

CONSERVATION REGULATIONS TO CONTROL THE KILLING OF WILD SALMON IN SCOTLAND (INCLUDING THE TWEED DISTRICT) INCLUDING A PROHIBITION ON THE KILLING OF SALMON OUT-WITH INLAND WATERS (FORMERLY KNOWN AS THE KILL LICENCE)

As you may have seen from the [press release](#) which was issued earlier today – the Minister for Environment, Climate Change and Land Reform has confirmed a number of changes to regulate the killing of wild salmon in Scotland.

I therefore wanted to write to you to keep you informed of progress with the above Regulations and associated activity following the conclusion of the recent consultation period. I apologise for the delay in doing so but there have been a number of areas where Ministers wanted to consider additional information and concerns expressed by stakeholders.

Background

The further consultation (which was advertised on 1 October 2015) attracted 258 responses with many common themes. A significant number of the points identified were considered as part of the package of activity that we originally outlined in the consultation paper and detailed on our [website](#).

Outline

Following further consideration Scottish Ministers have now confirmed that they will be progressing the Regulations which will reflect the recent proposals, namely:

- Killing outwith estuary limits will be prohibited for a period of three years due to the mixed stock nature of the fishery and the limited data on the stock composition of the catch. This will be reviewed after three years.
- The killing of Atlantic salmon will be managed on an annual basis by categorising fishery districts (using the 109 fishery districts used for the catch stats/Special Areas of Conservation (SACs) in relation to their conservation status and with accompanying guidance and/or regulation.

The only significant change will now be the requirement for a Conservation Plan irrespective of the conservation status.

Consultation responses

During the consultation there has been much commentary on the methodology deployed for determining conservation status. For example, some angling clubs have been concerned that we have developed a system based on the fishery districts as opposed to river level, most particularly where they consider the basis and evidence for their categorisation may have been significantly and disproportionately impacted. We have explained that our longer term goal is to have river by river designations but that is not something we can deliver at this

stage. We will keep you informed of progress over the coming year, including to what extent it might be possible to achieve that goal for the 2017 season.

There have also been some concerns expressed about the way in which the methodology has taken into account lochs and in many cases the absence of data in this particular area. Marine Scotland have responded to those concerns and have re-run the model to see if this would make any material difference to the categorisation process.

Annex A explains the changes made to the conservation regulations process and the resultant final outputs. Most specifically the removal of lochs has resulted in a change of grade for the following stocks (Carron, Gruinard non SAC, Inver and Kirkaig districts and the North Harris and Langavat SACs). They have all moved from a grade 3 to a grade 2 conservation status.

With regard to the Ness district outside of the Moriston SAC, and having rerun the model in common with other fishery districts, the initial output suggested a category 2 status. However, the conservation status of the Moriston SAC is poor (grade 3) and salmon destined for this SAC will pass through, and be available for capture/killing in, the wider district. In order to provide protection for the Moriston SAC, and in recognition of the obligations under the Habitats Directive, the rest of the Ness district remains a grade 3.

Engagement with Local Biologists

You will also wish to be aware that as a start of a process of engagement with local biologist employed by the Fisheries Trusts and the District Salmon Fishery Boards a meeting was held to discuss the current process and look at how the data supporting the determination of conservation status can be developed and refined for future years. Developments from this work will be published on the Marine Scotland [website](#) with updates also being provided through the Scottish Fisheries Co-ordination Centre (SFCC), ASFB and RAFTS and other forums. We would encourage you to engage with the biologists to inform their thinking going forward. That initiative reflects our continued desire to work collaboratively with the District Salmon Fishery Boards and Fishery Trusts going forward.

Some angling clubs are concerned that the impact of the category 3 designation will be so significant that they may cease to operate in the future or see a significant reduction in their existing membership. There has also been considerable discussion as to the wider impact of the measure, including the impact on local tourism.. Whilst recognising the potential risk, it should be remembered that current catch and release averages are over 90% for spring fish and over 80% for the annual catch. The trend over many years is towards catch and release becoming the norm rather than the exceptional practice. While these measure will make it a statutory requirement in some fishery districts it should also be remembered that this will be based on an annual assessment and as such is designed to enable improved conservation status, which has greater long term benefit to all those who have an interest in Atlantic salmon.

We have also been in contact with Fishpal, and we are aware that many proprietors and clubs already work with them, to promote their angling opportunities and who have experience in marketing fishing on a catch and release basis. This is something we will be closely monitoring once the Regulations are in force.

Netsmen

The new measures will have a significant impact on coastal netsmen and we have had early engagement with the representative body and individuals around how that might be mitigated. Shortly I will be writing to all netsmen who our records indicate might be impacted by the prohibition and asking you to complete a short template to help move that discussion forward. I appreciate the many conversations I have already had on this issue and the offer to participate in future science activity which has potential to benefit the whole sector (for example around coastal migration routes). However I would welcome your cooperation in this process so that we can begin discussions as soon as possible.

It is also important to remember that the prohibition on netting outside estuary limits will be reviewed in three years and should the stocks improve the potential exists to recommence activities in the future within a sustainable framework. We would encourage both netsmen and the District Salmon Fishery Boards to engage positively in the coming years, to recognise the challenge that these measures will present for many going forward and to acknowledge the contribution all can make to influence the future.

Conservation Plan

One of the key changes from the previously published proposals is the requirement for a Conservation Plan irrespective of the conservation status. The conservation plan is inextricably linked to the conservation measure and is a key initiative for a number of reasons, not least as it has the potential to influence the existing relationship between local fishery management and national policy development and the likely future plan led approach being championed within the wild fisheries reform discussions.

The purpose of the plan is to complement the application of a conservation status and to inform further management measures and actions that might be considered at a local and national level. The conservation plan will summarise the options for the conservation, restoration, enhancement and management of wild Atlantic salmon stocks taking into account the best scientific evidence available. The conservation plan will include detail of existing and future local initiatives to address the current assessment of the fishery district; and identify (and where possible quantify) other factors that might have a material impact, such as marine renewable energy, predation, aquaculture and barriers.

I appreciate in many circumstances many of the District Salmon Fishery Boards and Fishery Trusts are already completing this exercise under a number of differing banners. We are certainly not looking to add to that workload. However by collating the various responses, mapping those out in a coherent fashion and publishing the results we can all collectively contribute to developing areas of national prioritisation and focus. This will allow us to explore, in close collaboration with local management, options for managing, mitigating or alleviating identified pressures.

I should make it clear that this is not designed or intended to apportion blame but rather to better quantify areas of impact and potential areas of mitigation, including mapping to other activities such as River Basin Management Planning, Habitats Directive objectives and the National Planning Framework. In order to provide clearer guidance for Boards on what the

plans will look like we will be working to provide an example Conservation Plan template within the next few weeks.

Further activity

In addition to the activity already outlined, we are developing a number of science initiatives to further enhance our understanding of salmon populations together with complementary work around sea trout with a view to a considering the viability of a similar scheme being introduced in 2017.

Shortly we will establish a working group on baits and lures to consider the options around national and/or local measures. That group will include significant membership from the sector and from those companies who currently sell equipment to ensure any proposals take into account any commercial impacts.

We are also aware that an early review of the spring conservation measures will be required and we will utilise the biologist group and other forums to consider how that might best be progressed.

Throughout 2016 we will be issuing a monthly update on a range of activities, including the work of the salmon and recreational fisheries team, wild fisheries reform and the work of [Marine Scotland Science](#) which we hope will ensure everyone with an interest is fully aware of work that is currently being undertaken and those areas being considered.

Finally I should advise that I have moved from my current responsibilities to take forward progress on the wider fisheries reform process. Kerrie Campbell has now joined us to become Team Leader for Wild Salmon and Recreational Fisheries.

Should you have questions please direct them in the first instance to SalmonandRecreationalFisheries@gov.scot

Thank you

Jeff Gibbons

Wild Salmon and Recreational Fisheries

Marine Scotland

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The Application of Conservation Limits for Atlantic Salmon in Scotland

1. Assessment of Conservation Status

1.1. Background

Assessing the conservation status of salmon is a straightforward idea; determining whether or not the number of salmon spawning is above a critical threshold level. However, managing the uncertainties in assessing this leads to some complexity. ICES and countries reporting to NASCO have developed pragmatic approaches for applying conservation limits and these have been drawn on to construct the system for Scotland. The methods used are detailed in the [technical document](#), and the principles are summarised below. The approach requires some knowledge of first, actual levels of spawning and second, the minimum acceptable (target) levels of spawning. The target level is also called the "conservation limit".

Actual spawning levels are usually expressed in terms of egg deposition and rely on estimation of numbers of returning adult salmon from counters and catches. The estimated number of eggs produced can be obtained from rod-catch data using the process shown in Figure 1.

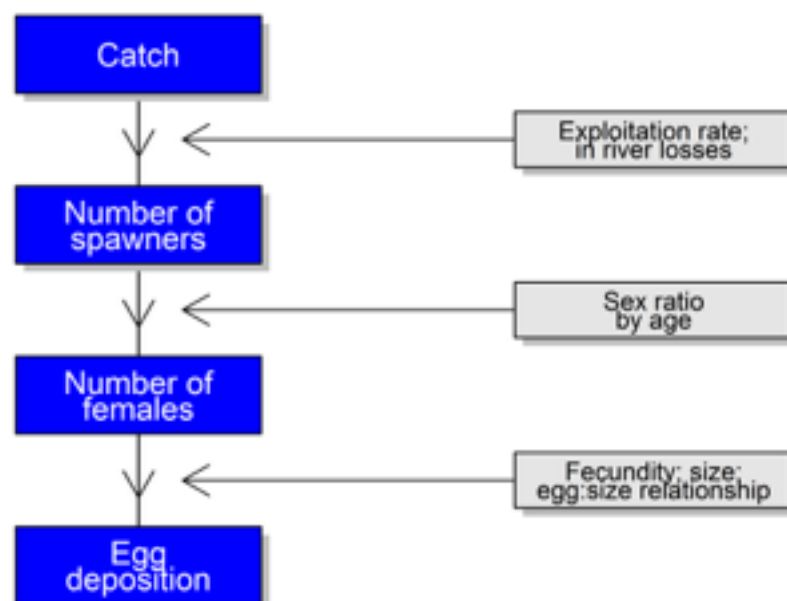


Figure 1. Process used to estimate egg deposition

Estimated egg deposition can then be compared to the egg target for a given stock. Egg targets are available from a number of study rivers and expressed in terms of eggs per square meter. An estimate of the area used by the stock is therefore also required to assess the conservation status (Figure 2).

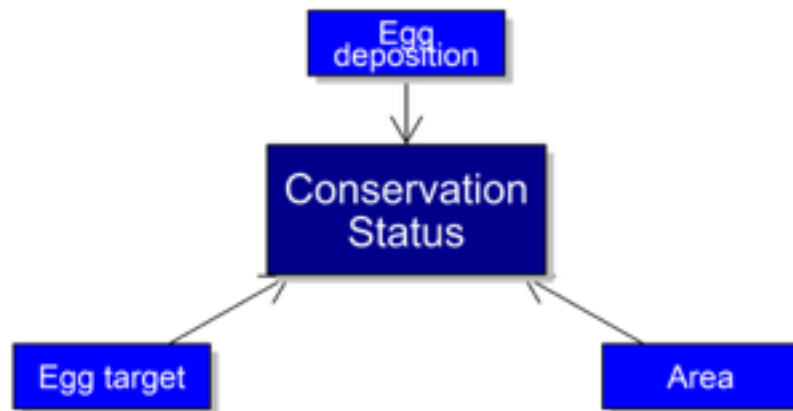


Figure 2. Process used to determine conservation status

With perfect information, the conservation status is simply defined as whether or not a stock attains the target level. However, such perfect information does not exist and there is uncertainty in estimates of the egg deposition, egg target and the area used by salmon. Instead the probability of meeting the egg target is estimated

1.2. Application

The conservation status of each stock was defined using the probabilities of meeting the conservation limit over a five year period. Rather than a simple pass or fail stocks are allocated to one of the following three grades each with their own recommended management actions:

- **Grade 1** At least an 80% mean probability of CL being met in the last 5 years.
 - Exploitation is sustainable and therefore no additional management action is currently required.
- **Grade 2** 60-80% mean probability of CL being met in the last 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. Production of a conservation plan by the District Salmon Fishery Board is required in consultation with Marine Scotland. Where a Board does not exist, assistance in plan formulation will be offered to those responsible for local management.
- **Grade 3** Less than 60% mean probability of CL being met in the last 5 years.
 - Exploitation is unsustainable and mandatory catch and release (all methods) for 1 year will be required. Management action is necessary to reduce exploitation and production of a conservation plan is required in consultation with Marine Scotland.

It is recognised that fisheries may not be the main drivers of change in salmon stocks, nor will compulsory catch and release on its own necessarily lead to CLs being attained. However, it is clear that when stocks are below their conservation limit, reducing numbers killed by fisheries will help towards CLs being met in the future.

2. Changes to Assessment Process

There are two main changes to the assessment process as originally explained. The first involved obtaining better information on catches within and outwith SACs and we are grateful to those fisheries who provided this information. The second change involved one of the issues that came back from the consultation process, which was unhappiness of some stakeholders over the inclusion of loch margins in the areas used by salmon in Scotland. In the absence of specific information from Scotland, the original model was based on information regarding use of lochs by salmon in Norway. To account for potential differences between Scotland and Norway the models were re-run without lochs influencing the areas used in the calculations. The resultant gradings were compared to examine the influence of lochs on the final outcomes of the model. If removal of the loch area led to a stock moving from grade 3 to a higher grade, then that stock was classified as grade 2. Movement into grade 1 was not permitted as the grade 2 categorisation reflects the remaining uncertainty over the distribution of salmon in lochs.

3. Final Output

The removal of lochs resulted in a change of grade for six stocks (Carron, Gruinard non SAC, Inver and Kirkaig districts and the North Harris and Langavat SACs). The Ness district outside of the Moriston SAC would also be allocated to grade 2 by this method. However, the conservation status of the Moriston SAC is poor (grade 3) and salmon destined for this SAC will pass through, and be available for capture/killing in, the wider Ness district. To provide protection for the Moriston SAC the rest of the Ness district remains a grade 3.

Figure 3 presents a map illustrating the geographic distribution of the categories with the outputs also being presented in Table 1. The probability of attaining the conservation limits for each of the years examined for each stock is given in Annex B for both the model incorporating lochs and the one where loch areas are ignored. In total there are 20 areas in category 1, 21 in category 2, 70 in category 3 and 18 where reported catch data are insufficient to allow an assessment to be carried out. For the purposes of management, stocks without sufficient catch data to run the model are included in category 3.

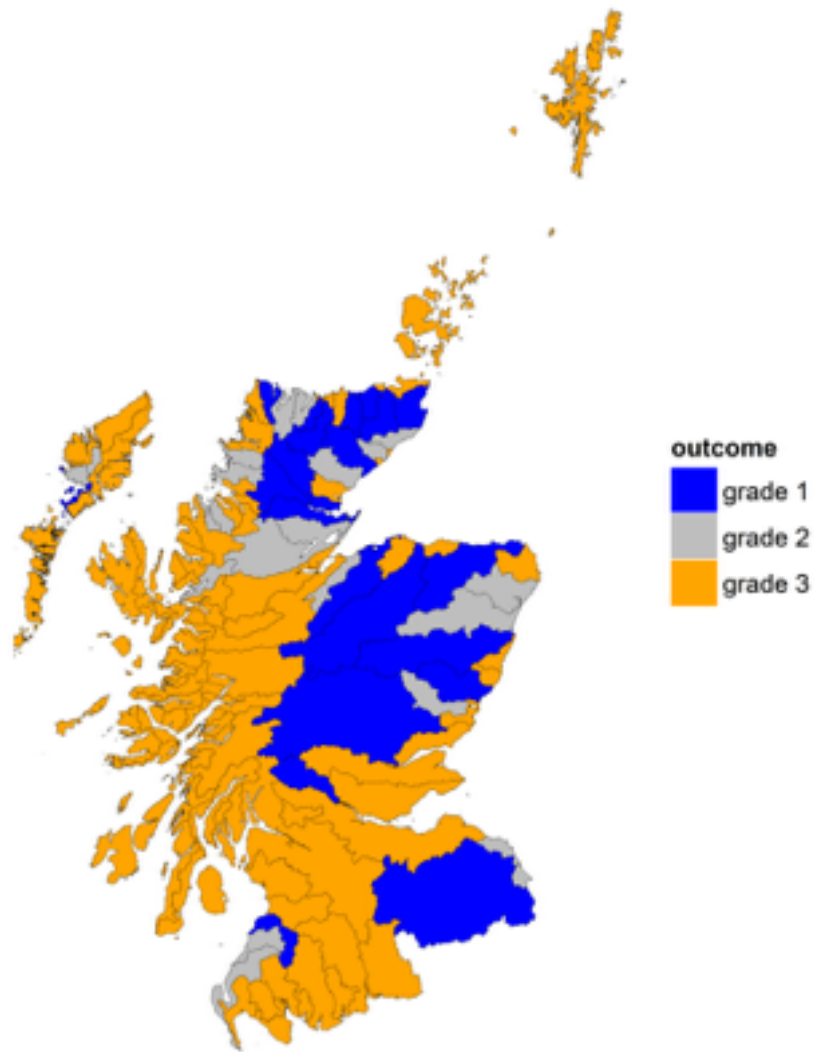


Figure 3. Map illustrating the outcome of the final assessment procedure. **Note:** map used for illustration purposes only.

Table 1. Summary of the output of the modelling for each of the stocks examined. The mean percentage probability of attaining the conservation limit for the last 5 years is presented for models with and without loch areas. The final grades are also presented.

District	With Lochs	Without Lochs	Outcome
Add	0.7	1.1	grade 3
Ailort	10.8	20.4	grade 3
Aline	7.0	7.9	grade 3
Alness	76.7	77.0	grade 2

Annan	36.5	36.8	grade 3
Applecross	7.1	7.7	grade 3
Arnisdale	19.9	20.1	grade 3
Awe	11.3	12.0	grade 3
Ayr	35.3	35.4	grade 3
Baa	9.7	16.1	grade 3
Badachro	32.5	38.8	grade 3
Balgay	30.9	45.7	grade 3
Beaully	45.7	47.4	grade 3
Berriedale non SAC	-	-	grade 3
Berriedale SAC	61.1	61.1	grade 2
Bervie	1.9	1.9	grade 3
Bladnoch non SAC	-	-	grade 3
Bladnoch SAC	17.4	18.7	grade 3
Borgie SAC	88.9	96.8	grade 1
Broom	7.2	7.3	grade 3
Brora	76.1	76.7	grade 2
Carradale	1.0	1.0	grade 3
Carron	55.9	61.0	grade 2
Clayburn	0.0	0.5	grade 3
Clyde non SAC	24.2	25.3	grade 3
Conon	75.8	83.6	grade 2
Cree	44.1	45.3	grade 3
Creed	4.8	25.9	grade 3
Creran	0.2	0.3	grade 3
Croe	3.0	3.3	grade 3
Dee (Aberdeenshire) non SAC	0.1	0.1	grade 3
Dee (Aberdeenshire) SAC	95.6	95.7	grade 1
Dee (Kirkcudbright)	0.4	1.0	grade 3
Deveron	86.5	86.5	grade 1

Don	65.7	65.8	grade 2
Doon	94.8	95.2	grade 1
Drummachloy	-	-	grade 3
Dunbeath	69.7	70.9	grade 2
Eckaig	12.9	18.6	grade 3
Endrick SAC	8.6	8.7	grade 3
Ewe	30.6	52.8	grade 3
Fincastle non SAC	95.4	98.3	grade 1
Findhorn	83.9	84.8	grade 1
Fleet (Kirkcudbright)	0.1	0.1	grade 3
Fleet (Sutherland)	-	-	grade 3
Forss	85.5	89.7	grade 1
Forth non SAC	10.8	11.4	grade 3
Fyne	0.0	0.0	grade 3
Girvan	70.0	70.1	grade 2
Glenelg	1.8	1.8	grade 3
Gour	-	-	grade 3
Griess	2.5	6.6	grade 3
Grudie	80.8	85.0	grade 1
Gruinard non SAC	56.1	66.0	grade 2
Halladale	99.0	99.0	grade 1
Helmsdale	99.8	99.9	grade 1
Hope	65.1	66.6	grade 2
Howmore	2.6	14.7	grade 3
Inchard	10.1	17.9	grade 3
Inner	0.3	1.1	grade 3
Inver	43.6	66.0	grade 2
Iorsa	3.0	3.3	grade 3
Irvine	22.5	22.6	grade 3
Kennart	22.1	24.0	grade 3

Kilchoan	9.8	11.1	grade 3
Kinloch	74.3	82.3	grade 2
Kirkaig	53.0	81.9	grade 2
Kishorn	-	-	grade 3
Kyle of Sutherland non SAC	82.2	86.0	grade 1
Laggan	22.8	27.2	grade 3
Langavat SAC	68.8	100.0	grade 2
Laxford	25.2	42.8	grade 3
Leven	42.6	45.3	grade 3
Little Gruinard SAC	51.0	71.7	grade 2
Little Loch Broom	57.9	58.0	grade 3
Loch Long	35.2	37.5	grade 3
Loch Roag non SAC	19.4	41.1	grade 3
Lochy	27.2	32.7	grade 3
Lossie	6.0	6.1	grade 3
Luce	39.3	40.3	grade 3
Lussa	0.0	0.1	grade 3
Moidart	6.2	7.1	grade 3
Morar	29.6	42.8	grade 3
Moriston SAC	22.7	22.7	grade 3
Mullanageren	0.1	1.3	grade 3
Nairn	71.3	72.2	grade 2
Naver non SAC	-	-	grade 3
Naver SAC	98.4	99.5	grade 1
Nell	5.3	9.1	grade 3
Ness non SAC	53.5	69.4	grade 3
Nith	45.0	45.3	grade 3
North Esk	100.0	100.0	grade 1
North Harris SAC	50.5	63.6	grade 2
Orkney	-	-	grade 3

Ormsary	7.5	9.1	grade 3
Oykel SAC	96.5	97.8	grade 1
Pennygowan	1.2	2.4	grade 3
Resort non SAC	-	-	grade 3
Ruel	1.0	1.0	grade 3
Sanda	-	-	grade 3
Scaddle	6.8	6.9	grade 3
Shetland	-	-	grade 3
Shiel	17.1	21.1	grade 3
Sligachan	5.0	6.1	grade 3
Small Isles	-	-	grade 3
Snizort	22.7	27.1	grade 3
South Esk non SAC	-	-	grade 3
South Esk SAC	69.2	69.3	grade 2
Spey non SAC	-	-	grade 3
Spey SAC	83.2	83.7	grade 1
Stinchar	79.1	80.0	grade 2
Strathy	15.4	19.0	grade 3
Sunart	0.1	0.2	grade 3
Tay non SAC	48.0	50.9	grade 3
Tay SAC	91.3	93.1	grade 1
Teith SAC	90.5	94.1	grade 1
Thurso non SAC	-	-	grade 3
Thurso SAC	99.9	99.9	grade 1
Torridon	45.0	45.4	grade 3
Tweed non SAC	71.9	72.8	grade 2
Tweed SAC	97.6	97.7	grade 1
Ugie	13.0	14.6	grade 3
Ullapool	22.3	29.1	grade 3
Urr	40.2	44.1	grade 3

Wick	95.9	97.7	grade 1
Ythan	64.3	65.0	grade 2

ANNEX B: Detailed model output

Table A1. The annual percentage probability of attaining conservation limit for each of the stocks examined using the model including loch areas.

District or SAC	2010	2011	2012	2013	2014
Add	0.6	1.5	0.5	0.0	0.8
Ailort	20.0	0.1	23.3	10.3	0.0
Aline	1.0	15.0	18.5	0.0	0.7
Alness	96.5	85.2	81.2	60.5	60.1
Annan	44.0	61.2	41.6	20.2	15.6
Applecross	19.6	7.8	4.3	1.9	2.0
Arnisdale	27.8	20.7	38.2	9.3	3.6
Awe	2.3	16.7	13.9	6.4	17.2
Ayr	32.7	43.4	39.9	38.1	22.6
Baa	11.7	10.3	17.1	2.5	6.8
Badachro	7.9	11.0	48.5	26.3	68.7
Balgay	66.8	28.0	15.0	5.0	39.6
Beauly	57.5	39.6	51.3	44.9	35.0
Berriedale non SAC	-	-	-	-	-
Berriedale SAC	78.8	72.4	75.8	42.3	36.1
Bervie	6.0	0.6	2.9	0.0	0.0
Bladnoch non SAC	-	-	-	-	-
Bladnoch SAC	10.4	39.8	31.8	4.4	0.9
Borgie SAC	99.5	91.8	95.9	61.6	95.7
Broom	0.6	0.0	0.0	0.0	35.4
Brora	90.5	84.6	83.7	65.5	56.5
Carradale	1.8	0.8	0.2	0.2	1.8
Carron	66.7	62.0	63.1	22.5	65.2
Clayburn	0.2	0.0	0.0	0.0	0.0
Clyde non SAC	22.5	25.6	14.8	26.1	31.7

Conon	81.7	78.8	72.1	77.8	68.6
Cree	65.2	54.3	51.2	26.0	23.6
Creed	4.1	7.8	4.1	4.3	3.8
Creran	0.0	0.0	0.0	0.6	0.1
Croe	0.0	2.1	12.2	0.0	0.7
Dee (Aberdeenshire) non SAC	0.0	0.1	0.1	0.0	0.0
Dee (Aberdeenshire) SAC	98.5	98.2	96.4	92.4	92.3
Dee (Kirkcudbright)	1.9	0.0	0.0	0.0	0.0
Deveron	98.2	91.0	92.8	82.9	67.3
Don	86.3	62.3	75.3	54.5	50.4
Doon	99.2	93.7	92.8	91.7	96.4
Drummachloy	-	-	-	-	-
Dunbeath	87.5	72.2	92.1	25.9	70.8
Eckaig	15.6	17.5	12.8	6.3	12.2
Endrick SAC	0.0	0.1	28.0	11.7	3.4
Ewe	24.9	44.8	33.2	24.5	25.5
Fincastle non SAC	97.2	98.2	99.9	99.7	81.8
Findhorn	92.5	87.9	81.8	76.6	80.6
Fleet (Kirkcudbright)	0.4	0.0	0.0	0.0	0.0
Fleet (Sutherland)	-	-	-	-	-
Forss	91.9	72.6	95.4	81.9	85.7
Forth non SAC	5.1	6.2	22.6	13.9	6.3
Fyne	0.0	0.0	0.0	0.0	0.0
Girvan	84.1	84.6	93.0	40.5	47.9
Glenelg	1.0	0.5	4.4	0.1	3.1
Gour	-	-	-	-	-
Griess	0.1	0.9	3.8	7.0	0.6
Grudie	91.6	76.9	76.5	81.6	77.2
Gruinard non SAC	79.3	61.7	68.3	12.5	59.0
Halladale	100.0	99.6	99.9	97.2	98.3

Helmsdale	100.0	99.8	99.5	99.9	99.8
Hope	72.9	69.3	56.1	69.1	58.3
Howmore	4.9	4.1	2.0	0.2	1.7
Inchard	11.8	19.4	10.2	3.0	6.2
Inner	0.8	0.2	0.3	0.0	0.3
Inver	56.9	39.2	34.9	46.2	40.6
Iorsa	9.1	3.6	1.4	0.4	0.5
Irvine	19.8	37.6	18.9	16.6	19.5
Kennart	42.5	18.4	6.2	0.9	42.4
Kilchoan	7.5	10.3	19.8	0.8	10.5
Kinloch	85.0	89.7	74.4	43.6	78.7
Kirkaig	68.6	62.6	44.0	37.0	52.7
Kishorn	-	-	-	-	-
Kyle of Sutherland non SAC	84.3	81.9	84.5	94.0	66.2
Laggan	24.4	38.8	21.1	25.4	4.2
Langavat SAC	71.9	77.0	66.2	64.2	64.6
Laxford	0.0	48.3	19.7	22.7	35.2
Leven	41.6	50.2	64.1	18.9	38.0
Little Gruinard SAC	72.2	67.2	52.2	37.5	26.0
Little Loch Broom	58.3	77.2	49.3	50.7	54.3
Loch Long	33.4	31.5	49.0	22.2	40.2
Loch Roag non SAC	18.6	17.9	27.3	10.7	22.4
Lochy	17.1	36.8	32.7	21.2	28.4
Lossie	22.8	2.8	3.4	0.5	0.4
Luce	28.6	65.1	61.3	32.6	8.7
Lussa	0.1	0.0	0.0	0.0	0.0
Moidart	7.2	5.5	4.2	7.0	7.3
Morar	15.1	21.1	47.4	28.3	36.3
Moriston SAC	12.5	30.7	7.7	14.2	48.3
Mullanageren	0.0	0.2	0.1	0.0	0.0

Nairn	93.8	85.3	78.0	39.8	59.5
Naver non SAC	-	-	-	-	-
Naver SAC	99.1	98.9	97.9	96.3	99.6
Nell	0.6	6.9	0.8	0.3	17.9
Ness non SAC	53.9	51.7	43.9	52.1	66.1
Nith	76.4	65.2	38.5	25.4	19.4
North Esk	100.0	100.0	100.0	100.0	100.0
North Harris SAC	90.7	61.9	60.8	39.3	0.0
Orkney	-	-	-	-	-
Ormsary	11.5	10.5	6.7	4.3	4.5
Oykel SAC	98.4	95.7	96.5	99.1	92.5
Pennygowan	2.5	3.2	0.4	0.0	0.1
Resort non SAC	-	-	-	-	-
Ruel	0.0	4.6	0.5	0.2	0.0
Sanda	-	-	-	-	-
Scaddle	0.3	3.5	15.5	7.1	7.6
Shetland	-	-	-	-	-
Shiel	16.1	11.5	21.9	6.8	29.2
Sligachan	8.8	1.9	3.0	0.1	11.1
Small Isles	-	-	-	-	-
Snizort	31.2	32.1	8.3	16.0	25.6
South Esk non SAC	-	-	-	-	-
South Esk SAC	87.2	73.1	56.6	50.3	78.9
Spey non SAC	-	-	-	-	-
Spey SAC	85.3	89.3	80.5	75.8	85.4
Stinchar	93.1	90.5	82.7	67.6	61.8
Strathy	17.0	9.1	23.9	12.2	14.9
Sunart	0.1	0.3	0.2	0.0	0.0
Tay non SAC	65.1	65.9	41.0	34.8	33.3
Tay SAC	89.1	87.1	87.9	98.3	94.2

Teith SAC	90.7	94.3	95.3	92.7	79.6
Thurso non SAC	-	-	-	-	-
Thurso SAC	100.0	100.0	100.0	99.8	99.9
Torridon	0.0	89.9	37.3	97.9	0.0
Tweed non SAC	87.4	83.5	67.0	65.9	55.9
Tweed SAC	99.8	98.9	94.3	99.8	95.4
Ugie	30.9	24.0	7.1	0.5	2.8
Ullapool	21.0	43.6	26.3	3.2	17.4
Urr	48.6	79.9	41.4	11.0	20.4
Wick	100.0	99.9	99.1	81.9	98.6
Ythan	89.4	66.6	71.1	43.6	50.9

Table A2. The annual percentage probability of attaining conservation limit for each of the stocks examined using the model excluding loch areas.

District or SAC	2010	2011	2012	2013	2014
Add	1.0	2.3	0.8	0.0	1.4
Ailort	37.6	0.4	41.4	22.6	0.0
Aline	1.3	16.7	20.5	0.0	1.0
Alness	96.6	85.5	81.5	61.0	60.4
Annan	44.3	61.5	41.9	20.4	15.8
Applecross	20.6	8.4	4.7	2.3	2.2
Arnisdale	28.1	20.9	38.5	9.4	3.7
Awe	2.7	17.5	14.6	7.0	18.1
Ayr	32.8	43.5	40.0	38.2	22.8
Baa	19.0	16.9	26.1	5.8	12.6
Badachro	11.0	14.6	58.0	32.9	77.7
Balgay	83.7	45.1	28.0	12.6	58.9
Beaully	59.6	41.2	53.2	46.5	36.4
Berriedale non SAC	-	-	-	-	-
Berriedale SAC	78.8	72.4	75.8	42.3	36.1
Bervie	6.0	0.6	2.9	0.0	0.0
Bladnoch non SAC	-	-	-	-	-
Bladnoch SAC	11.4	42.0	34.0	5.1	1.1
Borgie SAC	100.0	98.5	99.7	86.4	99.7
Broom	0.6	0.0	0.0	0.0	35.6
Brora	90.9	85.1	84.2	66.2	57.2
Carradale	1.9	0.9	0.2	0.2	1.8
Carron	72.0	67.3	68.5	26.4	70.7
Clayburn	1.4	0.1	0.7	0.1	0.3
Clyde non SAC	23.6	26.9	15.7	27.4	33.0
Conon	88.6	85.7	79.9	86.4	77.4
Cree	66.6	55.7	52.8	27.1	24.5

Creed	23.7	33.3	23.6	26.6	22.1
Creran	0.0	0.0	0.0	1.0	0.3
Croe	0.0	2.4	13.4	0.0	0.9
Dee (Aberdeenshire) non SAC	0.0	0.1	0.1	0.0	0.0
Dee (Aberdeenshire) SAC	98.5	98.3	96.6	92.7	92.5
Dee (Kirkcudbright)	4.6	0.0	0.3	0.0	0.0
Deveron	98.2	91.1	92.9	83.0	67.5
Don	86.3	62.3	75.3	54.5	50.5
Doon	99.3	94.2	93.3	92.4	96.9
Drummachloy	-	-	-	-	-
Dunbeath	88.5	73.7	93.0	27.2	72.3
Eckaig	22.0	24.0	18.3	10.6	17.9
Endrick SAC	0.0	0.1	28.0	11.8	3.4
Ewe	45.5	68.7	57.1	46.3	46.5
Fincastle non SAC	99.4	99.8	100.0	100.0	92.5
Findhorn	93.1	88.7	83.1	77.8	81.5
Fleet (Kirkcudbright)	0.4	0.0	0.0	0.0	0.0
Fleet (Sutherland)	-	-	-	-	-
Forss	95.0	78.5	97.2	87.7	90.2
Forth non SAC	5.5	6.5	23.6	14.5	6.7
Fyne	0.0	0.0	0.0	0.0	0.0
Girvan	84.1	84.6	93.1	40.6	48.0
Glenelg	1.1	0.5	4.4	0.1	3.1
Gour	-	-	-	-	-
Griess	0.6	2.8	10.1	17.4	2.2
Grudie	94.2	81.1	81.2	86.8	81.9
Gruinard non SAC	88.2	72.6	79.7	18.7	70.7
Halladale	100.0	99.6	99.9	97.4	98.5
Helmsdale	100.0	99.9	99.8	99.9	99.9
Hope	74.1	70.6	57.7	70.6	59.8

Howmore	23.1	20.2	13.4	4.0	13.1
Inchard	20.0	31.1	18.5	7.4	12.3
Inner	2.3	0.6	1.0	0.2	1.2
Inver	79.5	60.3	55.9	72.1	62.4
Iorsa	9.8	4.1	1.6	0.4	0.6
Irvine	19.9	37.7	18.9	16.7	19.5
Kennart	45.6	20.2	7.1	1.2	45.6
Kilchoan	8.6	11.6	22.3	1.1	12.0
Kinloch	92.0	94.7	83.6	54.2	87.1
Kirkaig	93.3	88.1	74.8	70.1	83.4
Kishorn	-	-	-	-	-
Kyle of Sutherland non SAC	88.0	85.5	88.4	96.5	71.7
Laggan	29.0	45.3	25.6	30.3	5.7
Langavat SAC	100.0	100.0	100.0	100.0	100.0
Laxford	0.0	72.5	38.9	44.3	58.4
Leven	44.6	53.1	67.2	20.8	40.9
Little Gruinard SAC	90.9	86.4	76.0	60.7	44.4
Little Loch Broom	58.3	77.2	49.3	50.7	54.3
Loch Long	35.6	33.6	51.4	23.9	43.0
Loch Roag non SAC	40.1	37.5	53.4	27.9	46.4
Lochy	21.2	43.1	38.9	26.1	34.0
Lossie	23.3	2.9	3.6	0.5	0.5
Luce	29.6	66.1	62.7	33.7	9.2
Lussa	0.2	0.0	0.0	0.0	0.0
Moidart	8.2	6.2	4.8	7.9	8.4
Morar	23.9	32.1	64.0	42.8	51.4
Moriston SAC	12.5	30.7	7.7	14.2	48.3
Mullanageren	1.6	3.0	1.5	0.1	0.0
Nairn	94.3	85.9	79.0	40.9	60.7
Naver non SAC	-	-	-	-	-

Naver SAC	99.8	99.7	99.2	98.9	99.9
Nell	2.0	12.1	2.4	0.8	28.1
Ness non SAC	70.0	66.1	59.8	69.7	81.2
Nith	76.8	65.6	38.9	25.7	19.6
North Esk	100.0	100.0	100.0	100.0	100.0
North Harris SAC	97.8	79.9	80.4	59.8	0.0
Orkney	-	-	-	-	-
Ormsary	13.9	12.4	8.3	5.4	5.7
Oykel SAC	99.1	97.2	98.0	99.7	94.8
Pennygowan	5.2	5.8	0.9	0.0	0.3
Resort non SAC	-	-	-	-	-
Ruel	0.0	4.6	0.5	0.2	0.0
Sanda	-	-	-	-	-
Scaddle	0.3	3.5	15.6	7.2	7.7
Shetland	-	-	-	-	-
Shiel	20.0	14.7	26.3	9.5	34.8
Sligachan	10.6	2.6	3.9	0.3	13.3
Small Isles	-	-	-	-	-
Snizort	36.4	37.4	10.9	20.0	30.6
South Esk non SAC	-	-	-	-	-
South Esk SAC	87.2	73.2	56.8	50.4	79.0
Spey non SAC	-	-	-	-	-
Spey SAC	85.7	89.7	81.0	76.4	85.8
Stinchar	93.7	91.1	83.5	68.8	62.9
Strathy	21.0	11.6	28.5	15.4	18.4
Sunart	0.1	0.3	0.3	0.0	0.0
Tay non SAC	68.2	68.8	43.8	37.7	36.0
Tay SAC	91.1	89.2	90.4	98.9	95.7
Teith SAC	94.3	96.5	97.6	96.6	85.3
Thurso non SAC	-	-	-	-	-

Thurso SAC	100.0	100.0	100.0	99.8	99.9
Torridon	0.0	90.5	38.2	98.2	0.0
Tweed non SAC	88.1	84.3	68.1	66.6	56.8
Tweed SAC	99.8	98.9	94.5	99.8	95.4
Ugie	33.7	26.4	8.7	0.7	3.3
Ullapool	28.2	53.5	34.2	5.7	23.6
Urr	54.0	83.6	46.1	13.0	23.6
Wick	100.0	100.0	99.7	89.1	99.5
Ythan	89.8	67.2	71.9	44.4	51.7

List of categories

Category 1

Deveron
Doon
Fincastle, Meaveg, Ballanachist, South Lacastile, Borve and Obb (West Harris) (excludes the North Harris SAC)
Findhorn
Forss
Grudie or Dionard
Halladale
Helmsdale
Kyle of Sutherland (excludes the River Oykel SAC)
North Esk
Wick
Borgie (SAC)
Dee (Aberdeenshire) (SAC)
Naver (SAC)
Spey (SAC)
Tay (SAC)
Teith (SAC)
Thurso (SAC)
Tweed (SAC)
Oykel (SAC)

Category 2

Alness
Brora
Carron
Conon
Don
Dunbeath
Girvan
Guinard (excludes the Little Guinard SAC)
Hope and Polla or Strathbeg
Inver
Kinloch (Kyle of Tongue)
Kirkaig
Nairn
Stinchar
Tweed (excludes the River Tweed SAC)
Ythan
Berriedale (SAC)
Langavat (SAC)
Little Gruniard (SAC)
North Harris (SAC)
South Esk (SAC)

Category 3

Add

Aline
Annan
Applecross
Arnisdale (in Loch Hourm)
Awe
Aylort (Kinloch) (Ailort)
Ayr
Baa and Glencoilleadar
Badachro and Kerry (in Gairloch)
Balgay
Beaully
Berriedale (excludes the Berridale SAC)
Bervie
Bladenoch (excludes the Bladnoch SAC)
Bladnoch (SAC)
Broom
Carradale (in Cantyre)
Clayburn, Finnis-Bay, Aven-nan-geren, Strathgravat, North Lacastile, Scalladale and Mawrig (East Harris)
Clyde and Leven
Cree
Creed or Stornoway and Laxay
Creran
Crowe and Shiel (Loch Duich) (Croe)
Dee (Aberdeenshire) (excludes the Dee SAC)
Dee (Kirkcudbright)
Drummachloy or Glenmore (Isle of Bute)
Eckaig (Echaig)
Endrick (SAC)
Ewe
Fleet (Kirkcudbright)
Fleet (Sutherland)
Forth (excludes the Teith SAC)
Fyne (Loch)
Glenelg
Gour
Greiss (Gress), Laxdale and Tong or Thunga
Howmore
Inchard
Inner (in Jura)
Iorsa (in Arran)
Irvine and Garnock
Kennart (Kanaird)
Kilchoan or Inverie (Loch Nevis)
Kishorn
Laggan and Sorn (in Islay)
Laxford
Leven
Little Broom (Little Loch Broom)
Loch Long (Luingi and Elchaig)
Loch Roag (Lewis), Rivers Blackwater, Grimersta and Morsgail (excludes the Langavat and Grimersta SAC)
Lochy
Lossie
Luce
Lussa (Mull) and River, Loch Uisk and Loch Buy
Moidart
Morar

Moriston (SAC)
Mullanageren, Horasary and Loch-na-Ciste (North Uist)
Naver and Borgie (excludes the River Naver and River Borgie SACs)
Nell, Feochan and Euchar (Loch Feochan)
Ness (excludes the River Moriston SAC)
Nith
Orkney Islands
Ormsary (Loch Killisport), Loch Head River, and Stornoway (Mull)
Pennygown or Glen Forsa and Aros
Resort
Ruel or Daruel
Sanda
Scaddle
Shetland Islands
Shiel (Loch Shiel)
Sligachan, Broadford and Portree
Small Isles
Snizort, Orley, Oze (Loch Bracadale) and Drynoch (Loch Harport)
South Esk (excludes the River South Esk SAC)
Spey (excludes the River Spey SAC)
Strathy
Sunart (Loch)
Tay (excludes the River Tay SAC)
Thurso (excludes the River Thurso SAC)
Torridon
Ugie
Ullapool
Urr