



Marine Scotland Licensing Operations Team Marine Laboratory 375 Victoria Road Aberdeen **AB11 9DB** 

30 March 2022

# WEST SCOTLAND - WS05 - RIVER AWE (ARGYLL DSFB)- SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## Application

This application covers the River Awe.

### Salmon stocks

The most up to date stock assessment of salmon in the River Awe indicates that the overall stock is in poor conservation status. In relation to salmon conservation, MSS therefore recommend that a seal licence is issued for this river and note that this is one of a range of measures being undertaken to protect salmon stocks in this river.

Salmon are known to be delayed below hydroelectric dams such as the Awe barrage and in other areas salmonids have been shown to be vulnerable to predation by pinnipeds during these delays.

## Number of seals and feeding activity

The applicant has reported no instances of harbour seals or grey seals in the River Awe in the last year.

The applicant has witnessed no predation events by either harbour seals or grey seals in the River Awe in the last year.

MSS advise that without any evidence for the presence of seals within the rivers the justification for granting licences to take seals is weaker than if such evidence were to be provided.

## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.







The PBR limits advised by SCOS (2021) for seals in this seal management area are 933 for grey seal and 936 for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take 2 grey seals and 1 harbour seal. The total requested seals from all applications in the West Scotland seal management area in 2022 is 6 grey seals and 3 harbour seal. MSS advise that the requested licences for grey seals and harbour seals fall well within the PBR limits for the seal management area, both individually and cumulatively, for both species.

## Non-lethal deterrents

The applicant has not provided evidence on the use of alternative non-lethal techniques to reduce seal predation.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

Hopefully these comments are helpful to you. If you wish to discuss any matters further then please contact the REEA Advice inbox at MSS Advice@gov.scot

Yours sincerely,











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## WEST SCOTLAND - WS05 - RIVER CRERAN (ARGYLL DSFB) -SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## Application

This application covers the River Creran.

#### Salmon stocks

The most up to date stock assessmen indicates that the stock in the River Creran is in poor conservation status. In relation to salmon conservation, MSS therefore recommend that a seal licence is issued for this river.

## Sea trout stocks

Less information is available on the conservation status of sea trout compared to salmon. There is a well-documented decline in rod catches of sea trout in Scotland which is indicative of declining stocks. Catches from the Creran district show a long term decline from an average of approximately 150 sea trout caught in the rod fishery each year for the period 1952 to the mid 1980s to annual catches of less than 10 sea trout in recent years. There is therefore a case for issuing a licence to conserve sea trout within this river.

## Number of seals and feeding activity

The applicant has reported no instances of harbour seals or grey seals in the River Creran in the last vear.

The applicant has witnessed no predation events by either harbour seals or grey seals in the River Creran in the last year.

MSS advise that without any evidence for the presence of seals within the rivers the justification for granting licences to take seals is weaker than if such evidence were to be provided.

## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not







produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.

The PBR limits advised by SCOS (2021) for seals in this seal management area are 933 for grey seal and 936 for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take 2 grey seals and 1 harbour seal. The total requested seals from all applications in the West Scotland seal management area in 2022 is 6 grey seals and 3 harbour seals. MSS advise that the requested licences for grey seals and harbour seals fall well within the PBR limits for the seal management area, both individually and cumulatively, for both species.

### Non-lethal deterrents

The applicant has not provided evidence on the use of alternative non-lethal techniques to reduce seal predation.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp, DOI: 10,7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

Hopefully these comments are helpful to you. If you wish to discuss any matters further then please contact the REEA Advice inbox at MSS Advice@gov.scot

Yours sincerely,











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# WEST SCOTLAND - WS05 - LOCH ETIVE (ARGYLL DSFB) -SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and has provided the following comments.

## Application

This application covers the River Etive.

### Salmon stocks

The most up to date stock assessment of salmon in the River Etive indicates that the overall stock is in moderate conservation status. When combined with the concerns for continued decline in Scottish stocks (see the Wild Salmon Strategy) there is a case for issuing a seal licence to protect salmon stocks in the River Etive. A seal licence is one of a number of measures aimed at protecting salmon stocks, although realtively little detail is provided in the application.

## **Sea Trout stocks**

Less information is available on the conservation status of sea trout compared to salmon. There is a well documented decline in rod catches of sea trout in Scotland which is indicative of declining stocks. Information is not available for the River Etive but catches from the Awe district (which contains the Etive) have declined from averaging over 500 at the when catches were first collected to averageing less than 20 in recent years (data cover 1952-2020). There is therefore a case for issuing a licence to conserve sea trout within this river.

## Number of seals and feeding activity

The applicant has reported no instances of either harbour seals or grey seals in the River Etive in the last year.

The applicant has witnessed no predation events by either harbour seals or grey seals in the River Etive in the last year.

MSS advise that without any evidence for the presence of seals within the rivers the justification for granting licences to take seals is weaker than if such evidence were to be provided.

## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are







therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.

The PBR limits advised by SCOS (2021) for seals in this seal management area are 933 for grey seal and 936 for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take 2 grey seals and 1 harbour seal. The total requested seals from all applications in the West Scotland seal management area in 2022 is 6 grey seals and 3 harbour seals. MSS advise that the requested licences for grey and harbour seals fall well within the PBR limits for the seal management area, both individually and cumulatively, for both species.

### Non-lethal deterrents

The applicant has not provided evidence on the use of alternative non-lethal techniques to reduce seal predation.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

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Yours sincerely,











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# SOUTH WEST - SW06 - RIVER SHIRA (ARGYLL DSFB) - SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## Application

This application covers the River Shira.

### Salmon stocks

The most up to date salmon stock assessment indicates that the overall stock is in poor conservation status. In relation to salmon conservation, MSS therefore recommend that a seal licence is issued for this river, although we note that the case would be made stronger with the provision of more detailed supporting information.

## Number of seals and feeding activity

The applicant has reported no instances of either harbour seals or grey seals in the River Shira in the last year.

The applicant has witnessed no predation events by either harbour seals or grey seals in the River Shira in the last year.

The applicant has provided the following information on seal presence and feeding activity in the river: On occasion seals have come into the tidal Dubh Loch which is a refuge for migrating salmon and sea trout. Occurrences of seals entering the river are rare.

MSS advise that without any evidence for the presence of seals within the rivers the justification for granting licences to take seals is weaker than if such evidence were to be provided.

## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.







The PBR limits advised by SCOS (2021) for seals in this seal management area are 116 for grey seal and 71 for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take 2 grey seals and 1 harbour seal. The total requested seals from all applications in the Southwest Scotland seal management area in 2022 is 3 grey seals and 2 harbour seal. MSS advise that the requested licences for both grey seals and harbour seals fall well within the PBR limit for the seal management area both individually and cumulatively.

## Non-lethal deterrents

The applicant has not provided evidence on the use of alternative non-lethal techniques to reduce seal predation.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

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30 March 2022

### MORAY FIRTH - MF01 - RIVER CARRON- SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## **Application**

This application covers the River Carron.

### Salmon stocks

The most up to date stock assessment of salmon in the River Carron indicates that the overall stock is in good conservation status. However, recent declines in the number of salmon returning to Scotland have led SG to determine that this is a crisis point for salmon leading to the launch of a Wild Salmon Strategy. There are also a number of local measures beign undertaken to protect and enhance salmon stocks.

In common with all rivers in Scotland there are national conservation measures in place to protect vulnerable spring salmon stocks. In relation to salmon conservation, MSS recommend issuing a licence covering grey and harbour seals during January-March.

## Number of seals and feeding activity

The applicant has reported no instances of harbour seals or grey seals in the River Carron in the last year.

The applicant has witnessed no predation events by either harbour seals or grey seals in the River Carron in the last year.

MSS advise that without any evidence for the presence of seals within the rivers the justification for granting licences to take seals is weaker than if such evidence were to be provided.

# Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.







The PBR limits advised by SCOS (2021) for seals in this seal management area are 370 for grey seal and 6 for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take two grey seals and one harbour seal. The total requested seals from all applications in the Moray Firth seal management area in 2022 is 30 grey seals and eight harbour seal. MSS advise that the requested licences for grey seals fall well within the PBR limit for the seal management area both individually and cumulatively. However, the declining harbour seal population in this seal management area, and the correspondingly small PBR mean that there is limited capacity for to account for any bycatch or other incidental take from the harbour seal population. This leads MSS to recommend that no licences should be granted for harbour seals in this seal management area.

### Non-lethal deterrents

The applicant has not provided evidence on the use of alternative non-lethal techniques to reduce seal predation.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

## References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

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Yours sincerely,











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### MORAY FIRTH - MF01- RIVER DEVERON - SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## Application

This application covers the River Deveron.

### Salmon stocks

The most up to date stock assessment of salmon in the River Deveron indicates that the overall stock is in moderate conservation status. However, recent declines in the number of salmon returning to Scotland have led SG to determine that this is a crisis point for salmon leading to the launch of a Wild Salmon Strategy. In additional to the national measures outlined in the strategy there are a large number of local measures which are aimed at protecting and enhancing salmon stocks. This application is therefore part of a larger effort aimed at conserving salmon in the River Deveron.

In common with all rivers in Scotland there are national conservation measures in place to protect vulnerable spring salmon stocks. In relation to salmon conservation, MSS would recommend issuing a licence covering grey and harbour seals during January-March.

# Number of seals and feeding activity

The applicant has reported no instances of harbour seals or grey seals in the River Deveron in the last year.

The applicant has witnessed no predation events by either harbour seals or grey seals in the Deveron river in the last year.

MSS advise that without any evidence for the presence of seals within the rivers the justification for granting licences to take seals is weaker than if such evidence were to be provided.

## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not







produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.

The PBR limits advised by SCOS (2021) for seals in this seal management area are 370 for grey seal and six for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take six grey seals and two harbour seal. The total requested seals from all applications in the Moray Firth seal management area in 2022 is 30 grey seals and eight harbour seal. MSS advise that the requested licences for grev seals fall well within the PBR limit for the seal management area both individually and cumulatively. However, the declining harbour seal population in this seal management area, and the correspondingly small PBR mean that there is limited capacity for to account for any bycatch or other incidental take from the harbour seal population. This leads MSS to recommend that no licences should be granted for harbour seals in this seal management area.

### Non-lethal deterrents

The applicant has provided evidence on the use of alternative non-lethal techniques to reduce seal predation. Harassment measures have been used (noise, water disturbance and laser) but the applicant does not comment on how effective these measures have been.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp, DOI: 10,7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

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Yours sincerely,











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30 March 2022

### MORAY FIRTH - MF01- RIVER FINDHORN - SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## Application

This application covers the River Findhorn.

### Salmon stocks

The most up to date stock assessment of salmon in the River Findhorn indicates that the overall stock is in good conservation status. However, recent declines in the number of salmon returning to Scotland have led SG to determine that this is a crisis point for salmon leading to the launch of a Wild Salmon Strategy.

In additional to the national measures outlined in the strategy there are a large number of local measures which are aimed at protecting and enhancing salmon stocks. This application is therefore part of a larger effort aimed at conserving salmon in the River Findhorn.

In common with all rivers in Scotland there are national conservation measures in place to protect vulnerable spring salmon stocks. In relation to salmon conservation, MSS would recommend issuing a licence covering grey and harbour seals during January-March.

## Number of seals and feeding activity

The applicant has reported no instances of harbour seals, and six instances of grey seals, in the Findhorn river in the last year.

The applicant has witnessed six predation events by either harbour seals or grey seals in the Findhorn river in the last year.

Interpretation of these numbers is difficult because no information is provided on how they were collected and they are not effort related.

## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are







therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.

The PBR limits advised by SCOS (2021) for seals in this seal management area are 370 for grey seal and six for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take nine grey seals and one harbour seal. The total requested seals from all applications in the Moray Firth seal management area in 2022 is 30 grey seals and eight harbour seal. MSS advise that the requested licences for grey seals fall well within the PBR limit for the seal management area both individually and cumulatively. However, the declining harbour seal population in this seal management area, and the correspondingly small PBR mean that there is limited capacity for to account for any bycatch or other incidental take from the harbour seal population. This leads MSS to recommend that no licences should be granted for harbour seals in this seal management area.

### Non-lethal deterrents

The applicant has provided evidence on the use of alternative non-lethal techniques to reduce seal predation. Harassment techniques have been used, namely firing blank shots overhead, walking towards hauled out seals and shouting, but seals have become accustomed to this behaviour and only moved a short distance. ADDs, which were previously used 10 years ago, were ineffective.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

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Yours sincerely,











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30 March 2022

### WESTERN ISLES - WI28 - GARYNAHINE ESTATE - SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## Application

This application covers the River Blackwater.

### Salmon stocks

The most up to date stock assessment of salmon in the River Blackwater (Lewis) indicates that the overall stock is in good conservation status. However, recent declines in the number of salmon returning to Scotland have led SG to determine that this is a crisis point for salmon leading to the launch of a Wild Salmon Strategy.

In additional to the national measures outlined in the strategy there are a number of local measures which are aimed at protecting salmon and sea trout stocks.

In common with all rivers in Scotland there are national conservation measures in place to protect vulnerable spring salmon stocks and we would recommend issuing a seal licence during January-March to coincide with these measures.

### Sea Trout stock

Less information is available on the conservation status of sea trout compared to salmon. There is a well-documented decline in rod catches of sea trout in Scotland which is indicative of declining stocks. Information is not available for the River Blackwater but catches from the Loch Roag district (which contains the Blackwater) have declined in recent years and in 2020 were the 9th lowest on record (1952-2020). There is therefore a case for issuing a licence to conserve sea trout within this river.

## Number of seals and feeding activity

The applicant has reported no instances of harbour seals and 45 instances of grey seals, in the River Blackwater in the last year, with sightings in all seasons but peaking in July-September.

The applicant has witnessed 18 predation events by grey seals in the River Blackwater in the last year, between April-September only.

Salmon are known to congregate at the mouths of rivers during low flow conditions making them more vulnerable to predation by seals compared to higher flows when they move through the lower reaches of the river more rapidly.







Interpretation of these numbers is difficult because no information is provided on how they were collected and they are not effort related. However, they do demonstrate that grey seals are active within the river and are consistent with other areas that show a peak in activity during the summer months, coincident with increased numbers of adult salmon entering rivers.

## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.

The PBR limits advised by SCOS (2021) for seals in this seal management area are 1291 for grey seal and 105 for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take 6 grey seals and 0 harbour seal. The total requested seals from all applications in the Western Isles seal management area in 2022 is 11 grey seals and 0 harbour seal. MSS advise that the requested licences for grey seals fall well within the PBR limits for the seal management area both individually and cumulatively.

### Non-lethal deterrents

The applicant has provided evidence on the use of alternative non-lethal techniques to reduce seal predation. Harassment and paintball guns have been used but tend to move seals around the pool. Specialist seals will stay in pool even when anglers are present.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

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Yours sincerely,











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30 March 2022

### WESTERN ISLES - WI18 - GRIMESTA ESTATE- SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## Application

This application covers the Langavat Special Area of Conservation (SAC), for which Atlantic salmon is a Qualifying Interest.

#### Salmon stocks

The most up to date stock assessment of salmon in the Langavat SAC indicates that the overall stock is in good conservation status. However, recent declines in the number of salmon returning to Scotland have led SG to determine that this is a crisis point for salmon leading to the launch of a Wild Salmon Strategy.

In additional to the national measures outlined in the strategy there are a number of local measures which are aimed at protecting salmon and sea trout stocks.

In common with all rivers in Scotland there are national conservation measures in place to protect vulnerable spring salmon stocks, and MSS would recommend issuing a seal licence during January-March to coincide with these measures.

## Number of seals and feeding activity

The applicant has reported no instances of harbour seals and 51 instances of grey seals in the Grimersta river in the last year across all seasons.

The applicant has witnessed 30 predation events by grey seals in the Grimersta river in the last year, between April-September only.

Salmon are known to congregate at the mouths of rivers during low flow conditions making them more vulnerable to predation by seals compared to higher flows when they move through the lower reaches of the river more rapidly.

Interpretation of these numbers is difficult because no information is provided on how they were collected and they are not effort related. However, they do demonstrate that seals are active within the river and have been observed predating salmon.

## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management







area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.

The PBR limits advised by SCOS (2021) for seals in this seal management area are 1291 for grey seal and 105 for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take 5 grey seals and 0 harbour seal. The total requested seals from all applications in the Western Isles seal management area in 2022 is 11 grey seals and 0 harbour seal. MSS advise that the requested licences for grey seals fall well within the PBR limits for the seal management area both individually and cumulatively.

### Non-lethal deterrents

The applicant has provided evidence of the use of alternative non-lethal techniques to reduce seal predation. Harassment measures such as loud noise, flags, using staff to stand and wave arms etc. have been used and they have recently acquired a paintball gun which can have a short term effect of deterring a seal. All these measures are used from the bank and, where practical, by boat.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

Hopefully these comments are helpful to you. If you wish to discuss any matters further then please contact the REEA Advice inbox at MSS Advice@gov.scot

Yours sincerely,











Marine Scotland Licensing Operations Team Marine Laboratory 375 Victoria Road Aberdeen **AB11 9DB** 

30 March 2022

### ORKNEY NORTH COAST - ONC05 - RIVER HALLADALE - SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## Application

This application covers the Halladale River.

### Salmon stocks

The most up to date stock assessment of salmon in the Halladale River indicates that the overall stock is in good conservation status. However, recent declines in the number of salmon returning to Scotland have led SG to determine that this is a crisis point for salmon leading to the launch of a Wild Salmon Strategy. In additional to the national measures outlined in the strategy there are a large number of local measures which are aimed at protecting and enhancing salmon stocks.

In common with all rivers in Scotland there are national conservation measures in place to protect vulnerable spring salmon stocks. In order to protect these vulnerable stocks we would recommend issuing a licence covering grey and harbour seals during January-March.

## Number of seals and feeding activity

The applicant has reported 35 instances of harbour seals and 48 instances of grey seals in the Halladale River in the last year, across all seasons.

The applicant has witnessed 27 predation events by either harbour seals or grey seals in the Halladale River in the last year, across all seasons.

Interpretation of these numbers is difficult because little information is provided on how they were collected and they are not effort related. However, they do demonstrate that both grey and harbour seals are present in the river throughout the year in high numbers and both species are regularly observed to predate salmon.

## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in







considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.

The PBR limits advised by SCOS (2021) for seals in this seal management area are 1923 for grey seal and 8 for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area. However, the assessments for tidal renewable energy developments in the seal management area identify risks of seals colliding with tidal renewable devices and being killed. The inclusion of these takes means the PBR for harbour seals in this seal management area is already accounted for.

The applicant has requested licences to take 4 grey seals and 2 harbour seal. The total requested seals from all applications in the Orkney North Coast seal management area in 2022 is 5 grey seals and 3 harbour seals. MSS advise that the requested licences for grey seals fall well within the PBR limit for the seal management area both individually and cumulatively. However, the declining harbour seal population in this seal management area, and the consequently small PBR mean that there is limited capacity for to account for any bycatch or other incidental take from the harbour seal population. This leads MSS to recommend that no licences should be granted for harbour seals in this seal management area.

## Non-lethal deterrents

The applicant has provided evidence on the use of alternative non-lethal techniques to reduce seal predation. Shouting clapping, bird scarers, bangers, laser pens and paintball guns have been used but there has been limited success due to habituation. The use of ADDs has been deemed impractical due to sandy conditions of the site.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

Hopefully these comments are helpful to you. If you wish to discuss any matters further then please contact the REEA Advice inbox at MSS Advice@gov.scot

Yours sincerely,











Marine Scotland Licensing Operations Team Marine Laboratory 375 Victoria Road Aberdeen **AB11 9DB** 

30 March 2022

## ORKNEY NORTH COAST - ONCO8 - RIVER NAVER- SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## **Application**

This application covers the River Naver. The River Naver is a Special Area of Conservation (SAC) for which Atlantic salmon is a Qualifying Interest.

#### Salmon stocks

The most up to date stock assessment of salmon in the River Naver SAC indicates that the overall stock is in good conservation status. However, recent declines in the number of salmon returning to Scotland have led SG to determine that this is a crisis point for salmon leading to the launch of a Wild Salmon Strategy.

In common with all rivers in Scotland there are national conservation measures in place to protect vulnerable spring stocks. Protection of all components of the salmon stock is also required by the designation of the River Naver SAC. In relation to salmon conservation, we would recommend issuing a licence covering grey and harbour seals during January-March.

# Number of seals and feeding activity

The applicant has reported 3 instances of harbour seals and 7 instances of grey seals in the River Naver SAC in the last year, primarily between January-June.

The applicant has witnessed 16 predation events by either harbour seals or grey seals in the River Naver SAC in the last year, between January-June only.

Interpretation of these numbers is difficult because no information is provided on how they were collected and they are not effort related.

## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in







considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.

The PBR limits advised by SCOS (2021) for seals in this seal management area are 1923 for grey seal and 8 for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area. However, the assessments for tidal renewable developments in the seal management area identify risks of seals colliding with tidal renewable energy devices and being killed. The inclusion of these takes means the PBR for harbour seals in this seal management area is already accounted for.

The applicant has requested licences to take 1 grey seal and 1 harbour seal. The total requested seals from all applications in the North Coast and Orkney seal management area in 2022 is 5 grey seals and 3 harbour seal. MSS advise that the requested licences for grey seals fall well within the PBR limit for the seal management area both individually and cumulatively. However, the declining harbour seal population in this seal management area, and the correspondingly small PBR mean that there is limited capacity to account for any bycatch or other incidental take from the harbour seal population. This leads MSS to recommend that no licences should be granted for harbour seals in this seal management area.

## Non-lethal deterrents

The applicant has provided evidence on the use of alternative non-lethal techniques to reduce seal predation. Barriers were deemed to be impractical and ADDs are not used due to shallow and sandy substrate and no mains power supply. The physical presence of anglers is reported to have no effect of deterrence to seals. Noise harassment and paintball guns continue to be used, though previous use to-date has had limited success.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

Hopefully these comments are helpful to you. If you wish to discuss any matters further then please contact the REEA Advice inbox at MSS Advice@gov.scot

Yours sincerely,











Marine Scotland Licensing Operations Team Marine Laboratory 375 Victoria Road Aberdeen **AB11 9DB** 

30 March 2022

### MORAY FIRTH - MF01- RIVER NESS - SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## **Application**

This application covers the River Ness.

### Salmon stocks

The most up to date stock assessment of salmon in the River Ness indicates that the overall stock is in good conservation status. However, recent declines in the number of salmon returning to Scotland have led SG to determine that this is a crisis point for salmon leading to the launch of a Wild Salmon Strategy.

In additional to the national measures outlined in the strategy there are a large number of local measures which are aimed at protecting and enhancing salmon stocks. This application is therefore part of a larger effort aimed at conserving salmon in the River Ness.

In common with all rivers in Scotland there are national conservation measures in place to protect vulnerable spring salmon stocks. The River Ness catchment contains the River Moriston Special Area of Conservation (SAC), designated for Atlantic salmon, a which is principally a spring fish tributary. In relation to salmon conservation, MSS would recommend issuing a licence covering grey and harbour seals during January-March.

## Number of seals and feeding activity

The applicant has reported ten instances of harbour seals, and six instances of grey seals, in the River Ness in the last year.

The applicant has witnessed nine predation events by either harbour seals or grey seals in the River Ness in the last year.

Interpretation of these numbers is difficult because no information is provided on how they were collected and they are not effort related.

## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of







seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.

The PBR limits advised by SCOS (2021) for seals in this seal management area are 370 for grey seal and six for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take two grey seals and one harbour seal. The total requested seals from all applications in the Moray Firth seal management area in 2022 is 30 grey seals and eight harbour seals. MSS advise that the requested licences for grey seals fall well within the PBR limit for the seal management area, both individually and cumulatively. However, the declining harbour seal population in this seal management area, and the correspondingly small PBR mean that there is limited capacity to account for any bycatch or other incidental take from the harbour seal population. This leads MSS to recommend that no licences should be granted for harbour seals in this seal management area.

### Non-lethal deterrents

The applicant has provided evidence on the use of alternative non-lethal techniques to reduce seal predation. Shouting and clapping were used but were not effective. Starter pistols were used and worked temporarily. There is a plan to trial paintball guns against seals. Translocation was attempted in 2019 but failed. An ADD was trialled in the River Ness in 2019 and was ineffective.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

Hopefully these comments are helpful to you. If you wish to discuss any matters further then please contact the REEA Advice inbox at MSS Advice@gov.scot

Yours sincerely,











Marine Scotland Licensing Operations Team Marine Laboratory 375 Victoria Road Aberdeen **AB11 9DB** 

30 March 2022

### SOUTH WEST - SW02 - RIVER NITH - SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## Application

This application covers the River Nith.

### Salmon stocks

The most up to date stock assessment of salmon in the River Nith indicates that the overall stock is in poor conservation status. In relation to salmon conservation, MSS therefore recommend that a seal licence is issued for this river and note that this is one of a range of measures being undertaken to protect salmon stocks in this river.

## Number of seals and feeding activity

The applicant has reported no instances of harbour seals and 5 instances of grey seals in the River Nith in the last year, between April-September only.

The applicant has witnessed 4 predation events by grey seals in the River Nith in the last year, between July-September only.

Interpretation of these numbers is difficult because no information is provided on how they were collected and they are not effort related.

### Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.

The PBR limits advised by SCOS (2021) for seals in this seal management area are 116 for grey seal and 71 for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.







The applicant has requested licences to take 1 grey seal and 1 harbour seal. The total requested seals from all applications in the Southwest Scotland seal management area in 2022 is 3 grey seals and 2 harbour seal. MSS advise that the requested licences for both grey seals and harbour seals fall well within the PBR limits for the seal management area, both individually and cumulatively.

### Non-lethal deterrents

The applicant has provided evidence on the use of alternative non-lethal techniques to reduce seal predation. Shouting and water slapping have been used but do not deter seals. Some staff have catapults but are not on site at all times. Pyrotechnics have been used but there was no report of how effective this is. ADDs are not used as they have been deemed to be ineffective.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

#### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

Hopefully these comments are helpful to you. If you wish to discuss any matters further then please contact the REEA Advice inbox at MSS Advice@gov.scot

Yours sincerely,











Marine Scotland Licensing Operations Team Marine Laboratory 375 Victoria Road Aberdeen **AB11 9DB** 

30 March 2022

### MORAY FIRTH - MF01 - RIVER OYKEL - SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## **Application**

This application covers the River Oykel. The River Oykel is a Special Area of Conservation (SAC), for which Atlantic salmon are a Qualifying Interest.

#### Salmon stocks

The most up to date stock assessment of salmon in the River Carron indicates that the overall stock is in good conservation status. However, recent declines in the number of salmon returning to Scotland have led SG to determine that this is a crisis point for salmon leading to the launch of a Wild Salmon Strategy. There are also a number of local measures beign undertaken to protect and enhance salmon stocks

In common with all rivers in Scotland there are national conservation measures in place to protect vulnerable spring salmon stocks. Protection of all components of the salmon stock is also required by the designation of the River Oykel SAC. In relation to salmon conservation, MSS would recommend issuing a licence covering grey and harbour seals during January-March.

# Number of seals and feeding activity

The applicant has reported no instances of harbour seals or grey seals, in the River Oykel in the last year.

MSS advise that without any evidence for the presence of seals within the rivers the justification for granting licences to take seals is weaker than if such evidence were to be provided.

## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.







The PBR limits advised by SCOS (2021) for seals in this seal management area are 370 for grey seal and six for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take four grey seals and one harbour seal. The total requested seals from all applications in the Moray Firth seal management area in 2022 is 30 grey seals and eight harbour seals. MSS advise that the requested licences for grev seals fall well within the PBR Imiit for the seal management area both individually and cumulatively. However, the declining harbour seal population in this seal management area, and the correspondingly small PBR mean that there is limited capacity to account for any bycatch or other incidental take from the harbour seal population. This leads MSS to recommend that no licences should be granted for harbour seals in this seal management area.

#### Non-lethal deterrents

The applicant has not provided evidence on the use of alternative non-lethal techniques to reduce seal predation.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

Hopefully these comments are helpful to you. If you wish to discuss any matters further then please contact the REEA Advice inbox at MSS Advice@gov.scot

Yours sincerely,











Marine Scotland Licensing Operations Team Marine Laboratory 375 Victoria Road Aberdeen **AB11 9DB** 

30 March 2022

# EAST COAST - EC23 - PARK FISHERIES (DEE) SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## **Application**

This application covers the River Dee. The River Dee is a Special Area of Conservation (SAC), for which Atlantic salmon is a Qualifying Interest.

#### Salmon stocks

The most up to date stock assessment of salmon in the River Dee SAC indicates that the overall stock is in good conservation status. However, recent declines in the number of salmon returning to Scotland have led SG to determine that this is a crisis point for salmon leading to the launch of a Wild Salmon Strategy.

In additional to the national measures outlined in the strategy there are a large number of local measures which are aimed at protecting and enhancing salmon stocks. This application is therefore part of a larger effort aimed at conserving salmon in the River Dee SAC.

In common with all rivers in Scotland there are national conservation measures in place to protect vulnerable spring stocks. Protection of all components of the salmon stock is also required by the designation of the River Dee salmon SAC. In relation to salmon conservation, MSS would recommend issuing a licence covering grey and harbour seals during January-March.

# Number of seals and feeding activity

The applicant has reported 17 instances of harbour seals and 10 instances of grey seals in the River Dee in the last year, along with 11 sightings of unidentified seals. These sightings were between October-June only.

The applicant has witnessed 4 predation events by either harbour seals or grey seals in the River Dee in the last year, between October-June only.

The applicant has provided the following information on seal presence and feeding activity in the river: 30 of the 38 seal observations were made above the tidal limit on the Dee and considered to be 'river specialists'. These seals were observed feeding, foraging, swimming up and down stream and hauled out. Observations were impacted by COVID restrictions in early 2021. Only two seals were photographed. In previous years several seals were identified as river specialists.

Interpretation of these numbers is difficult because no information is provided on how they were collected and they are not effort related, although these data are consistent with research previously undertaken by the Sea Mammal Research Unit on the Dee.







## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.

The PBR limits advised by SCOS (2021) for seals in this seal management area are 823 for grey seal and 2 for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take 3 grey seals and 1 harbour seal. The total requested seals from all applications in the East Scotland seal management area in 2022 is 14 grey seals and 2 harbour seal. MSS advise that the requested licences for grey seals fall well within the PBR limit for the seal management area both individually and cumulatively. However, the declining harbour seal population in this seal management area, and the consequently small PBR mean that there is limited capacity for to account for any bycatch or other incidental take from the harbour seal population.

MSS's general advice would be that no licences should be granted for harbour seals in this management area. However, given the concerns around spring salmon, it may be appropriate to licence one removal during the January to March period.

#### Non-lethal deterrents

The applicant has provided evidence on the use of alternative non-lethal techniques to reduce seal predation. DDSFB staff have sought advice directly from SMRU with regards to using the paintball gun as a means of harassing seals, with limited efficacy so far. ADDs installed by the DDSFB with the support of SMRU did not create an effective barrier, due to too few transducers and difficulties with power supply.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

Hopefully these comments are helpful to you. If you wish to discuss any matters further then please contact the REEA Advice inbox at MSS Advice@gov.scot

Yours sincerely,

Renewable Energy Environmental Advice Salmon and Freshwater Fisheries Marine Scotland Science

Marine Laboratory, 375 Victoria Road, Aberdeen AB11 9DB www.gov.scot/marinescotland











Marine Scotland Licensing Operations Team Marine Laboratory 375 Victoria Road Aberdeen **AB11 9DB** 

30 March 2022

### EAST COAST - EC07 - RIVER YTHAN - SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## Application

This application covers the River Ythan.

### Salmon stocks

The most up to date stock assessment of salmon in the River Ythan indicates that the overall stock is in poor conservation status. In relation to salmon conservation, we therefore recommend that a licence is issued for this river and note that this is one of a number of measures being undertaken to conserve stocks in this river.

## Sea Trout stocks

Less information is available on the conservation status of sea trout compared to salmon. There is a well-documented decline in rod catches of sea trout in Scotland which is indicative of declining stocks. Catches from the Ythan show a long term decline since 1952 with catches in recent years being around 15% of those during the 1950s. There is therefore a case for issuing a licence to conserve sea trout within this river.

## Number of seals and feeding activity

The applicant has reported 0 instances of harbour seals and more than 325 instances of grey seals in the River Ythan in the last year across all seasons.

The applicant has witnessed 34 predation events by either harbour seals or grey seals in the River Ythan in the last year, between April-December only.

Interpretation of these numbers is difficult because no information is provided on how they were collected and they are not effort related.

## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in







considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.

The PBR limits advised by SCOS (2021) for seals in this seal management area are 823 for grey seal and 2 for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take 6 grey seals and 0 harbour seals. The total requested seals from all applications in the East Scotland seal management area in 2022 is 14 grey seals and 2 harbour seals. MSS advise that the requested licences for grey seals fall within the PBR limit for the seal management area both individually and cumulatively.

### Non-lethal deterrents

The applicant has provided evidence on the use of alternative non-lethal techniques to reduce seal predation. Harassment with loud noises, canoes and paintball guns have been used. A boat-mounted ADD has been deployed with varying success; some seals are undeterred.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

Hopefully these comments are helpful to you. If you wish to discuss any matters further then please contact the REEA Advice inbox at MSS Advice@gov.scot

Yours sincerely,











Marine Scotland Licensing Operations Team Marine Laboratory 375 Victoria Road Aberdeen **AB11 9DB** 

30 March 2022

### MORAY FIRTH - MF01 - RIVER SPEY - LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## **Application**

This application covers the River Spey. The River Spey is a Special Area of Conservation (SAC), for which Atlantic salmon is a Qualifying Interest.

#### Salmon stocks

The most up to date stock assessment of salmon in the River Spey indicates that the overall stock is in good conservation status. However, recent declines in the number of salmon returning to Scotland have led SG to determine that this is a crisis point for salmon leading to the launch of a Wild Salmon Strategy.

In additional to the national measures outlined in the strategy there are a large number of local measures which are aimed at protecting and enhancing salmon stocks. This application is therefore part of a larger effort aimed at conserving salmon in the River Spey SAC.

In common with all rivers in Scotland there are national conservation measures in place to protect vulnerable spring salmon stocks. Protection of all components of the salmon stock is also required by the designation of the River Spey SAC. In relation to salmon conservation, MSS would recommend issuing a licence covering grey and harbour seals during January-March.

# Number of seals and feeding activity

The applicant has reported no instances of harbour seals, and nine instances of grey seals, in the River Spey in the last year.

The applicant has witnessed three predation events by either harbour seals or grey seals in the River Spey in the last year.

Interpretation of these numbers is difficult because no information is provided on how they were collected and they are not effort related.

## Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of







seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.

The PBR limits advised by SCOS (2021) for seals in this seal management area are 370 for grey seal and six for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take five grey seals and one harbour seal. The total requested seals from all applications in the Moray Firth seal management area in 2022 is 30 grey seals and eight harbour seals. MSS advise that the requested licences for grey seals fall well within the PBR limit for the seal management area both individually and cumulatively. However, the declining harbour seal population in this seal management area, and the correspondingly small PBR limit mean that there is limited capacity to account for any bycatch or other incidental take from the harbour seal population. This leads MSS to recommend that no licences should be granted for harbour seals in this seal management area.

### Non-lethal deterrents

The applicant has provided evidence on the use of alternative non-lethal techniques to reduce seal predation. Barriers have been considered but deemed impractical due to flow of river. Noise harassement (shouting and clapping) has been used but has not been effective. Trialling paintball guns appears to be partially effective. The use of ADDs has been researched there has been a site visit from SMRU, but their was use deemed impractical.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

## References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

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Yours sincerely,











Marine Scotland Licensing Operations Team Marine Laboratory 375 Victoria Road Aberdeen **AB11 9DB** 

30 March 2022

### MORAY FIRTH - MF01 - RIVER SHIN - SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## Application

This application covers the River Shin.

### Salmon stocks

The most up to date stock assessment of salmon in the River Shin indicates that the overall stock is in good conservation status. However, recent declines in the number of salmon returning to Scotland have led SG to determine that this is a crisis point for salmon leading to the launch of a Wild Salmon Strategy. There are also a number of local measures beign undertaken to protect and enhance salmon stocks

In common with all rivers in Scotland there are national conservation measures in place to protect vulnerable spring salmon stocks. In relation to salmon conservation, MSS would recommend issuing a licence covering grey and harbour seals during January-March.

## Number of seals and feeding activity

The applicant has reported no instances of harbour seals or grey seals in the River Shin in the last year.

MSS advise that without any evidence for the presence of seals within the rivers the justification for granting licences to take seals is weaker than if such evidence were to be provided.

### Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines. We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.







The PBR limits advised by SCOS (2021) for seals in this seal management area are 370 for grey seal and six for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take two grey seals and one harbour seal. The total requested seals from all applications in the Moray Firth seal management area in 2022 is 30 grey seals and eight harbour seals. MSS advise that the requested licences for grev seals fall well within the PBR limit for the seal management area both individually and cumulatively. However, the declining harbour seal population in this seal management area, and the correspondingly small PBR mean that there is limited capacity to account for any bycatch or other incidental take from the harbour seal population. This leads MSS to recommend that no licences should be granted for harbour seals in this seal management area.

#### Non-lethal deterrents

The applicant has not provided evidence on the use of alternative non-lethal techniques to reduce seal predation.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

### References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

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Yours sincerely,











Marine Scotland Licensing Operations Team Marine Laboratory 375 Victoria Road Aberdeen **AB11 9DB** 

30 March 2022

### EAST COAST - EC06 - RIVER TAY SEAL LICENCE CONSULTATION

Marine Scotland Science have reviewed the relevant documentation and have provided the following comments.

## **Application**

This application covers the River Tay. The River Tay is a Special Area of Conservation (SAC), for which Atlantic salmon is a Qualifying Interest.

#### Salmon stocks

The most up to date stock assessment of salmon in the River Tay SAC indicates that the overall stock is in good conservation status. However, recent declines in the number of salmon returning to Scotland have led SG to determine that this is a crisis point for salmon, leading to the launch of a Wild Salmon Strategy.

In additional to the national measures outlined in the strategy there are a large number of local measures which are aimed at protecting and enhancing salmon stocks. This application is therefore part of a larger effort aimed at conserving salmon in the River Tay SAC.

In common with all rivers in Scotland there are national conservation measures in place to protect vulnerable spring stocks. Protection of all components of the salmon stock is also required by the designation of the River Tay salmon SAC. In relation to salmon conservation, we would recommend issuing a licence to cover grey and harbour seals during January-March.

### Number of seals and feeding activity

The applicant has reported 1 instance of harbour seals and 4 instances of grey seals in the River Tay in the last year, between July-December only.

The applicant has witnessed no predation events by either harbour seals or grey seals in the River Tay in the last year.

Interpretation of these numbers is difficult because no information is provided on how they were collected and they are not effort related.

# Number of seals requested on the licence

The NERC Special Committee on Seals (SCOS) reports to Scottish Government annually on Potential Biological Removal (PBR) numbers for the two resident seal species. These numbers represent the maximum anthropogenic take from the seal populations within a seal management area in order for the populations to be sustainable, and reflect both the population size and trend. Takes from shooting must be cumulated and assessed alongside all other anthropogenic takes of seals within the management area, including, for example, bycatch and collision with tidal turbines.







We note that seals taken through bycatch and other incidental takes are not planned and are therefore difficult to cumulate for annual assessment. Bycatch data from previous years are also not produced at the same spatial scale as the seal management areas making their inclusion in considerations more complicated. As a result, MSS recommend that MS-LOT take a cautious approach to determining the number of licences for seal takes that can be issued.

The PBR limits advised by SCOS (2021) for seals in this seal management area are 823 for grey seal and 2 for harbour seal. To our knowledge, there are no other planned anthropogenic takes from the seal populations in this seal management area.

The applicant has requested licences to take 5 grey seals and 1 harbour seal. The total requested seals from all applications in the East Scotland seal management area in 2022 is 14 grey seals and 2 harbour seals. MSS advise that the requested licences for grey seals fall well within the PBR limit for the seal management area, both individually and cumulatively. However, the declining harbour seal population in this seal management area, and the correspondingly small PBR, mean that there is limited capacity to account for any bycatch or other incidental take from the harbour seal population.

MSS's general advice would be that no licences should be granted for harbour seals in this management area. However, given the particular concerns around spring salmon, it may be appropriate for MS-LOT to licence one removal during the January to March period.

### Non-lethal deterrents

The applicant has provided evidence on the use of alternative non-lethal techniques to reduce seal predation. The Tay District Salmon Fishery Board was informed in the past after a visit from the Sea Mammal Research Unit (SMRU) that ADDs would not work due to the width of the river (100 m). Physical barriers were deemed unsuitable for the same reason. A range of physical and acoustic harassment techniques have been trialled, with little success at displacing seals wider than the immediate area. Further noise harassment measures are not appropriate due to the proximity to tourist attractions.

MSS recommend that prior to lethal removal, applicants explore further non-lethal measures to reduce depredation or displace seals from critical areas of the river. These non-lethal measures have been extensively reviewed in a recent Marine Scotland report (Thompson et al. 2021).

## References

Thompson, D, A J Coram, R N Harris and C E Sparling. (2021). Review of non-lethal seal control options to limit seal predation on salmonids in rivers and at finfish farms. Scottish Marine and Freshwater Science Vol 12 No 6, 136pp. DOI: 10.7489/12369-1 https://data.marine.gov.scot/dataset/review-non-lethal-seal-control-options-limit-seal-predationsalmonids-rivers-and-finfish-0

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Yours sincerely,





