

Appendix 9.5: Outline Regional Eagle Conservation Management Plan

2023

Loch Liath Wind Farm

Technical Appendix 9.5: Outline Regional Eagle Conservation Management Plan

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1. Introduction

- 1.1 This Outline Regional Eagle Conservation Management Plan (hereafter referred to as the 'Outline RCMP') is intended to provide the framework for the finalisation and implementation of a Regional Eagle Conservation Management Plan (hereafter referred to as the 'RCMP') for Natural Heritage Zone (NHZ) 7 Northern Highlands. Implementation of those elements of the RCMP set out in section 3 in this Outline RCMP is intended to be secured by way of a suitably worded planning condition for Loch Liath Wind Farm (hereafter referred to as the Development).
- 1.2 Whilst the responsibility of the operator of the Development is limited to the obligations set out in section 3, it is also considered that, in time, funding from other appropriate developments may also be provided to extend the RCMP as described below which aligns with the mechanism for the existing NHZ 10 RCMP, delivered by SSE (and partners) for the Dunmaglass Wind Farm¹.

2. Aims and Objectives

- 2.1 The initial aim of the RCMP is to positively contribute to the regional conservation status of the golden eagle within NHZ 7 Northern Highlands (Figure 1) through improved monitoring of the species' population and breeding status.
- 2.2 This shall be achieved through the Development operator's obligations set out in section 3. However, through the structures established by these obligations, the objectives of the RCMP could also be extended to include research and practical conservation management actions to enhance the size and productivity of the NHZ 7 golden eagle population, where possible.
- 2.3 The RCMP will also provide for support and contribution to research to improve species knowledge, including to further understand and address threats or constraints, and opportunities for regional population growth for golden eagle.

3. Operator's Obligations

- 3.1 The operator of the Loch Liath Wind Farm shall undertake the following actions in order to secure the achievement of the initial aim of the RCMP set out in section 2.1 above:
- Appointing and funding the Independent Expert to:
 - establish and extend invitations to join the Advisory Group as set out in section 5.
 - undertake the finalisation of the RCMP as set out in section 6. The RCMP shall be approved by the Planning Authority prior to operation of the Development (unless otherwise required by the corresponding planning condition).
 - The full cost for funding a complete census of all territory occupancies, vacancies and their breeding fates within NHZ 7 once every three years, until

¹ The Highland Council (THC) Planning Ref: 05/00217/S36IN.

the Development ceases to operate or (if sooner) a period of 35 years from the date of the commencement its Development.

- Appoint the Project Officer who shall be responsible for undertaking the functions set out in section 5 and to fund the employment of the Project Officer for a maximum of 40 days per annum for an initial period of 5 years and thereafter as agreed by the Advisory Group subject to a maximum of 40 days per annum, provided that the operator of the Development shall not be obliged to fund the employment of the Project Officer beyond the date on which the wind farm ceases to operate, or 35 years from the date of its first operation (whichever is the sooner).

4. Geographical Scope

- 4.1 The focus of the RECMF will be NHZ 7 (Figure 1), within which the Development is located, and against which associated regional impacts on golden eagle species have been assessed.

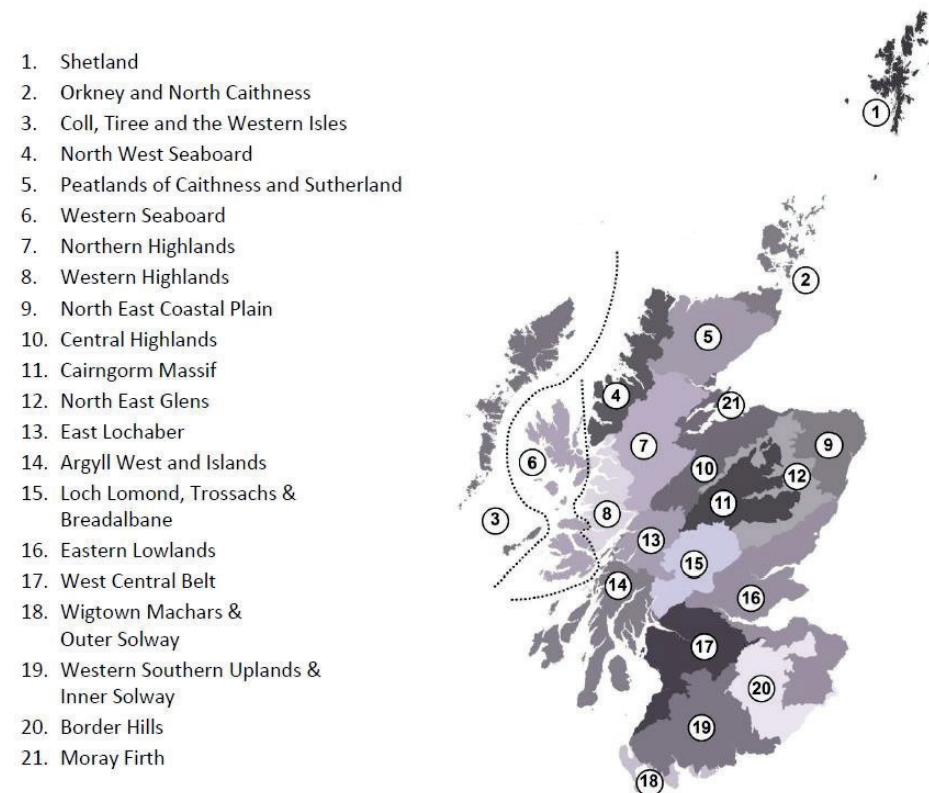


Figure 1: Natural Heritage Zones (NHZs).

- 4.2 Whilst the initial objectives (and obligations of the operator of the Development) are focussed on NHZ 7, the geographical scope may be subject to adjustment as part of the review process set out in section 9 below. This may, for example, allow the undertaking of survey, research and monitoring and practical conservation actions outside of NHZ 7, e.g., within adjacent NHZ boundaries, where this is considered appropriate to support the RECMF's primary aim of understanding and positively affecting the conservation status of the NHZ 7 golden eagle population.

5. Personnel Within the RECMF

Independent Expert

- 5.1 An Independent Expert (IE) will finalise the RECMF in consultation with NatureScot, and implement it, as agreed. Once finalised the operator of the Development will submit the RECMF to the Planning Authority to discharge the corresponding planning condition.

Project Officer

- 5.2 A Project Officer (PO) will be appointed to liaise with the Highland Scotland Raptor Study Group (HRSRG) and will have responsibility for liaising with landowners and land management parties, as well as co-ordinating and carrying out survey and monitoring work required to facilitate a complete inventory and census of golden eagles within NHZ 7 to supplement existing efforts by the HRSRG.
- 5.3 The PO must be a named person (or persons) with demonstrable experience in the survey and monitoring of breeding raptors in Scotland and should have local connections to, or membership of, the SRSRG. The PO will be appointed following consultation with The Highland Council and NatureScot.
- 5.4 The appointment of a PO will, in time, provide a recognisable individual who will become a focal point for liaison with estates, land managers, conservation organisations and members of the public.
- 5.5 Protocols for the reporting of Wildlife Crime by the PO, based on established and agreed protocols by the Partnership for Action against Wildlife Crime in Scotland (PAWS), will be presented within the RECMF.

Advisory Group

- 5.6 The RECMF shall include the formation of a supporting Advisory Group, to advise, co-ordinate some activities undertaken as part of the RECMF, comment on the plan and agree recommendations for new and/or revisions to such, where proposed by the assigned independent expertise.
- 5.7 It is proposed that at least one representative of each of the following will be invited to join the Advisory Group:
- Loch Liath Wind Farm Ltd. (the Applicant) or any future operator of the Loch Liath Wind Farm;
 - The Highland Council;
 - NatureScot;
 - National Wildlife Crime Unit;
 - Highland Scotland Raptor Study Group (HRSRG); and,
 - RSPB Scotland.

- 5.8 The forming of and invitation to the Advisory Group will be undertaken by the Independent Expert, within a timeframe contained within the RCMP.
- 5.9 Additional contributors, such as a representative for Police Scotland and SRMS may also be invited to join and/or engage with the Advisory Group in the provision of expertise and resources, where considered integral to achieving the aims and objectives of the RCMP by the Independent Expert or the Advisory Group once formed.
- 5.10 The Advisory Group in time may also include representatives from other funding sources for the RCMP and landowners, e.g., where needed to deliver practical conservation actions (see section 10).

6. Basic Requirements and Background Research of the RCMP

- 6.1 The RCMP will provide detail on:
- the status of golden eagle in NHZ 7;
 - the proposed surveys and monitoring methods, including a full census every three years; and
 - Reporting requirements.

Further information is provided in section 7 and 8 of this Outline RCMP.

- 6.2 The RCMP will also provide background information including:
- Using existing sources, to establish the status of golden eagles within NHZ 7 including the identification of all known occupied, historically occupied (but inactive) and new or potentially establishing territories²;
 - Identification of the potential status of the NHZ 7 population using historical distribution data and/or habitat suitability analyses; and,
 - Identification of the threats, constraints and opportunities to realise potential status and identify any knowledge gaps for such (including survey and monitoring shortfalls or other research needs), within NHZ 7.

7. Golden Eagle Status in NHZ 7

- 7.1 The primary aim of the RCMP will be to positively affect the conservation status of the golden eagle within NHZ 7.
- 7.2 The concept of meeting "Favourable Conservation Status" (FCS) for golden eagle, with relevant tests (Whitfield *et al.*, 2006 and 2008), is considered to provide an effective and minimal tracking device to measure the baseline and assess the extent to which that aim is met, in an evolving process.
- 7.3 In the most recently published assessment of the conservation status of the golden eagle in Scotland (Whitfield *et al.*, 2008) and based on the results of the 2003 national population survey, NHZ 7 is considered to be in unfavourable conservation status

because, in 2003, only 43 ranges out of 90 known at that time were occupied. Overgrazing by deer was identified as the primary constraint on the species reaching favourable conservation status in NHZ 7, with pressures from illegal persecution resulting in low occupancy rates.

- 7.4 Whilst the most recent national population survey in 2015 (Hayhow *et al.*, 2017) indicates that golden eagle has since exceeded the national target for FCS, data provided from the Highland Raptor Study Group (HRSG) showed that there were at least 49 pairs within NHZ 7 in 2019, although it was noted that the increase in numbers elsewhere in the Highlands has not occurred to the same extent in NHZ 7. Thus, it is unlikely that the criteria for favourable condition (>66% occupancy) has been met due to continued low occupancy rates.
- 7.5 The 2015 national survey found home range occupancy of the Highland region (covering NHZ 7) remained relatively low, with a high proportion of breeding pairs comprising sub-adult or mixed pairs. The absence of breeding adult birds and the use of territories by non-breeding immature birds, being associated with impacts of persecution (Whitfield *et al.*, 2004).
- 7.6 The baseline conservation status of the golden eagle population within NHZ 7 for the RCMP will therefore be re-examined using the tests for FCS detailed by Whitfield *et al.*, 2006 and 2008, on the basis of most recent national surveys i.e., 2015 (Hayhow *et al.*, 2017). This will be updated and/or supplemented as appropriate with the findings of any subsequent national surveys, monitoring results of the Scottish Raptor Monitoring Scheme (SRMS) and consultations with the HRSG (section 8).
- 7.7 This will form an initial part of research to be provided in the RCMP.
- 7.8 This initial research will also identify and assess the influence of threats to the NHZ 7 population and constraints in meeting the tests of FCS. It is however, considered likely that the key constraint acting upon the NHZ 7 golden eagle population and meeting or improving FCS will be deer grazing and illegal persecution, and will remain as such for the foreseeable future. The RCMP will therefore be sensitive to these issues and seek to establish the extent to which these threats continue. The RCMP will have further regard for other potential pressures on the NHZ 7 golden eagle population, such as increasing commercial forestry cover, as appropriate at the time.
- 7.9 Survey and monitoring work to be carried out under the RCMP, will subsequently be used to periodically re-examine the conservation status of the NHZ 7 golden eagle population and constraints to achieve FCS, and assess the effectiveness of the RCMP.

8. Survey, Monitoring and Reporting

- 8.1 Survey and monitoring of breeding territories within NHZ 7 will be an essential component of the RCMP.
- 8.2 The RCMP will include a complete updated inventory and full census of all occupied, inactive (but previously occupied) territories, and potential new territories³, to

² This may include for the purchase and analyses of satellite tagging data.

³ E.g., in response to the findings of satellite tagging data (where available).

establish occupancy and breeding productivity (including fledgling output) within NHZ 7. The RCMP will also provide for a mechanism to identify any shortfalls in achieving the census and outline measures to address gaps in geographical coverage.

- 8.3 The complete updated inventory and full census will feed into periodic assessments of FCS (detailed above) and identify appropriate measures to facilitate the implementation of the steps required to address constraints and progress towards achieving and maintaining FCS within NHZ 7.
- 8.4 Most baseline survey efforts to monitor golden eagle territories in Scotland are undertaken voluntarily by regional branches of the Scottish Raptor Study Group (SRSG) (under the SRMS) and their dedicated raptor workers (e.g., Challis *et al.*, 2022). However, being voluntary, such effort cannot typically provide a complete census of an area required to feed into assessments of FCS. As part of national species surveys for example, volunteer efforts are therefore supplemented by employed surveyors to fill these gaps in coverage (Hayhow *et al.*, 2017).
- 8.5 Following discussion with the HRSG, it is understood that monitoring coverage of NHZ 7 by the HRSG is low, restricted mainly to Special Protection Areas (SPAs) and that long-term vacant sites are not checked annually. As such, the RCMP will work in conjunction with the HRSG to ensure optimal census regional coverage.
- 8.6 The HRSG will therefore be consulted to ascertain and agree limitations to completing an updated inventory and subsequent full census of golden eagle territories within NHZ 7, in line with the Census Method (see below).
- 8.7 Following this, the RCMP will clarify where gaps in existing monitoring coverage of NHZ 7 are present and also where possible future gaps may arise over the lifetime of the Development.

Census Methods

- 8.8 In accordance with Hardey *et al.* (2013), the RCMP will provide for at least four visits to every known active, vacant or potentially establishing new territories within NHZ 7 once every three years, to establish occupancy and any breeding outcomes as follows:

Visit 1	January to early March	To check for occupancy.
Visit 2	April	To locate active nests.
Visit 3	June	To check for young.
Visit 4	Late July to August	To check for fledged young.

- 8.9 The criteria for confirming signs and evidence of breeding, fledging and non-breeding as detailed within Hardey *et al.* (2013) should be followed, unless where otherwise agreed with the Advisory Group.

Census Report

- 8.10 The results of the census shall be considered confidential (i.e., territory, breeding site and roosting site locations) but will be provided to the Advisory Group, within an agreed time limit, by way of a census report, and which will not be made publicly available.
- 8.11 The census report shall as a minimum provide:
- Survey effort – i.e., dates, times and locations of breeding territories monitored;
 - Results – observations, including digitised field plans of species activity, made during survey visits and conclusions of occupancy and breeding outcomes for all territories monitored; and,
 - Copies of consultations with the HRSG and the effort and results of their monitoring visits (as above).
- 8.12 The census report shall also be provided to the SRMS and directly to the HRSG, together with copies of any digitised monitoring results, should they require it.
- 8.13 An agreed data sharing policy for the Advisory Group will be prepared and presented within the RCMP and will consider the opportunity for the public dissemination of non-sensitive findings of the census (and other actions undertaken under the RCMP) e.g., through the Development's website.

9. Review

- 9.1 The RCMP will be based on the framework proposed within this Outline RCMP and will be approved in accordance with the suitably worded planning condition imposed.
- 9.2 The RCMP will be a dynamic document and will be reviewed every 5 years by the Advisory Group to incorporate any change in knowledge or progress achieved by its enacted recommendations. It is proposed that this review schedule should however remain flexible but should span the consented operational lifetime of the Development.

10. Further Opportunities of the RCMP

- 10.1 The RCMP may provide opportunities for further aims and objectives should additional funding become available, or third parties become involved. Examples of potential further opportunities are provided in sections 11 and 12 below.

11. Research

- 11.1 Research will be an element of the finalised RCMP to support the RCMPs objectives. The RCMP's research needs shall therefore be established as part of the basic requirements (under section 6) and finalisation of the RCMP, and which reflect the specifics of golden eagle biology and threats within NHZ 7.

- 11.2 It is envisaged that research could be secured through suitably worded planning conditions or s75 Agreements for future wind farms in NHZ 7 and supported by scientific input from the RCMP.
- 11.3 RCMP-funded research may therefore include the following:
- research to develop the understanding of constraints on the population in NHZ 7 e.g., prey availability, persecution, development land use and other factors (e.g., recreation and weather); and,
 - research with the aim of furthering the understanding of golden eagle behaviour, survival and biology in NHZ 7 and Scotland.
- 11.4 The analyses and public dissemination of research results (subject to discretion of sensitivity by the Advisory Group) shall be a key consideration in identifying appropriate based funded research needs for the RCMP. The RCMP shall also provide a mechanism to allow for the identification of evolving RCMP-funded research needs, as part of periodic reviews.

12. Practical Conservation Actions

- 12.1 The prescribing of practical conservation actions will be undertaken in response to survey, monitoring and research. These may include the following and may require the involvement, financial contribution, and co-operation of other third parties:
- Surveillance studies including satellite tagging, nest cameras and/or additional visits to breeding territories (see sections 7 and 8);
 - Habitat management proposals;
 - Discussions with interested landowners relating to changes in land management practices and implementation of agreed changes; and,
 - Contribution to the evidence base for statutory guidance and legislative change.
- 12.2 The funding mechanism for the RCMP will remain flexible to allow the provision and sourcing of additional funding or resources to undertake feasible practical conservation actions.

13. Conclusion

- 13.1 This Outline RCMP provides the details of a framework upon which the finalisation of a RCMP for NHZ 7 should be undertaken, in accordance with a suitably worded planning condition.
- 13.2 It has been provided to ensure that any contribution to regional conservation measures for golden eagle by the Applicant, seeks to positively affect the FCS of the NHZ 7 golden eagle population.
- 13.3 The implementation of the RCMP will be undertaken by an Independent Expert and an informed by an Advisory Group, formed to ensure the objective and focused delivery of recommendations made under the RCMP.

- 13.4 The RCMP will include for a survey, monitoring and research elements which will serve to update the current population status of golden eagle within NHZ 7 and clearly establish the threats and constraints to the population meeting the tests of FCS.
- 13.5 This will allow for the identification of any practical conservation measures which may be proposed and receive funding from the RCMP.
- 13.6 The RCMP once approved, will remain an evolving document, enabling it to span the operational lifetime of the Development and respond to changes in understanding of species biology and behaviours.

14. References

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