

# FEARNA STORAGE

## **Fearna Pumped Storage Hydro Scheme EIA Report**

### **Appendix 8.7.1.1 – Deer Management Assessment February 2025**



## Quality Information

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# Fearna PSH Deer Management Assessment

ADLnature

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## 1. Aim

The aim of this assessment is to define individual properties, their current management policies, the potential impact the construction and operation of the Proposed Development would on the current deer population, and the impact that the deer population might have on proposals to restore peatland within the properties hosting the Proposed Development.

## 2. Introduction

### 2.1 Principal Properties

The principal properties and their sizes covered by this assessment are:

- FLS (Forestry and Land Scotland) Glengarry, Greenfield and Clunes – 15,533ha
- Glenquoich Estate – 7,788 ha
- East Glenquoich Estate – 4,023 ha
- Glen Kingie Forest Estate – 6,546 ha
- Kingie Estate – 402 ha

The individual FLS properties are Glengarry, Greenfield and Clunes.

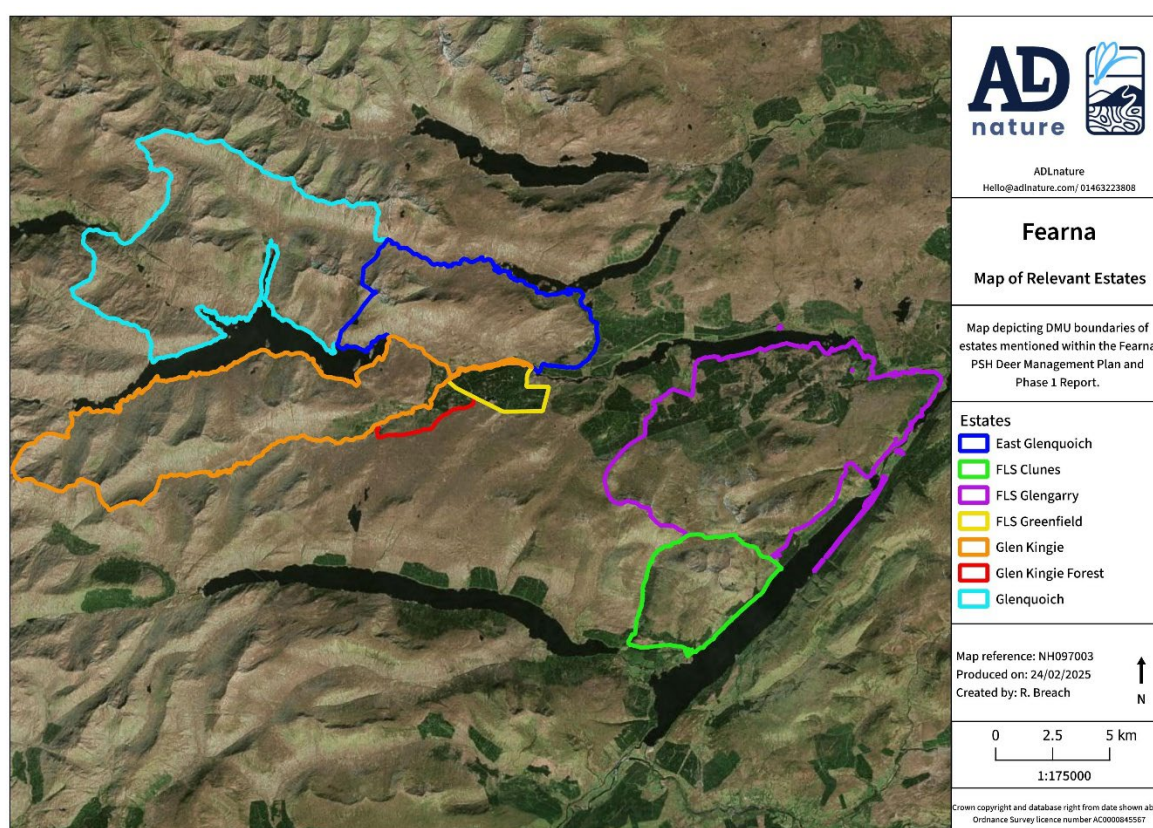


Figure 1 - Map of Estates Listed in Introduction

They are located on the north and south of Glengarry and west of Loch Lochy. FLS properties are primarily a mix of woodland (mostly commercial) and open hill with either blanket bog or heather moor components.

Both Glenquoich, East Glenquoich and Kingie have a small amount of forestry with primarily a commercial sporting operation across the estates. The Glen Kingie Forest Estate comprises entirely of commercial forestry.

There are several existing run-of-river hydro schemes on Glenquoich and FLS properties.

Current deer numbers are unavailable for FLS through the ADMG (Association of Deer Management Groups) portal that host deer management plans. However, the current FLS target is to manage deer numbers to between 2 and 7 deer per km<sup>2</sup> as identified in their strategy document (FLS 2014).

Deer numbers are available from the Glenelg Deer Management Plan, and current data indicates that:

Deer numbers of East Glenquoich are around 230 Stags / Hinds / Claves or 7.2 deer/km<sup>2</sup>

Deer numbers on Glenquoich are 592 Stags / Hinds / Claves or 9.5 deer/km<sup>2</sup>

As the impacts of the Proposed Development on the Glen Kingie Forest and Kingie Estates are limited to an access road passing along the perimeter of these properties, and no unfenced restoration works are planned within them, these estates are discounted from the remainder of this assessment.

#### FLS Next Steps

The most recent communication (February 2025) from FLS to Fearn PSH Ltd indicates that:

*“Over the next 6-36 months FLS plans, subject to finances, are to secure the Invergarry block from deer migration through upgrade and installation of deer fences. E.g. secure from Poullary bridge to Loch Garry, Kilfinnan farm to River Garry”.*

and

*“Repost strategic western boundary fence. Renew/new fence between the Poullary bridge and Loch Garry, Renew/new fence on eastern boundary Kilfinnan farm to River Garry. Thinking is yes, there may be migration across the Loch but minimal to zero. Likewise, from River Garry up to the dam due to the level of disturbance (public use)”*

## **2.2 Objectives of the Management Plan: FLS**

The primary goal of the management plan on FLS properties is to reinstate perimeter fencing and reduce deer numbers to a level (noted above) that would facilitate woodland and riparian habitat establishment. This plan would not be underpinned by the Proposed Development as it is understood that FLS have already planned to reduce numbers below that potentially required to facilitate peatland restoration.

The by-product of any intensively managed deer population (as proposed by FLS) would in itself further support positive improvements in the speed of regeneration on any restored blanket bog and native woodland sites.

### **2.3 Objectives of the Management Plan: Glenquoich and East Glenquoich**

Both properties are signatories to the Glenelg Deer Management Plan that is currently being updated for spring 2025.

Both properties are also currently under the 10 deer/km<sup>2</sup> threshold that peatland action require before they can take forward a peatland action project. Any native woodland restoration within these estates would require to be fenced.

Any proposed peatland restoration on these properties would be underpinned by habitat information collated during the Phase 1 survey. Other aspects to be considered for specific sites would be elements such as access routes, habitat type and what would be the long-term potential for carbon sequestration. Proposals would also take note of the number of herbivores that are cited in the Glenelg Deer Management Plan.

### **2.4 Outcomes for Sites Proposed for Peatland Restoration**

FLS proposals are to manage deer to a population level below that required for peatland restoration to be considered a success. Therefore, no further action on deer management would need to take place on FLS properties in respect of the Proposed Development.

Glenquoich and East Glenquoich also both fall below the threshold considered to be the upper level for peatland restoration to be viable. In other words, at 7.2 and 9.5 deer/km<sup>2</sup> respectively, Deer would not need to be displaced (by fencing for instance) or culled in order for peatland restoration projects to be taken forward.

Therefore, on FLS properties (in light of their proposals) and on both Glenquoich and East Glenquoich (using current numbers), any proposed peatland restoration would generally not have a negative impact on the current hefted populations.

### **2.5 Outcomes for Wild Deer Welfare**

It is considered that within the FLS landholdings, where the construction and operation of the Proposed Development is limited to the use of an access track and a construction compound, and deer numbers are planned to be limited to below 4/km<sup>2</sup>, there would not be any significant impact on the welfare of wild deer as a result of the Proposed Development.

Within the Glenquoich and East Glenquoich estates, it is considered that the limited area of the Proposed Development within the scale of these estates would not give rise to any significant impact on the welfare of wild deer.

### **2.6 Areas to note**

It should be noted that some areas, such as transit zones, areas along current deer fence lines and areas adjacent to habitats with high grazing values would require further thought as to the viability of long-term peatland restoration. Elements to discuss with site managers would include: -

- Localised culling – this would not involve an overall reduction in deer numbers, but would involve site specific actions;
- Not undertaking restoration within 200m of any fencing;

- Using drone data to define more clearly migratory pathways and managing restoration areas in line with that information;
- Diversionary feeding – both Glenquoich estates currently feed in any case, so that would potentially be a tool to mitigate risk in some areas; and
- Looking at hefted areas to understand population dynamics (with estate staff on Glenquoich and East Glenquoich)

For projects to be taken forwards on any site, there would be a full survey on habitats using (for example) drone footage, peat depth and habitat impact assessments. Habitat impacts can change in light of local population dynamics and therefore while ADLnature have conducted an assessment, it cannot take into account future changes due to increased forestry plantations/fencing or increases in deer populations above the current numbers.

### **3. Ecological Context**

#### **3.1 Habitat Description:**

- Blanket bog – 1,168ha
- Heather moor 6,919ha
- Woodland (various) – 5,466ha
- Montane – 1,544ha
- Rest (Grassland, rock etc) - 529ha

#### **3.2 Impacts of Elevated Deer Populations in Woodland and On Open Range Habitats:**

- Reduced biodiversity: Deer browsing can reduce the number of plants and animals in a forest. This can affect soils and release carbon.
- Damaged trees: Deer can damage tree bark and lower branches, which can lead to structural weakness and disease.
- Prevented regeneration: Deer can prevent forests from regenerating by killing or suppressing seedlings.
- Reduced timber value: Deer can reduce the value of timber crops by up to 50%.

### **4. Population Control Strategies**

Deer would continue to be managed to maintain populations at levels where browsing is at an acceptable level. Impacts would be measured through the monitoring of regeneration, planted trees and semi natural habitats. Management would be carried out on FLS properties by wildlife rangers, tenants or contractors, and subject to the prescriptions of the local deer management plan. The district would take part in all deer management groups.

Culling on Glenquoich and East Glenquoich is managed by owners and staff respectively, with clients and invited guests also participating in managed culls.

## **5. Habitat Management**

### **5.1 Deer Fencing**

This is already used extensively to manage deer over large areas and to keep herbivores as much as possible out of woodland areas. However, it is likely that subject to funding, more fencing is likely to take place on these three properties.

### **5.2 Vegetation Management**

The primary tools for assessing sites are: -

[Best Practice Guidance Habitat assessment](#) (BPG 2025)

Upland Habitat Impact Assessment (SNH 2004)

[Wild deer dung counting](#) (BPG 2025)

These tools provide upland managers in FLS with information on distribution and impacts from primarily Red deer, but Sika and Roe are actively managed in line with local policies. Site specific culls can then be implemented in line with information from these types of assessments.

## **6. Monitoring and Data Collection**

### **6.1 Deer Counts**

Deer counts can take place on the “open range” with other options open to upland managers as noted above.

Deer counts include: -

- Helicopter counts (as part of the wider deer group management)
- Recruitment counts - A recruitment count is done to determine the surviving calves as a proportion of hinds at the end of winter (usually late April into may)
- Open range counts (Stags, Hinds, Calves, Unclassified)

### **6.2 Impact Assessments**

Periodically assess the ecological impact of the deer, especially in relation to vegetation or biodiversity.

As already noted, these include a range of measures appropriate to any given environment.

## **7. Stakeholder Engagement**

### **7.1 Public Awareness**

FLS have a policy of promoting deer management through documentation such as the Lochaber deer management plan (FC 2009). They also use national approaches with their deer management strategy (FLS 2025).

ADMG promote good practice through their website and deer management documents for the Knoydart group are available from the website.

All of the above approaches are aimed at giving as broad a spread of information to the public and allows individuals and key stakeholders to comment and offer any relevant responses.

## **7.2 Neighbouring Properties / Key Stakeholders**

The [Knoydart deer management plan](#) (ADMG 2025) is available online and is the primary document that outlines actions undertaken across the group to manage deer numbers.

It underlines policies and procedures in line with current deer policies as outlined by the Scottish Government through NatureScot. Key aims by the Scottish Government include: -

- Reduce the deer population by about half by 2030
- Achieve sustainable deer management by 2045
- Protect and restore habitats, particularly woodland and peatland
- Improve animal welfare

One of the primary documents used to inform deer management going forwards was “*The Management of Wild Deer in Scotland*” (Pepper, Barbour, Glass 2019). The report looked at:

- Wild deer and the frameworks around them
- Public safety and measure to reduce risks to the public
- Damage to public interest such as agriculture, forestry and national heritage
- Use of compulsory powers
- Refocussed approaches and a standardised way forward.

## **8. Conclusion**

### **8.1 FLS**

Deer numbers are projected to be reduced to between 2 and 7 deer / km<sup>2</sup> on FLS properties in line with the latest communication from field officers. Other species will be managed as required.

In light of this approach, there are no further recommendations made by ADL Nature on behalf of the Proposed Development in respect of deer reduction policies on FLS land.

Furthermore, the current deer management plan (that FLS are a signatory to) is the [Knoydart deer management plan](#) and this approach underpins best practice guidance management.

In order to ensure that restored habitats are protected from overgrazing/trampling it would be preferable that an agreement on ongoing numbers be sought to ensure their long-term success.

It is considered that the construction and operation of the Proposed Development would not have any significant impact on the welfare of wild deer.

## 8.2 Glenquoich and East Glenquoich

Current counts indicate that both Glenquoich and East Glenquoich are below 10 deer/km<sup>2</sup>. Therefore, there is no imperative to reduce numbers below this to facilitate peatland restoration. Any native tree planting would be fenced.

While there is currently likely to be site specific impacts from herbivores in some areas, this would be redefined in any future surveys to ensure that restoration proposals are not unduly affected by localised trampling/grazing.

Future restoration on both properties in their current management format is not therefore likely to be impacted by the deer numbers cited above. However, changes (increases) in hefted populations or physical changes (at a landscape level) like fencing or new buildings could influence population dynamics. Therefore, any restoration programme would need to take account of future management decisions. It is however considered that the limited area of the Proposed Development within the scale of these estates would not give rise to any significant impact on the welfare of wild deer.

## 9. References

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- (SNH) Scottish Natural Heritage (2004) Guide to UPLAND HABITATS Surveying Land Management Impacts books 1 & 2. ISBN 9 781853 972966
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