# Appendix 7 —Water and Catchment Management

#### Freshwater Management

All operations on Scotland's National Forests and Lands (NFL) will adhere to the UK Forestry Standard (UKFS) (2017), section 6.7 - Forests and Water, and the Water Environment (Controlled Activities Scotland) Regulations (CAR) and the General Binding Rules published by Scottish Environment Protection Agency (SEPA). Operations will also be carried out in accordance with 'Managing Forest Operations to Protect the Water Environment' (FC, 2019) and the Forest and Water Scotland Initiative booklet "Know the Rules".

In Scotland, SEPA implements the Water Framework Directive (WFD) - a legal framework for the protection, improvement and sustainable use of all waterbodies in the environment across Europe. All water bodies in Scotland are routinely assessed for ecological and chemical status and catchment plans have been drawn up to ensure waterbodies are brought up to an acceptable level. North Region lies entirely within the Scotland river basin district, and is covered by the third River Basin Management Plan (2021 – 2027).

The aims of the WFD are to improve waterbodies to acceptable ecological status/potential (by 2015, but later if this has not been feasible) and to prevent any deterioration in ecological status/potential. FLS North Region consider it vital that operational planning and delivery does not lead to a deterioration of waterbody condition or water-dependant habitat within LMP areas including tributaries and waterbodies directly up- or downstream of the NFL.

Water bodies noted on SEPA's River Basin Management Plan (RBMP) website, and minor watercourses identified by North Region as significant for this LMP, are shown on Maps 10a & 10b Key Water Features. The ecological condition assessment of the RBMP-listed waterbodies is given in the table below.

Water Body ID	Water body Name	Current classification (Overall Status)	2027 Objective	
100156	Loch Ness	Good	Good	
20278	Allt Saigh	Good Ecological Potential	Good Ecological Potential	
23381	River Moriston- Loch Ness to Dundreggan Dam	Moderate	Good Ecological Potential	
20282	Allt Bhlaraidh*	Bad Ecological Potential	Bad Ecological Potential	
20283	Allt Larairidh	Good	Good	
20284	Allt Phocaichain	Moderate	Moderate	
20285	Allt Baile nan Carn	Moderate	Moderate	
20286	Allt na Muic	Good	Good	
23382	River Moriston- Dundreggan Dam to Bun Loyne	Good	Good	
20249	Caledonian Canal- Loch Oich to Loch Ness	Good	Good Good	
20253	River Oich	Good	Good	
20293	Invervigar Burn	High	High	

\* Note: Allt Bhlaraidh (ID: 20282) is classified as having bad ecological potential. This is due to the waterbody having been heavily modified to accommodate and operate a significant hydro-electric scheme in the water course (upstream of FLS ground). Any non-compliance of forest operations with water regulations may further negatively impact status. However in order to improve on the current 2027 Classification Objective would require a significant alteration in the function (and objectives) of the hydro-electric power generation scheme.

Many forests within the Fort Augustus plan area lie on the (sloping) banks on Loch Ness and as such the majority of the LMP area lies within the Loch Ness Catchment for a Public Drinking Water source. In consequence, compliance with all relevant Scottish Water guidance for working within a **Drinking Water Protected Area** will be adhered to when carrying out operations within this catchment.

Whilst no examples are present in the Fort Augustus LMP area, it is acknowledged that water bodies have suffered from inappropriate forestry practices in the past due to plantation edges being too close to watercourses, to their intensive cultivation and for poorly implemented drainage schemes. It is also recognised that **invasive non-native species** (INNS) can have impacts on the condition of areas protected under the Habitats Directive for species or habitats important at a European scale, and those nationally important, for biodiversity. INNS are recognised as a significant risk to the water environment in the 3rd River Basin Management Plan for the Scotland River Basin District (2021 – 2027).

Given the potential for contamination from management activities on upstream populations of riparian INNS, any control efforts will be undertaken with this in mind, and FLS will continue engage with established authorities (Rivers and Fisheries Trusts and SEPA) to work within existing project frameworks such as biosecurity plans when implementing control measures. Invasive plants have been recorded at small, localised scale in the plan area. Historically, removal works have been delivered to reduce rhododendron populations (*R. ponticum*) and will continue during the coming Plan period. Routine survey work will continue throughout the Plan period and any occurrence dealt with in compliance with best practice guidance.

Water crossings for proposed roads infrastructure will be planned and delivered in accordance with the Engineering in the Water Environment Best Practice Guide (River Crossings) (2010) and within the structure of the Controlled Activities Regulations (CAR). It is acknowledged that the on-site storage of oil will be carried out in accordance with the Water Environment (Oil Storage) (Scotland) Regulations 2006.

As a minimum, the Water Environment (Diffuse Pollution) (Scotland) Regulations 2008 General Binding Rules will be followed. These rules cover the storage and application of fertiliser, cultivation of land, discharge of site water, construction of roads and use of pesticides. These are considered operational planning issues and as such specific mitigation and working methods are not detailed in the LMP – except in relation to operations considered within the EIA Screening Opinion Request Form (Appendix 3) - but through the established work planning and pre-commencement planning protocols. The associated documentation being available for viewing as required by stakeholders.

North Region Civil Engineering staff will contact SEPA prior to commencing **engineering works** in, or in the vicinity of, inland surface waters to determine the level of authorisation required. Site-specific mitigation for engineering works is not a matter for this Plan; however Forestry Civil Engineering will adhere to all planning controls and mitigation measures stipulated before, during and after construction work.

Surface water drains will not discharge directly into the water environment. North Region staff will remediate legacy drains of this type to avoid siltation problems by using tree roots and other natural methods to act as anti-siltation devices during harvesting operations. When natural means are not available, plastic dams or semi-permeable netting may be used temporarily. When operations are finished these will be removed and the materials reused.

Where opportunities exist to deliver environmental improvement by alteration or removal of **inappropriately designed or redundant structures** - for instance upgrading of a culvert to allow fish passage or removal of a redundant weir - this will be undertaken in consultation with relevant stakeholders and FLS will register the operation with SEPA. Opportunities for morphological and ecological improvements may also be considered.

Forestry has a significant role to play in *mitigating the effects of climate change*. Building resilience against extreme weather events underpins all our proposals but is particularly relevant in relation to protecting overhead power line networks, public road infrastructure and watercourses. Many instances of historical, artificial cultivation and drainage across Scotland's NFL are inappropriate in light of (current) future climate predictions and will be addressed by adoption of less intensive techniques into the future and complemented by the establishment of a network of protective native riparian woodland where appropriate. Details of the proposed riparian woodland that will provide a buffer on all identified watercourses (average 30 metres from each bank) is shown spatially in **Maps 6a and 6b – Future Habitats and Species.** As part of pre-operational work planning, watercourses are initially identified from Ordnance Survey GIS data but this information may ultimately be supplemented by additional watercourse identified during environmental walkover surveys to inform the work plan. Where an existing drain has become a sizable and stable watercourse, it will be treated as though it were a natural watercourse in terms of respecting buffer areas along its length in line with FR Practice Guide 25 – 'Managing forest operations to protect the water environment'.

*Tree guards* may be used to protect more palatable species in riparian areas from browsing damage. When tree guards are being used this will be recorded using our work planning process and mapping software. Tree guards will be inspected annually and removed when no longer necessary. If possible tree guards will be reused on other sites.

Where specific operations produce *waste materials* not detailed above, North Region staff will liaise directly with SEPA to establish the level of permission/licensing required on a site by site basis.

#### Flood risk

The Flood Risk Management (Scotland) Act 2009 created a new framework for assessment and management of flood risk and new responsibilities for local and statutory authorities, including Forestry Commission Scotland, to consider and reduce flood risk as an integral and ongoing aspect of land management.

Of pertinence to this assessment requirement, the Highland Council (in partnership with Argyll and Bute Council, Scottish Water, Forestry and Land Scotland, Scottish Environment Protection Agency, the Cairngorms National Park Authority and the Loch Lomond and the Trossachs National Park Authority) has published The Highland and Argyll Local Flood Risk Management Plan 2022 – 2028. This Plan identifies forty areas where risk of flooding is deemed of greatest likelihood and significance. These areas are referred to as Potentially Vulnerable Areas (PVA).

The "Inverness and The Great Glen" PVA is illustrated on **Maps 10a and 10b** and includes an predominantly urban area adjacent to the Fort Augustus LMP area at Fort Augustus. Flooding occurred here from the River Oich in 1849, 1966, 1989 and 1990, mainly affecting the Riggs area of the town. The upstream catchment of the River Oich at Fort Augustus is approximately 49,871 ha. There is also attenuation and storage present in three lochs upstream. There is 12,135 ha of afforested land in the catchment of which 7,960 ha of forest is managed by FLS (part of the Fort Augustus Plan area but also the Invergarry LMP area). On account of the attenuation installed at the three upstream lochs, the best opportunities to reduce peak river flow at Fort Augustus is considered to be on the land below (i.e. downstream) of these attenuated lochs and therefore closer to Fort Augustus.

With this in mind, FLS will manage the forest in line with UKFS and the 2009 Flood Risk Management Act including: avoiding excessive felling that could increase the possibility of flooding downstream (see below); designing and maintaining forest drains separated from natural watercourses; planting and conserving riparian woodland to 'buffer' natural watercourses; and increasing the extent of continuous cover forest management in the catchment to increase evapo-transpiration rates in order to reduce peak flows at Fort Augustus.

Forest management within this Land Management Plan includes tree felling and forest thinning operations with the potential to reduce the interception of rainwater and rates of ground absorption and percolation of surface water, which in turn could increase flood risk. The tree felling is expected to create a cumulative total of approximately 150 ha felled ground at any one time within the ten year Plan period. Within a catchment of 49,871 ha upstream of Fort Augustus, this represents 0.3% of the catchment and is consequently deemed of no significant additional impact upon flood risk.

Finally, at national level, FLS has actively worked with SEPA, the local authorities and other partners throughout the evolution of the current (second) Flood Risk Management Plan cycle and is committed to continue this engagement to ensure - should new information come to light - that FLS is listening, understanding and considering potential new ideas in forest and land management which may mitigate flood risk even more effectively at Fort Augustus.

#### **Private Water Supplies**

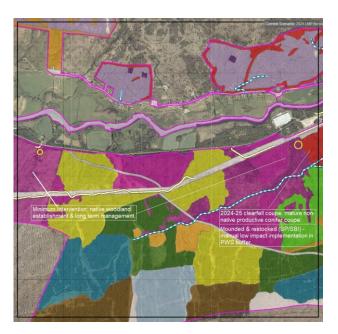
It is a legal offence to contaminate a drinking water supply. FLS adhere to guidance published through the Forestry & Water Scotland initiative (<a href="www.forestrywaterscotland.com">www.forestrywaterscotland.com</a>) and, with particular relevance to private water supplies, Confor's 'Protecting private water supplies during forestry activities' (also referenced in Appendix 11 – Key Policies and publications).

There are currently nine private surface water catchment drinking water supply points within the Fort Augustus Land Management Plan area. These are recorded in a layer in FLS' GIS mapping system and also displayed on **Maps 10a & 10b—Key Water Features**. All user infrastructure and intake points for these supplies have been identified, visited and - based on intake point and associated supply catchment area - all proposed tree felling and restocking proposals have been assessed\*. A minimum 50 m buffer zone of the upstream catchment associated with each intake is then applied where no future ground preparation or pesticide spraying will take place. In addition, FLS commit to establishing (or restructure at next felling intervention) this buffer as minimum intervention native broadleaved woodland in order to guard intakes from any future disturbance. The following images display the future habitat objectives of the eight catchments associated with these nine surface water catchments.

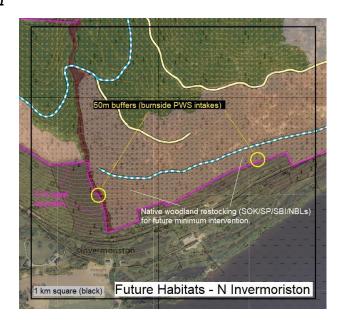
\*N.B. If the geology and/or geomorphology surrounding any intake had been found to be significantly sensitive (due to heightened porosity or high percolation on account of catchment topography) the extent of low density, minimum intervention native woodland would be increased beyond fifty metres - upon SEPA's recommendation - to counter the increased potential for negative impacts on water quality from forest management operations.

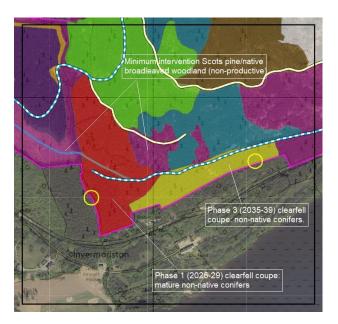
#### Achlain & Torgoyle, Glenmoriston (west)



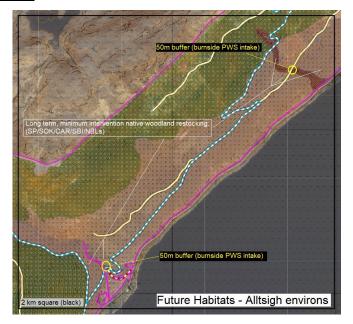


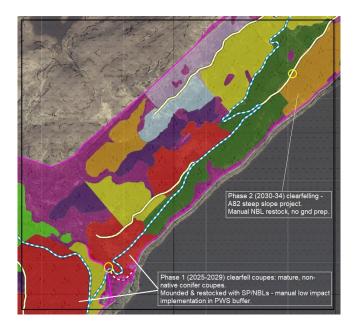
#### Invermoriston (northside)





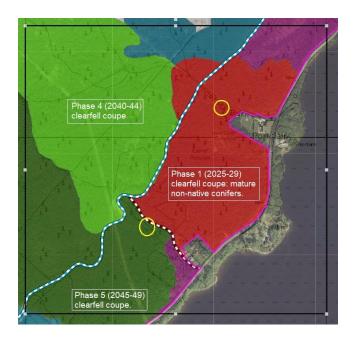
#### Alltsigh/Loch Ness northside



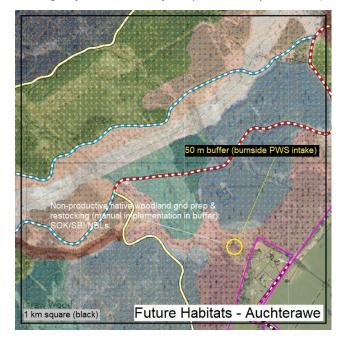


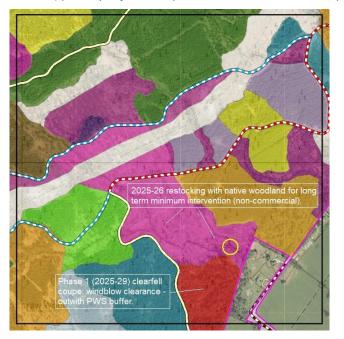
#### Port Clair/Loch Ness westside





<u>Auchterawe</u> – this is sole remaining surface PWS – due for replacement by borehole (outwith LMP area) possibly before Plan period. Included here in case operations delayed.





With respect to tree felling within supply catchments - to remove productive forest stands and initiate restructuring, site-specific operational mitigation is decided by the Delivery teams at the Work Plan stage. Affected neighbours are routinely consulted prior to any works commencing. Supply infrastructure and fifty metre buffer zones are clearly marked on all contract maps, as well as on the ground, and their presence and sensitivity discussed in pre-commencement briefings with forest works managers. Similarly, if invasive non-native plant removal is planned, the Delivery team will also determine site-specific operational mitigation and consult relevant neighbours. Again, buffer zones around the intake points are marked on the ground and on maps to prevent the potential for pollution incidents and the whole process recorded through the FLS Work Plan process.

There are a further 14 borehole water supplies at close proximity to the LMP area boundary, where mechanised felling operations may only take place upto 50 m from the borehole and where native broadleaves will be subsequently planted. Also, within this buffer, there is a presumption against the use of ground-disturbing preparation techniques or associated pesticide use.

The entire LMP area is covered by the Invermoriston Scottish Water Catchment (see Maps 10a & 10b – Key Water Features) but accounts for just 5% of the total area of the Catchment. Consequently any felling within the LMP area is assumed to have minimal impact on the Water Catchment as a whole and FLS will routinely engage with Scottish Water at the pre-operational Work Planning stage to agree any additional or specific mitigation measures that may be required during delivery.

# Appendix 8 - Deer Management Plan (DMP)

## Background

This DMP is a supporting document/appendix to the Fort Augustus Land Management Plan (LMP) 2024-2034. It also relates/is to be used in conjunction with FLS' current Deer Management Strategy - reflecting FLS commitment to implement cull resources to achieve sustainable deer and wildlife management in this area.

### Local objective

In line with the FLS national deer strategy, the main objective locally for this DMP is the further reduction of a well-established wild deer population in the area. FLS is committed to reducing the overall deer density in the LMP area, within the parameters of National Objectives. Links to national documents are provided below (National Objectives) for further reference.

To support the over-arching objectives of the LMP (section 1.1.4). Most relevant for deer management are:-

- the increasing proportion and extent of broadleaved trees being established and growing on the landholding and
- the reduced age structure of all woodland (significant removal of mature/over-mature trees and consequent re-establishment).
- FLS target density currently sits between 2 and 7 deer per square kilometre nationally. This is lower than the NatureScot prescription of 10 deer per square kilometre at a landscape scale as FLS understand that in certain sensitive habitats further reduction in density is required for successful establishment and regeneration. At this time the ambient level of deer across the entire landholding needs to be reduced further before specific targets can be applied in these areas.

Broadleaves in particular have increased susceptibility to browsing and resultant damage often resulting in tree mortality whilst the increased variety of age classes of the entire forest offers increased extent of shelter for deer which in turn can hinder effective localised management. Deer numbers need to be at a level that facilitates successful establishment of these more palatable and sensitive species for the LMP to meet its objectives. Key habitats and woodland types encountered within the LMP area – and requiring deer management to succeed are:

- Productive conifers growing for timber production (non-native species)
- Productive conifer & broadleaves (native)
- Areas of PAWS restoration and other areas prescribed for native woodland restructuring (natural regeneration and restocking). The LMP has ambitious broadleaf establishment targets in Glenmoriston in particular and reduction of *overall* deer density in this area will ultimately support establishment success of this element.
- A significant (localised) area of proposed peatland restoration
- Caledonian Pine Inventory (CPI) areas with veteran, indigenous trees, shrubs and associated ground flora and lower plants
- Extensive open ground habitat with co-dependent wildlife species (e.g. black grouse, raptors, lower plant assemblages).

### National objectives

These are contained within the following corporate strategy documents:

- Deer Management Strategy <u>Deer management strategy Forestry and Land Scotland</u>
- Scottish Biodiversity Strategy Biodiversity strategy: consultation gov.scot (www.gov.scot)
- And contributing to <u>Scottish Forestry Forestry Strategy</u> (this also includes Climate Change).

Note: Deer management policy and strategy is a constantly evolving field in which FLS are actively engaged and then responsive to changes made to legislation and required working practices, targets etc.

### Deer Species (and other herbivores)

The predominant deer species are Sika, Red and Roe deer. Red currently make up the majority of the deer population, with Sika another significant portion of the population. Roe make up a smaller proportion, however they present a disproportionate and significant threat to the successful establishment of planted and regenerating trees, particularly native broadleaved species.

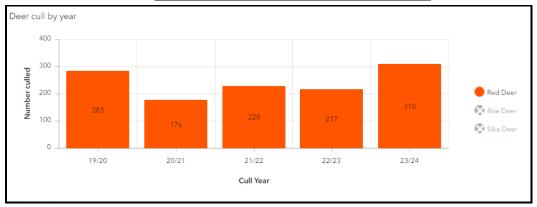
A significant population of Feral Wild Pigs is established in the LMP area and are culled opportunistically by contract staff and FLS wildlife rangers. FLS also conduct a corral trapping programme during the winter months. A specific Feral Wild Pig Management plan is attached to this LMP (Appendix 9).

There are significant numbers of livestock grazing fields surrounding the forests that would impact upon the objectives of the LMP if there were serious incursions into the area. The local Wildlife Ranger Manager (WRM) and supervisor will work with local agricultural enterprises and the department of agriculture, to make sure that any major incursions are dealt with swiftly.

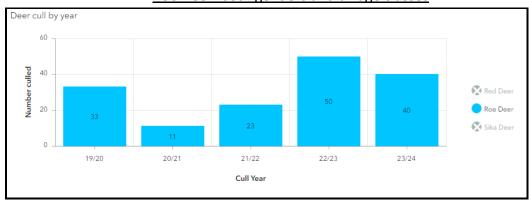
### Historic Deer Management

In the previous 5 years, FLS have produced average annual cull of 403 deer - inclusive of all species. It is widely accepted that a percentage of these will have come from incursions from neighbouring landholdings. This generally happens around wintertime when deer migrate down from high ground to seek shelter. The purpose of including this data is to highlight that although a consistently high cull has been successfully achieved annually, incremental decreases in overall population are slow. The following bar chart presents a specific breakdown by species for the last five year period:

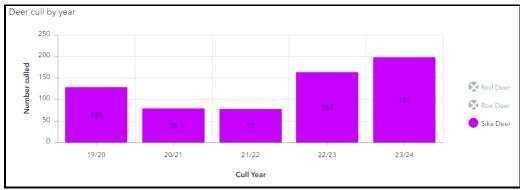
#### Red Deer: both genders and all age classes

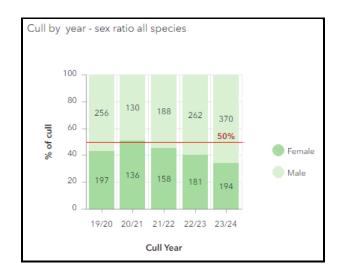


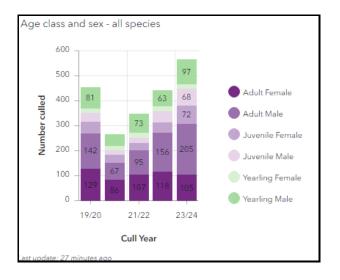
#### Roe Deer: both genders and all age classes



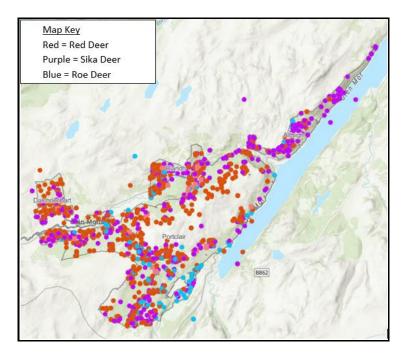
#### Sika Deer: both genders and all age classes







Historic cull locations are illustrated on the following map and shows effort focused not only in commercial restocked areas, but also areas of specific environmental significance and areas where a reduction of species, specifically sika, has been identified. The map draws on the last five years of data and highlights that culling effort is expended in sensitive and remote areas as well as the areas of conventional productive woodland silviculture.



To achieve culls, FLS use out of season authorisations, night shooting authorisations and daylight stalking. FLS also employ high seats to facilitate some static deer management in open areas. Pigs are not specifically targeted during deer culling operations; they are however culled opportunistically when outings take place (see also Appendix 9).

### Monitoring Methodology

- Established monitoring methods will be employed through out the duration of this LMP. In designated and sensitive sites this will play some part in informing the overall deer cull however it will not be the only aspect used to make an informed evidence based decision.
- Restocks are surveyed routinely through Nearest Neighbour impact assessments to determine the percentage of browsing damage to saplings. This in turn allows FLS to determine the trend in deer impacts in the LMP area. FLS' target is to achieve less than 10% of leader browsing.
- FLS assess deer densities through use of drones or dung count surveys conducted by an independent third party. This information enables FLS to set an evidence-based cull through population modelling alongside impact assessments and cull data obtained from the Wildlife Management System link to the FLS Deer Dashboard.
- Most of the data used to create this DMP can be found in FLS' Deer Dashboard. Access to the dashboard is not yet available to the public however this is due to change in the near future.

### Population Modelling and Future Culls

- Population modelling has been carried out in the area by using a blended method of dung counting, direct drone counting, and evidence used from previous culls.
- Population models are updated annually based on cull data collected from the previous years culling, this is then used to inform decision making for the next years cull target. Population models provide us with a estimated time frame to achieve a specific density target and in some cases this is a significant time scale.
- Deer density is estimated at 9.4 /km<sup>2</sup> (2012-2013). Deer numbers were counted in 2022 using a drone survey, data extrapolated from those results in an estimate of 8.7/km<sup>2</sup> at a minimum. Previous culling data shows that if we sustain the level of female culling at the same rate, it is likely that the populations will be brought down to a tolerable level.
- The current population model can be updated regularly to provide projections of where the cull is going and give FLS a projected population density for the future. However it does not include a suitable recognition of incurring deer into the area.
- The proposed cull for 2024/25 for the whole of the LMP area is given in the following table:

Forest Block	Red Deer	Roe Deer	Sika Deer	Total
Portclair	200	40	110	350
Blairidh	30	10	25	65
Altsigh	20	5	25	50
Dalchriechart/Torgoyle	30	0	29	59
Total	280	55	189	524

The proposed cull is based on figures derived from a resident deer population; any incurring deer will be added to the proposed cull.

• The cull will be monitored closely and is likely to be sustained at a high level through the duration of the LMP. This reflects the population of Sika deer present in the area. The population model is updated annually.

### Protection Options – cull/fence/tubes

- In addition to culling, certain tree species in vulnerable locations may be protected with tubes or small enclosures.
- A mix of deer and stock fencing of varying age and quality are found throughout the LMP area. There are no longer any serviceable lengths of internal fencing in the area. New and replacement march fencing when undertaken is typically at a 50/50 contribution between FLS and neighbouring landowners. These fences are surveyed and monitored on a regular basis by both landowners and any novel, observed deer intrusions are dealt with through culling.
- Currently FLS has no specific intention of erecting any new lengths of deer fencing in the area.

### Meeting objectives

- Currently, culling is carried out by both FLS Wildlife Staff and Contractor Ranger resource. Contract Ranger resource is employed solely in Portclair Wildlife Management Unit (Inchnacardoch, Port Clair, Dalcataig, Inverwick and west to Achlain) whilst in-house Ranger staff are used in the North of the LMP area in the smaller more challenging blocks Tolrgoyle, Dalchriechart, Dundreggan/Blairaidh, Achnaconeran, Alltsigh to Bunloit).
- Specific Local Objectives are discussed in detail with Contract culling and FLS Ranger resource.
- The deer culling contract offers the ability for FLS to respond to deer incursions in the within a swift time scale.
- There are no Recreational Deer Management Permissions within the DMP/LMP area.
- Both 5.6 (out of Season) and 18.2 (night shooting) authorisations are used to meet objectives. Night shooting takes place from the 1<sup>st of</sup> September to the end of March. Male deer are shot throughout the year and female deer only shot from 1<sup>st</sup> of September to the 31<sup>st</sup> of March.
- All deer controllers are qualified to DSC Level 2.
- All controllers undertake refresher training and undertake an annual practical based skills test, to ensure skills and knowledge of legislation is kept up to date and FLS are satisfied they meet their minimum marksmanship standards.

#### Infrastructure

- The LMP area has extensive road access and there are substantial open areas, early restocks and clearfelled areas to cull/control deer. There are also significant high forest areas where deer can be seen easily under the canopy and dispatched. Restocked areas will continue to require ATV/ pedestrian access to enable stalking, culling and extraction of carcasses. Ongoing roadside vegetation control is required to enable safe and successful night shooting operations.
- Where possible all existing access routes and ATV tracks should be maintained and not damaged during routine forestry operations in the area.
- In some circumstances it is beneficial for foresters to consult with wildlife staff to discuss the inclusion of new tracks into areas of the forest that may otherwise present complicated access issues.
- There are significant renewable energy projects situated within the LMP area and powerline wayleaves, that improve access in some areas.

### Collaborative working opportunities

- The LMP area has four main forest blocks that have neighbouring boundaries with several different landowners. These include sporting estates, a two rewilding estates, numerous agricultural smallholdings and larger agricultural enterprises.
- Collaborative working to reduce deer densities in the area would be beneficial to both FLS and other landowners. FLS are open to discussion of wildlife management with neighbouring landowners including how we may work together to further reduce overgrazing by herbivores in the LMP area, specifically the reduction of overall numbers of Sika deer.
- FLS currently engages proactively with several local estates and local land owners on wildlife management issues.
- FLS is also committed to working with other agencies to promote collaboration, specifically in regards to wildlife management.

### Deer Management Group representation

The LMP area sits within the Glenmoriston DMG. FLS are currently in regular contact with neighbouring landowners, as part of Night Shooting Authorisation and Out of Season Authorisation FLS will let neighbouring landowners know about their intended cull for the year. This DMP has also been submitted to the group as part of the wider scoping of the LMP.

#### **Venison Production**

- FLS subscribe to the Scottish Quality Wild Venison Assurance scheme (SQWV)
- All venison is quality assured and the vast majority of carcasses are sold to game dealer Highland Game. However, FLS will sell whole carcasses in the skin to the general public if requested.
- Inchnacardoch larder is used to process the FLS deer carcasses culled in the LMP area.
- FLS carry out compliance checks on Ranger and Contract deer cullers to ensure food safety standards are being met.

# Appendix 9 - Feral Wild Pig Management Plan

# Background

The Fort Augustus and Moriston areas of FLS North Region are considered of great importance in controlling the spread of feral wild pigs in Scotland. Recent discussion between FLS and Nature Scot (NS) has confirmed that NS are still in agreement that FLS are in the "Control Phase" of feral wild pig management. FLS have had representatives from NS attend site visits in the area to discuss the continued need to control the spread of feral wild pigs. FLS have agreed that there is still a need to continue corral trapping and are happy to commit considerable staff resource to the continuation of feral wild pig control. Continued control in the area will likely have an effect on the impacts the pigs are causing on neighbouring landholdings. There has also been an increase in road traffic collisions between vehicles and feral wild pigs on local roads. Our continued efforts in the control of the pigs will hopefully decrease the number of pigs frequenting roadsides and in turn have a positive effect on public health and safety.

### **Objectives**

- To control the spread of Feral Wild Pigs via the use of Corral trapping and opportunistic culling on foot.
- To implement other safe and tested methods of culling such as using a high seat.
- To maintain the highest standards of animal welfare and follow best practice guidance in all control methods implemented.
- To be open and transparent with neighbours, stakeholders and other interested parties about the Region's feral wild pig control.
- To produce and promote the highest health and safety standards when culling and dispatching feral wild pigs.
- To develop strategies and procedures that promote and develop the use corral trapping as a safe and effective method of control.
- To develop new types of baits and trapping methods throughout the year and keep a record of what works best.
- To work alongside Nature Scot to produce a pilot Feral Wild Pig Best Practice day.
- To work alongside Nature Scot and other agencies to develop and facilitate research on Feral Wild Pigs in Scotland.

### Management Plan

• FLS still considers corral trapping to be the safest and most effective method of lethal control to stop the spread of Feral Wild Pigs (FWP). Although culling on foot is not discounted – and this method controls increase in population density - it is widely understood that it has the potential to split up and disperse family groups and spread the pigs into areas where they did not previously have territories. Therefore the use of corral trapping in the area is still necessary to control the spread of pigs. A link to the best practice guide to be followed is included below:

Corraling - Best Practice Guidance (bestpracticeguides.org.uk)

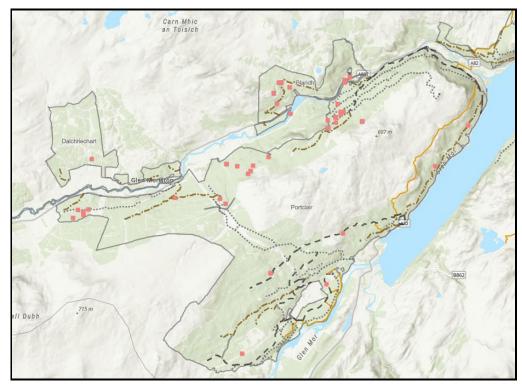
- Corral trapping will be carried out by FLS staff that will include the local Wildlife Ranger Manager, a Wildlife Ranger & Wildlife Ranger Supervisor.
- Corral trapping only takes place between October 1<sup>st</sup> and March 1<sup>st</sup> each year. This is not legislative, but is intended to mitigate against the possibility of orphaning dependent young.
- Staff and contractors that are permitted to control wildlife by lethal methods will be approved to cull FWP on foot on FLS landholdings. A link to the best practice guide to be followed is included below:

Shooting - Best Practice Guidance (bestpracticeguides.org.uk)

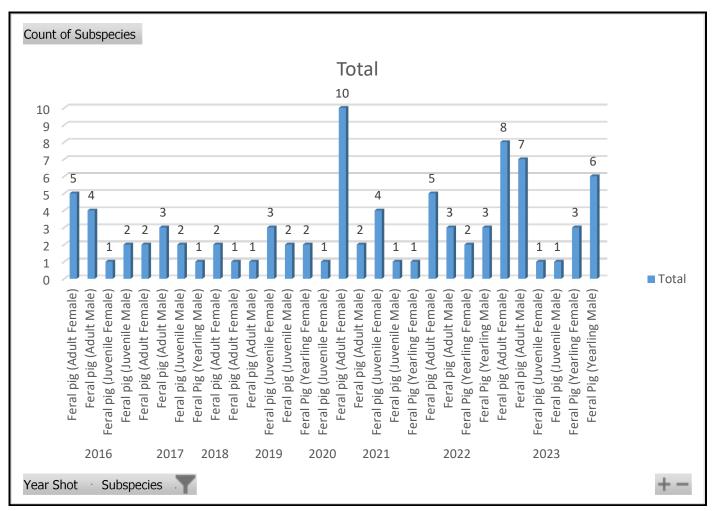
• FLS and contractors will produce carcasses that follow best practice guidance for collection by game dealer Highland Game. A link to the best practice guide to be followed is included below. Highland Game conduct the necessary trichonela testing.

<u>Carcass handling - Best Practice Guidance (bestpracticeguides.org.uk)</u>

### Historic Culling



Historic FWP culling locations. Inclusive of culling on foot and corral trapping.



Historic FWP cull figures by age class and gender

Historic culls have been achieved by the implementation of the corral trapping programme and opportunistic culling on foot. Until such time as the legislation pertaining to culling these pigs there is no need for any prior authorisation issued by NS. This is in part because FWP are classed as a non-native species.

## Monitoring and Population Modelling

- As a result of ongoing work, it is understood that there is no firm figure on overall FWP populations across the country and that a more robust monitoring and reporting system needs to implemented nationally. NS estimate that there are currently a few thousand FWP nationally. Local land owners in the vicinity of the LMP area have undertaken drone counts that estimate approximately 5.5 animals per square kilometer in the region.
- A camera trap monitoring system is in place during the trapping season. The cameras are at specific points near traps and give a snapshot of populations in these localised areas.
- Drone counting implemented as part of wider wildlife monitoring now includes the counting of Feral Pigs.
  - Collaborative work with APHA has been carried out in Dumfries and Galloway and it is hoped that the same method will be carried out in this area. This would give FLS a better understanding of the overall population.

### Collaborative Working Opportunities

- FLS appreciates that there are differing land uses and objectives on neighbouring landholdings in the area. FLS staff will remain in contact with neighbours via established lines of communication such as the deer management group. Until such time as there is Scottish Government policy produced, FLS should remain at the forefront of tackling the spread of feral wild pigs in the area.
- With adequate support, the WRM is happy to support and collaborate with local communities should they wish to gain knowledge and experience in the trapping process.
- FLS will continue to support NS in facilitating best practice events. This gives other interested stakeholders a chance to gain knowledge on best practice culling and trapping techniques.
- FLS will continue to engage with other agencies such as APHA, Quality Meat Scotland, Scottish Pig Producers, Scottish Government and neighbouring land owners, to assess and encourage the pro-active control of pigs.