fisheries Act 2010. How do you propose to plug that legislative gap?

In February 2017, advice was received by the Department of Communications Climate Action and Environment in the course of a review of the Inland Fisheries Act 2010 that the power to prosecute summary offences had not been explicitly transferred to IFI under the 2010 Act. An explicit power to prosecute should be included in Part 4 of the 2010 Act as a matter of priority.

It should be noted that anyone who commits an offence is still liable to be prosecuted under the Act and that amending legislation has being pursued as a matter of urgency.

The Department secured a Government Decision on 7 March 2017 noting the intention of the Minister to amend the Inland Fisheries Act 2010 to insert a specific provision conferring an explicit power on Inland Fisheries Ireland to bring and prosecute summary proceedings for offences under the Inland Fisheries Acts.

Priority drafting was also agreed by the Government. An exemption from Pre-Legislative Scrutiny was granted by the Business Committee of the Irish Parliament. The Minister of State and Departmental Officials briefed opposition Spokespersons on 28 March.

The Bill was drafted by the Department and approved by the Government on 4 April and the Minister authorised to present the Bill to the Irish Parliament

Second stage debate in the Parliament commenced on 13 April. Given the urgency of this matter it is intended to complete the next parliamentary stages and have the Bill enacted as soon as possible.

The doubts highlighted in the question relate to technical legal drafting and are not characterised as disturbing.

There will be no implications on persons already convicted who have not appealed their convictions within the statutory appeal period. The administration of cases in being will take their course before the Courts.

Furthermore, the current provisions and offences of the Inland Fisheries Acts continue in full force and effect. The powers of the Fisheries Officers remain, and anyone found in contravention of the Inland Fisheries Acts may be prosecuted once the amending legislation is in place.

IFI can seek a summons for cases within six months of an offence being committed i.e. offences committed over the weeks and months since the issue came to light in February can be prosecuted within six months of the offence occurring, provided that the amendment is in place at that time. It is intended that there will be no period when offences may be committed with impunity.

Questions to European Union - United Kingdom (England and Wales)

Source of Questions - United States

Recreational

Tenet 3: Are there penalties for non-reporting and, if so, are they applied and effective at ensuring compliance?

In England and Wales under our National Fisheries Byelaws 1996 Section 3 (1), it is a statutory requirement for all salmon and sea trout anglers to provide a catch return.

(1) Any person to whom a licence is issued by the Agency to fish by rod and line for salmon or migratory trout shall not later than the 1st day of January in the following year, make a return on a form provided by the Agency giving particulars of dates, the locations and the time spent fishing and the number and weight of any salmon or migratory trout caught (except in relation to small sea trout (500g or less) where only the number caught need be returned). This includes those returned alive giving details of whether they were caught on fly, spinner or bait, or a statement that no salmon or migratory trout were caught by the licence holder.

To date, no prosecutions have been taken for failure to complete and or submit a catch return though this doesn't preclude us taking enforcement action in the future. The maximum penalty for failing to submit a return is an unlimited fine, though in practice whether a fine is imposed following a successful prosecution would depend upon a number of factors such as good character, culpability and the financial means of the person involved, as this is not the only option available to a court. The approach that we have taken to date is to remind anglers of the need to submit a catch return at the point of buying their licence and through a subsequent catch return reminder sent at the end of the fishing season. To facilitate anglers making a catch return we also introduced an on-line catch reporting system in 2015.

Source of Questions - NGOs

Tenet C2: What does it mean that harvest is "generally" controlled? How effective are these rules at limiting catch?

The word ‘generally’ was used in the context of effort controls, which is the principal mechanism by which harvest is regulated. On reflection, ‘principally’ may have been a more appropriate word to use than ‘generally’. In more recent years, a small number of fisheries have been regulated by catch limits in addition to effort controls. Powers also exist to introduce emergency measures should these be required. Taken together, alongside annual reviews of stock status, these measures are considered to be sufficient for regulating catches and informing potential future decisions on possible further harvest control requirements.

Tenet C5: How effective is the enforcement? How do you measure its effectiveness?

Intelligence-led targeted operations are carried out by the Environment Agency and Natural Resources Wales, often jointly with Inshore Fisheries and Conservation Authorities (IFCAs)/Welsh Government and the police. Enforcement patrols, together with associated publicity, provide a critical deterrent to illegal fishing and help to ensure that fisheries legislation is complied with. Enforcement cases are recorded on our Case Management System, which has logged 242 High Impact Fisheries Enforcement cases since 2013, though not all of these relate to salmon offences. Examples of cases are described in the NASCO Annual Progress Reports.

It is impossible to accurately quantify the effectiveness of enforcement actions. However, the measures outlined above together with other initiatives (e.g. carcass tagging, ban on sale of rod caught fish) are believed to have substantially reduced the levels of illegal and under-reported catch in recent years.

Tenet R2: How effective are these measures at limiting catch? Are they consistent with NASCO guidelines?

As described in the six tenets self-assessment and the Annual Progress Report, a number of statutory and voluntary measures are in place to limit the harvest of salmon by anglers and promote catch and release. Between 1993 and 2016 the rate of catch and release has improved from 10% to 80%. In 2016, with a provisional estimate of 9,192 salmon released, it is estimated an additional 18 million eggs were contributed to the breeding population.

The regulatory measures, alongside annual reviews of stock status, are considered to be sufficient for regulating catches, informing potential future decisions on possible further harvest control requirements, and consistent with the NASCO guidelines.

Tenet R5: Is there no formal enforcement of the recreational fishery? How effective are the informal efforts? How is effectiveness measured?

Intelligence-led targeted operations are carried out by the Environment Agency and Natural Resources Wales, often jointly with the police to prevent illegal activity within the recreational fishery. Across England, for example, the Environment Agency has 70 warranted fisheries enforcement officers. All High Impact Fisheries Enforcement cases are recorded on our Case Management System. In 2016/17 the Environment Agency checked 54,472 coarse fish, trout and salmon rod fishing licences (the majority will have been coarse and trout licences) and took 2,422 successful prosecutions for licence evasion with total fines and costs of £621,000 and an average of £257 per offence.

It is impossible to accurately quantify the effectiveness of enforcement actions. However, the measures outlined above together with other initiatives (e.g. carcass tagging, ban on sale of rod caught fish) are believed to have substantially reduced the levels of illegal and under-reported catch in recent years.

Questions to European Union - United Kingdom (Northern Ireland)

Source of Questions - United States

Recreational

Tenet 3: While there is mandatory reporting, the assessment indicates that compliance rates are low. An electronic licensing process is being instituted which it is indicated will allow for the identification of anglers that do not report. However, it is not clear if there are or will be penalties for non-reporting. We would appreciate more information on this aspect.

It is a criminal offence for those anglers who do not provide a catch return for salmon and sea trout caught whilst angling. However, having sufficient evidence to prove that such an offence has taken place is another issue, as anglers can fish for trout or rainbow trout without having to make any catch declaration at all. The new digital system captures details of those issued with a game licence but this not currently linked to catch returns submitted. We are currently reviewing how we can improve compliance with reporting and how we can educate anglers to the importance of this data.

Source of Questions - NGOs

General - there is a problem with the Northern Ireland section in that it appears to cover both the Loughs Agency (LA) area and also the area administered by the Department of Agriculture Environment and Rural Affairs (DAERA). This is not stated in the document. The Loughs Agency area lies partially within the Republic of Ireland and there are significant differences in salmon management. We feel it would be best to have two documents: one for the DAERA area and a separate document for the LA area. While a number of the responses will be the same for each area, the differences may then be described and clarity will be achieved.

The Department of Agriculture, Environment and Rural Affairs (DAERA - NI), along with the Department for Communications, Climate Action and the Environment (DCCAE - ROI) are the sponsor Departments for the Loughs Agency. The Loughs Agency is a North South Implementation Body established under the Good Friday Agreement. The Loughs Agency's areas, which are enshrined in legislation as Lough Foyle and Carlingford Lough, and their Catchment Areas, for the purposes of managing fish stocks in these areas. There are however, a number of cross border salmon catchments in NI which lie outside the Loughs Agency's area of responsibility. How salmon stocks in these areas are reported on, has been agreed with the Republic of Ireland. As the UK is a member of the EU, the reports for salmon captured in the NI region of the UK give details for the entire area (including the Loughs Agency's area) which comes under the policy remit of the Minister responsible for

Agriculture, Environment and Rural Affairs in Northern Ireland. This has been the agreed approach for reports to other bodies such as ICES etc. The Implementation Plan for the UK(NI) does make reference to the two areas. However, we will endeavour to continue to highlight any differences between DAERA and the Loughs Agency areas so that readers have clarity on these.

Tenet C1: We were under the impression that netsmen who had taken a buyout would not be permitted to recommence netting afterwards. The descriptions within the document appear to indicate that this would in fact be permitted. Could you please clarify?

The commercial net owners that took a buyout cannot recommence netting now or indeed at any point in the future. There were 3 net owners that did not avail of the buyout, with a view to potentially fishing in the future - if and when stocks recover sufficiently. The policy for the potential commercial exploitation of salmon fisheries is based on the precautionary principle i.e. if there is sufficient surplus above CL for stocks affected by the fishery, over a consistent period of time, then they can harvest some of the surplus.

Given the mixed stock nature of these fisheries higher Management Targets have been set for any rivers affected by commercial activity. A threshold of 125% of CL has been established as the *management target* (MT) for the primary salmon rivers contributing to the commercial fishery. The *management objective* for the assessment of primary salmon rivers details that a stocks must consistently attain MT in at least 3 out of 5 years in the most recently available time series, before consideration is given to allocating a harvest. The harvestable surplus represents the potential surplus (based on the most recent 5 year dataset) above the 125% threshold, calculated to ensure a 75% probability of the stock attaining its MT. The precautionary approach is firmly adopted in the stock assessment protocol and supplementary data is also considered before allocating a harvestable surplus. For example, juvenile recruitment is monitored annually on all DAERA primary salmon rivers and recent recruitment trends are considered in the stock assessment process. Failure to attain a minimum recruitment threshold will prohibit allocation of a harvest and result in no commercial fishery being allowed to operate. The Loughs Agency operate a similar management regime (http://extwprlegs1.fao.org/docs/pdf/uk96026.pdf) and no commercial fisherman who accepted a hardship package cannot recommence fishing for salmon within the Loughs Agency area.

Tenet C2: How is the number of tags determined? How effective is this method for limiting the catch to a sustainable level?

In the DAERA area of UK (N. IRELAND) all primary salmon rivers are subject to annual stock assessment. Adult returns are evaluated either by fish counter, trap census or rod catch data. A threshold of 115% of CL has been established as the *management target* (MT) for the primary salmon rivers subject to recreational fishing. The *management objective* for the assessment of primary salmon rivers details that a stock must consistently attain MT in at least 3 out of 5 years in the most recently available time series, before consideration is given to allocating a harvest. The harvestable surplus represents the potential surplus (based on the most recent 5 year dataset) above the 115% threshold, calculated to ensure a 75% probability of the stock attaining its MT. The precautionary approach is firmly adopted in the stock assessment protocol and supplementary data is also considered before allocating a

harvestable surplus. For example, juvenile recruitment is monitored annually on all DAERA primary salmon rivers and recent recruitment trends are considered in the stock assessment process. Failure to attain a minimum recruitment threshold will prohibit allocation of a harvest and result in the precautionary application of a catch and release fishery. The Loughs Agency operate a similar regime using Conservation Limits and Management Targets (CL + 25% to allow for angling, illegal fishing/natural mortality) but have additional real time management options if stocks are not attaining in-season targets (http://extwprlegs1.fao.org/docs/pdf/uk96026.pdf).

Questions to European Union - United Kingdom (Scotland)

Source of Questions - United States

Recreational and Commercial (same questions for both):

Tenet 1: We would appreciate further clarification on how Scotland knows the full participant pool since there is no licensing requirement for recreational fisheries. We would appreciate further explanation of how this is the case.

Scotland does not have a licensing system and the current administration reiterated on 3 February 2017 that it has no plans to introduce one for recreational angling. As noted in our response, it is a statutory requirement to submit catch returns, all fisheries are known to the District Salmon Fisheries Board, or Management Organisation, and each salmon fishery is required to pay an annual assessment. Therefore, we can be confident that using these 3 tools we have identified our participant pool.

Tenet 2: We would appreciate further clarification on why a green rating was warranted as there is no explanation of how the management measures are consistent with NASCO's guidelines. We would appreciate more information on this aspect.

It was given a green category as we consider the annual assessment and determination of catch limits to be consistent with the guidelines. The conservation status of each stock is defined by the probability of the stock meeting its conservation limit over a five-year period. Rather than a simple pass or fail, stocks have been allocated to one of the following three grades, each with its own recommended management actions:

Category	Probability of Meeting CL	Effectively CL Met in:	Advice
1	At least 80%	4 out of 5 years	Exploitation is sustainable therefore no additional management action is currently required. This recognises the effectiveness of existing non-statutory local management interventions.

Category	Probability of Meeting CL	Effectively CL Met in:	Advice
2	60-80%	3 out of 5 years	Management action is necessary to reduce exploitation; mandatory catch and release will not be required in the first instance, but this will be reviewed annually.
3	Less than 60%	≤ 2 out of 5 years	Exploitation is unsustainable therefore management actions required to reduce exploitation for 1 year i.e. mandatory catch and release (all methods).

Where data is available the conservation limits are done at river level.

Tenet 3: We would appreciate further information on why a green rating was warranted for this tenet. This tenet is designed to assess whether what is reported is complete and accurate and used to limit catches. Examples of achievement related to question 2 of this tenet are provided by the working group (WGCIS(16)3)) and include license inspections, vessel inspections, among others. Specifically, how does Scotland verify catches are being reported accurately and how are catch data used to inform management, including effectively limiting catch/harvest?

Significant effort is put into collecting accurate catch data. The District Salmon Fishery Boards or management organisations take the enforcement of national and voluntary conservation measures very seriously. Failure to report is followed up by Marine Scotland and local managers.

Tenet 5: We would appreciate further clarification on why a green rating was warranted since there is no explanation of the range of penalties or how often they are used. We would appreciate more information on this aspect.

Control and enforcement processes for the protection of salmon is in place with a range of penalties from monetary fine to criminal record. Cases are regularly reported to the Procurator Fiscal. The application of offences has recently been reviewed by the Scottish Bailiffing Development and Enforcement and Regulation Group as part of the Wild Fisheries Reform process and will be used to inform future changes to policy.

Tenet 6: It would be useful if Scotland could explain how the results of their scientific sampling are used to inform management.

The model used to determine the conservation limits takes into account all available date such as electrofishing and counter data.

Source of Questions - NGOs

Tenet C2: How effective is this plan? How will it be measured? Are these measures consistent with NASCO guidelines?

This is only the second season that the Conservation Regulations have been put in place. Refinements to the assessment process will continue and we are working with a representative group of local biologists to take that forward. We believe that the Regulations an important step towards conservation of salmon and will continue as a matter of policy to assess it efficacy.

Tenet C5: How effective are these enforcement and compliance systems?

We assess our systems to be effective and appropriate.

As ever, there are of course resource constraints associated with enforcement action which mean that enforcement action has to be priorities and risk assessed on a local basis. This has been an area that the Wild Fisheries Reform Bill has explored to see what changes to the national bailiffing framework may be required. However, we believe that a significant effort goes into enforcement from local managers and that their actions are responsible, proportionate and effective.

Tenet R1: How are the locations of all fishers known?

I refer to the answer given in 14.1

Tenet R2 (and C2): When exploitation is considered to be sustainable, are there any measures that are used to limit the catch/harvest? How effective are they?

The Conservation of Salmon (Scotland) Regulations 2016 introduced a management framework of categorising salmon rivers upon their conservation status. Rivers for the 2017 were assessed using the definition set out in the answer to 14.2. Rivers in category 1 and 2 are still subject to our Spring Conservation Measures and any local voluntary measures that are put in place by local managers.

United States

Source of Questions - Canada

The US report simply notes that all directed salmon fisheries are closed. Canada is curious about what the requirements would be if the recreational fisheries were to reopen. Are there legally enforceable measures for managing recreational fisheries in the US? Are there examples from existing recreational fisheries that would be applied to salmon and would they comply with NASCO guidelines? This is specifically relevant to the following two sections:

There are legally enforceable measures for managing recreational fisheries in the United States, but they vary based on jurisdiction (e.g., Federal versus state). In addition, some measures apply generally (e.g., the State of Maine currently requires a license for all

freshwater fishing) while others are determined on a fishery-by-fishery basis (e.g., bag limits for a particular species). However, it is important to note that Atlantic salmon are protected under the U.S. Endangered Species Act (ESA) as they are considered at risk of extinction. Under the ESA, it is unlawful for any person subject to United States jurisdiction to "take" an Atlantic salmon. "Take" is defined very broadly from harassment to capture to lethal take. This provision, like others in the ESA, pre-empts state law. As such, all fisheries for ESA-protected Atlantic salmon, including both commercial and recreational fisheries, are closed and will remain closed until the species is sufficiently recovered. We have drafted a recovery plan highlighting the actions and timelines necessary to achieve recovery of this species in the United States. Recovery is currently estimated to take 75 years. As such, the protections of the federal ESA are expected to remain in place for quite some time, and any commercial or recreational fisheries for the species will not reopen in the foreseeable future. Even if the federal ESA protections were removed, the State of Maine would need to review whether a fishery in state waters was appropriate under its laws and what management measures should apply, given the State of Maine also currently prohibits fishing for sea-run Atlantic salmon. In addition, one aspect of the decision making process to remove the protections of the federal ESA would involve a review of state and Federal regulatory mechanisms, including for fisheries, to determine whether they are adequate to ensure population gains are not lost once the ESA's protections are removed. The United States strongly supports NASCO's guidelines for fisheries, habitat and aquaculture and would seek to ensure that any recreational or commercial fishery for Atlantic salmon be entirely consistent with NASCO's goals.

Item 1 – known pool of participants: Would all people fishing for salmon have to be licensed and registered? Would it be a state regulation or a federal regulation? Etc.

It is difficult to speculate on what a recreational fishery might look like given that the likelihood of one operating is far out into the future. However, should the species be taken off the federal Endangered Species Act's list of endangered species, and the State of Maine determined a recreational fishery in state waters is appropriate under its laws, the fishery would be managed by the State of Maine. It is also highly probable that a license would be required given that licenses were required when the recreational fishery last operated. Currently, the State of Maine requires licenses for all recreational freshwater and saltwater fishing.

At the federal level, the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act or MSA) is the primary law governing marine fisheries management in U.S. federal waters. First passed in 1976, the Magnuson-Stevens Act fosters long-term biological and economic sustainability of our nation's marine fisheries out to 200 nautical miles from shore. Key objectives of the Magnuson-Stevens Act are to:

- Prevent overfishing
- Rebuild overfished stocks
- Increase long-term economic and social benefits
- Ensure a safe and sustainable supply of seafood

Prior to passage of the MSA, waters beyond 12 nautical miles were international waters and fished by fleets from other countries. The 1976 law extended U.S. jurisdiction to 200 nautical miles. It also established eight regional fishery management councils (Councils)

responsible for the fisheries that require conservation and management in their region, with limited exceptions for some internationally shared stocks. The Councils are composed of both voting and non-voting members representing the commercial and recreational fishing sectors in addition to environmental, academic, and government interests. Under the MSA, the primary responsibility of the Councils is to develop and amend Fishery Management Plans (FMPs) that, inter alia, include science based annual catch limits and, where appropriate, provide for stock rebuilding. To carry out this work, the Councils convene committees and advisory panels and conduct public meetings. They also develop research priorities in conjunction with a Scientific and Statistical Committee. FMPs must comply with a number of conservation and management requirements, including the 10 National Standards—principles that promote sustainable fisheries management.

Under the MSA, U.S. fisheries management is a transparent and robust process of science, management, innovation, and collaboration with the fishing industry, states, and other stakeholders. A scientific analysis of the abundance and composition of a fish stock (stock assessment) evaluates the stock to determine if the stock status is subject to overfishing or overfished. Using this scientific data, Councils set annual catch limits, and if they are exceeded in a fishing year, accountability measures pre-determine the mechanism to respond. Council-recommended management plans and measures are reviewed by the federal government and, if approved, are implemented through federal regulations.

There is an existing fishery management plan for Atlantic salmon even though there is no longer a commercial or recreational fishery in the United States. The Atlantic Salmon Fishery Management Plan was implemented by the National Marine Fisheries Service on March 17, 1988, establishing explicit U.S. management authority over all Atlantic salmon of U.S. origin. Its purpose was to complement state salmon management programs in coastal and inland waters and federal management authority over salmon on the high seas. The plan prohibits the possession of Atlantic salmon and any directed or incidental (bycatch) commercial fishery for Atlantic salmon in federal waters. This plan is implemented by federal regulations.

Under item 3 – accurate, effective and timely reporting: Before the closure of the fisheries, was there a reporting system? What methods would be in place to ensure accurate, effective and timely reporting if the fishery were to reopen?
In a similar vein, Canada included a section on commercial fisheries (despite being closed) in order to provide context as to what management measures were in place previously.

Recreational fisheries for Atlantic salmon were closed in 2000 with the exception of a small experimental fishery that occurred in the Penobscot River in 2006, 2007, and 2008. When the experimental fishery was open, all anglers required a license; fishing was only allowed when water temperatures were below 70 degrees (F); and fishing was catch-and-release only using a single barbless fly. Previous management regimes were less restrictive; however, all angling for sea-run salmon has required a license in the recent past (Table 1).

Table 1. Angling regulations for Atlantic salmon in Maine, 1979 to 2000, excluding the Pleasant River which was closed to directed angling from 1986 to 1989 and limited to catch and release beginning in 1990.

	Bag Limit		Special
Year	Daily	Season	Regulations
1979	2	None	None
1980	1	None	None
1981	1	None	None
1982	1	None	None
1983	1	10	Tag
1984	1	None	None
1985	1	5/season w/ 1 MSW	Tag
1986	1	5/season w/ 1 MSW	Tag
1987	1	5/season w/ 1 MSW	Registration > 25"
1988	1	5/season w/ 1 MSW	Registration > 25"
1989	1	5/season w/ 1 MSW	Registration of all
1990	1	5/season w/ 1 MSW	Registration of all
1991	1	5/season w/ 1 MSW	Registration of all
1992	1	1/season	Registration of all
1993	1	1/season	Registration of all
1994	1	1/season, grilse only	Registration of all
1995	1	1/season, grilse only	Registration of all
1996	0	Catch and release only	None
1997	0	Catch and release only	None
1998	0	Catch and release only	None
1999	0	Catch and release only	None
2000	Directed Angling for Atlantic salmon closed statewide		

With respect to reporting if the fishery were to open again, it is difficult to speculate on what a recreational fishery might look like given that the likelihood of one operating is far out into the future. However, as discussed above, one aspect of the decision making process to remove the protections of the federal ESA would involve a review of state and Federal regulatory mechanisms, including for fisheries, to determine whether they are adequate to ensure population gains are not lost once the ESA's protections are removed. Even if the federal ESA protections were removed at some point in the future, before a fishery could be conducted the State of Maine would need to review whether a fishery in state waters was appropriate under its laws and what management measures should apply, given the State of Maine also currently prohibits fishing for sea-run Atlantic salmon. The United States strongly supports NASCO's guidelines for fisheries, habitat and aquaculture and would seek

to ensure that any recreational or commercial fishery for Atlantic salmon be entirely consistent with NASCO's goals.

Reporting requirements would likely be a key consideration if an Atlantic salmon fishery were allowed in the future once the species is recovered, the protections of the federal ESA are removed, and state law allowed fishing for sea-run Atlantic salmon. For example, for all species that achieve federal recovery goals, the ESA requires the federal government to implement a system in cooperation with the states to monitor the species' status for not less than five years. Typically, this monitoring program is developed prior to the removal of the federal ESA's protections for the species and is implemented immediately. Effective reporting requirements for fisheries provide valuable information for monitoring the status of the species and would likely be considered as an important aspect of such an ESA-based monitoring program in conjunction with other federal and state laws. However, the monitoring program, generally, and reporting requirements, specifically, would not need to be limited to measures that existed in the past. Given the possibility of recreational or commercial fisheries is so far off in the future, past measures would not necessarily provide a useful context for predicting future measures.

Source of Questions - NGOs

Tenet 5: How effective are enforcement efforts? Is there any evidence of poaching? Are there ever any arrests/convictions? Please include a statement of effectiveness here rather than a reference to the APR.

A combination of enforcement and deterrent efforts at the national, state, and local levels are effective at minimizing the potential for any poaching. At the federal level, NMFS conservation and management staff work closely with NOAA's Office of Law Enforcement to enhance the presence of uniformed law enforcement officers in salmon watersheds in Maine to further dissuade any illegal takes of the species whether or not intentional. No salmon poaching in the state of Maine has been detected by NOAA Law Enforcement officers as a result of this enhanced monitoring.

At the state level, Maine game wardens have patrolled streams and rivers, including when Atlantic salmon are known to be present in areas where fishermen are fishing for other species. Approximately 20% of the Maine Warden Service's activities are directed at compliance with fishing regulations (including, but not limited to, Atlantic salmon surveillance activities). For more information, please see the following website: http://www.maine.gov/ifw/warden_service/pdfs/_2013MWS%20Annual%20Report.pdf

During these patrols, the Maine Warden Service ensures that anglers know that they may not fish for Atlantic salmon, must keep any incidentally caught fish in the water, and must release them immediately. The Maine Warden Service has also investigated and successfully prosecuted illegal harvest and attempts to sell Atlantic salmon. A recent example of an effective deterrent campaign can be found by following this link: http://bangordailynews.com/2014/05/09/outdoors/anglers-advised-to-leave-kenduskeag-atlantic-salmon-alone/?ref=relatedBox

An example of a very public enforcement action conducted by the Maine Warden Service can be found here: https://bangordailynews.com/2011/05/11/news/bangor/dover-foxcroft-man-sentenced-to-six-months-for-taking-selling-salmon/?ref=storyPrevNextLinks