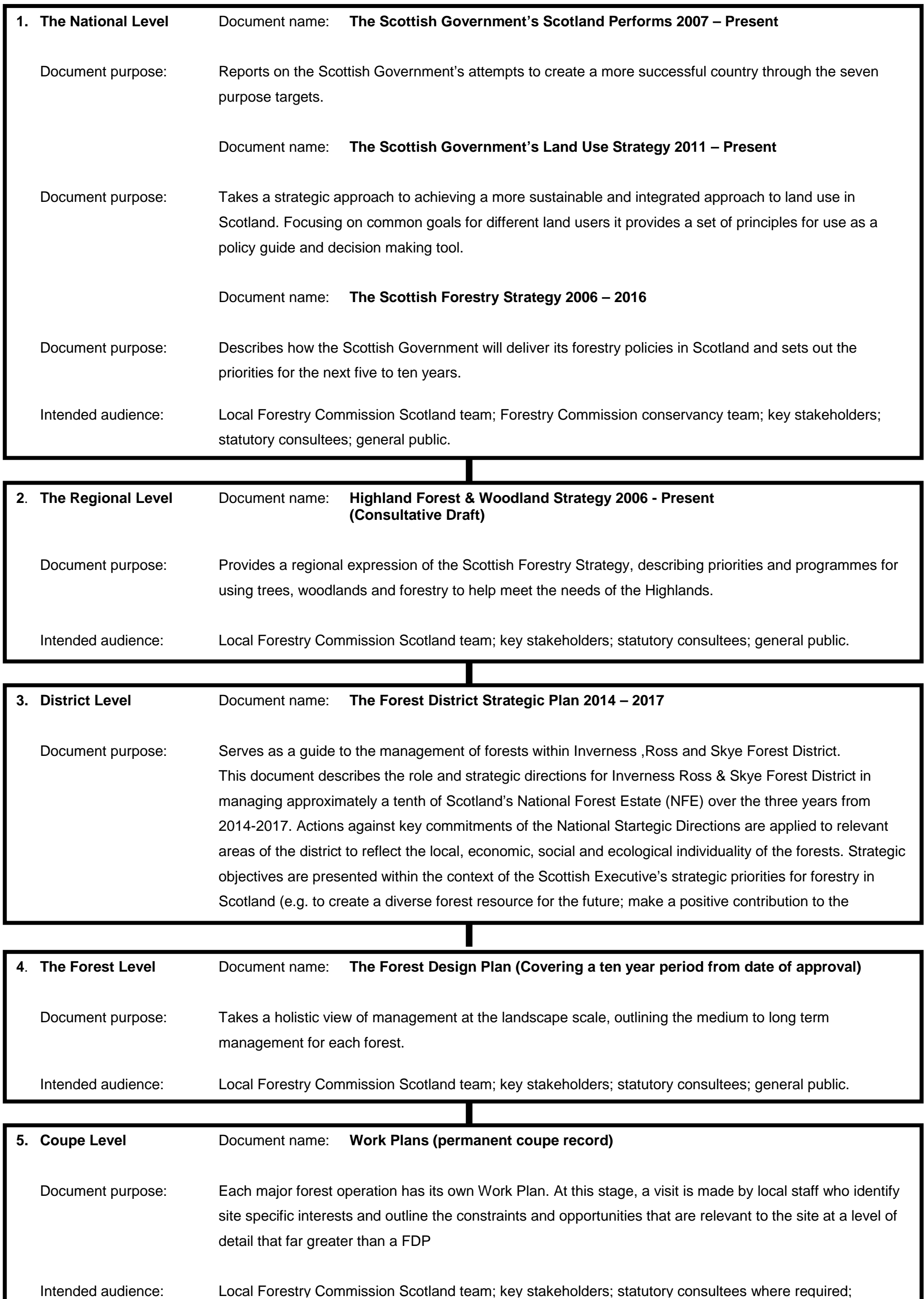


## Appendix 1: The Forest Planning Framework in Scotland

### FC Scotland prepares Forest Design Plans within the following planning framework:



Appendix 1b: CSM6 Form

**FOREST ENTERPRISE - Application for Forest Design Plan Approvals in Scotland**

Forest District:	Inverness Ross & Skye
Woodland or property	Fort Augustus Forests
Nearest town, village or	Fort Augustus
OS Grid reference:	NH 379091
Local Authority	Highland Council

Areas for approval

	Conifer	Broadleaf	Mixture
Clear felling	1131.1	0.0	
Selective felling	33.2	0.0	
Thinning	550	0.0	
Restocking	555.1	304	
New planting (complete appendix 4)	18.2	4	
Natural Regeneration			103.1

- I apply for Forest Design Plan approval~~\*/amendment approval\*~~ for the property described above and in the enclosed Forest Design Plan.
- \* I apply for an opinion under the terms of the Environmental Impact Assessment (Forestry) (Scotland) Regulations 1999 for afforestation\* /deforestation\*/ roads\*/ quarries\* as detailed in my application.
- I confirm that the initial scoping of the plan was carried out with FC staff on
- I confirm that the proposals contained in this plan comply with the UK Forestry Standard.
- I confirm that the scoping, carried out and documented in the Consultation Record attached, incorporated those stakeholders which the FC agreed must be included.
- I confirm that consultation and scoping has been carried out with all relevant stakeholders over the content of the of the design plan. Consideration of all of the issues raised by stakeholders has been included in the process of plan preparation and the outcome recorded on the attached consultation record. I confirm that we have informed all stakeholders about the extent to which we have been able to address their concerns and, where it has not been possible to fully address their concerns, we have reminded them of the opportunity to make further comment during the public consultation process.
- I undertake to obtain any permissions necessary for the implementation of the approved Plan.

Signed ..... Signed .....

For Forest District Manager  
Inverness Ross & Skye Forest District

For Conservator  
H&I Conservancy

Date ..... Date of Approval.....

Date approval ends.....

\*delete as appropriate

REQUEST FOR DETERMINATION UNDER THE E.I.A. (FORESTRY) (SCOTLAND) REGULATIONS 1999	
OPERATION	Forest Road Construction (See Map 6 – CSM6)
LOCATION	Fort Augustus FDP
GRID REFERENCE	NH 379 091
IS THE LOCATION OF THE PROPOSED WORKS WITHIN A "SENSITIVE AREA", AS DEFINED IN THE REGULATIONS? IF SO, WHAT TYPE OF SENSITIVE AREA?	No
IF OPERATION IS AFFORESTATION, DEFORESTATION OR FOREST QUARRIES, WHAT AREA IS INVOLVED?	Deforestation for Forest roads – 3.6Ha
IF OPERATION IS FOREST ROADS, TRACKS OR PATHS, WHAT IS SPECIFICATION AND WHAT LENGTH & WIDTH IS INVOLVED?	<b>Forest Road Construction (CAT 1a)</b> <b>Inchnacardoch Spur</b> – 1206m long– 15m wide <b>Achlain East Spur</b> – 438m long– 15m wide <b>Bhlaraidh East Spur</b> – 544m long – 15m wide <b>Bhlaraidh forwarder track</b> – 219m 8m wide
IS THE PROPOSED OPERATION IMMEDIATELY ADJACENT TO AN AREA OF THE SAME PROJECT TYPE WHICH HAS BEEN COMPLETED SINCE 6TH SEPT.1999? IF SO, GIVE DETAILS.	Yes – Rooding is a spur continuation of existing roads. Achlain East is a new road connected to an existing forest lay-by adjacent to the A887
PROPOSED TIMING	<b>Inchnacardoch</b> – 2015-2019 <b>Achlain,</b> – 2020 – 2024 <b>Bhlaraidh East spur</b> – 2020-2024 <b>Bhlaraidh forwarder track</b> -2020-2024
<b>STATE ANY PERCEIVED IMPACT ON THE FOLLOWING..</b>	
ARCHAEOLOGY	No impact is anticipated. Full GIS record exists and archaeology will be identified by workplan process and walk over survey prior to commencement.
CONSERVATION	No impact is anticipated. Full GIS record exists and species/habitat interest will be identified by workplan process and walk over survey prior to commencement.
LANDSCAPE	No landscape impact is anticipated from internal rooding.
WATER	No impact
RECREATION / ACCESS	Not affected.
PEOPLE	No issues forseen

OTHER INFORMATION	None
SIGNED & DATED	Callum Nicholson – 27/05/14

<b>REQUEST FOR DETERMINATION UNDER THE E.I.A. (FORESTRY) (SCOTLAND) REGULATIONS 1999</b>	
OPERATION	Quarry
LOCATION	Lon Mor, Inchnacardcoh
GRID REFERENCE	NH32715 07067
IS THE LOCATION OF THE PROPOSED WORKS WITHIN A "SENSITIVE AREA", AS DEFINED IN THE REGULATIONS? IF SO, WHAT TYPE OF SENSITIVE AREA?	No
IF OPERATION IS AFFORESTATION, DEFORESTATION OR FOREST QUARRIES, WHAT AREA IS INVOLVED?	0.5 Ha on a clearfelled site currently under fallow.
IF OPERATION IS FOREST ROADS, TRACKS OR PATHS, WHAT IS SPECIFICATION AND WHAT LENGTH & WIDTH IS INVOLVED?	N/A
IS THE PROPOSED OPERATION IMMEDIATELY ADJACENT TO AN AREA OF THE SAME PROJECT TYPE WHICH HAS BEEN COMPLETED SINCE 6TH SEPT.1999? IF SO, GIVE DETAILS.	N/A
PROPOSED TIMING	2020 - 2024
<b>STATE ANY PERCEIVED IMPACT ON THE FOLLOWING..</b>	
ARCHAEOLOGY	No impact is anticipated. No record exists of archaeology in this area and unknown will be identified by workplan process and walk over survey prior to commencement.
CONSERVATION	No impact is anticipated. No record exists of archaeology in this area and unknown will be identified by workplan process and walk over survey prior to commencement.
LANDSCAPE	Minimal impact – this location is not visible from any significant viewpoint and is screened by mature conifer plantation in the South.

WATER	No Impact – nearest watercourse (as shown on 1:25k map is 250m away). Full compliance with the Forest and Water Guidelines 2011 and The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) & relevant quarrying regulations.
RECREATION / ACCESS	Not affected.
PEOPLE	No issues foreseen
OTHER INFORMATION	None
SIGNED & DATED	Callum Nicholson – 27/05/14

**CSM 6 Appendix 4 FOREST ENTERPRISE - Application for Approval of New planting (to be viewed with map 6.3)**

1. Forest Enterprise - Property	
Forest District	North Highland FD
Woodland or property name	Fort Augustus FDP
Nearest town, village or locality	Fort Augustus
OS Grid reference	NH 379 091
Local Authority district/unitary Authority	Highland Council

2. Proposed areas to nearest tenth of a hectare	
New Planting	22.2
Open Ground	5.5
Total	27.7

3. Special areas and protected land	
Designation	Area name or number Comments
None	

4. Proposal details of new planting							
Area name / number	Gross Area (Ha)	P Year	Spp	Area (Ha)	Open Ground (Ha)	Field identifier	Comments
Achlain	16.7	Phase 2 2020-2024	Scots pine & mixed broadleaves	14.2	2.5		Productive pinewood
Inchnacardoch	11	Phase 2 2020-2024	Downy birch, Rowan & Scots pine	8	3		Low input mixed woodland. Planting targeted to dry heath, net % of planting will be refined through detailed site assessment
Total	27.7			22.2	5.5		

REQUEST FOR DETERMINATION UNDER THE E.I.A. (FORESTRY) (SCOTLAND) REGULATIONS 1999	
OPERATION	New Planting (See map 7 – CSM6)
LOCATION	Achlain & Inchnacardoch
GRID REFERENCE	Achlain NH277119 Inchnacardoch –
IS THE LOCATION OF THE PROPOSED WORKS WITHIN A "SENSITIVE AREA", AS DEFINED IN THE REGULATIONS? IF SO, WHAT TYPE OF SENSITIVE AREA?	No
IF OPERATION IS AFFORESTATION, DEFORESTATION OR FOREST QUARRIES, WHAT AREA IS INVOLVED?	22.2 Ha of afforestation
IF OPERATION IS FOREST ROADS, TRACKS OR PATHS, WHAT IS SPECIFICATION AND WHAT LENGTH & WIDTH IS INVOLVED?	N/A
IS THE PROPOSED OPERATION IMMEDIATELY ADJACENT TO AN AREA OF THE SAME PROJECT TYPE WHICH HAS BEEN COMPLETED SINCE 6TH SEPT. 1999? IF SO, GIVE DETAILS.	No
PROPOSED TIMING	<b>New Planting – 2015 to 2019</b>
<b>STATE ANY PERCEIVED IMPACT ON THE FOLLOWING.</b>	
ARCHAEOLOGY	No impact is anticipated. Full GIS record exists and archaeology will be identified by workplan process and walk over survey prior to
CONSERVATION	Positive impact is anticipated, with an increase in restored habitat suitable for species already recorded. Workplan process will identify key issues pre-
LANDSCAPE	Positive impact expected from increased area of native woodland softening existing treeline and joining existing Moriston &
WATER	Positive impact anticipated by improving water quality and aquatic habitat through the establishment of appropriate native
RECREATION / ACCESS	No impact.
PEOPLE	No impact.
OTHER INFORMATION	None
SIGNED & DATED	Callum Nicholson 27/05/14

Fort Augustus Forest Design Plan 2014-2024

I apply for Authority to plant as above and as shown on the attached map.  
I undertake to obtain the necessary permissions from the appropriate statutory body before commencing work under any approval which is granted.

Signed .....for FDM

Signed .....Conservator

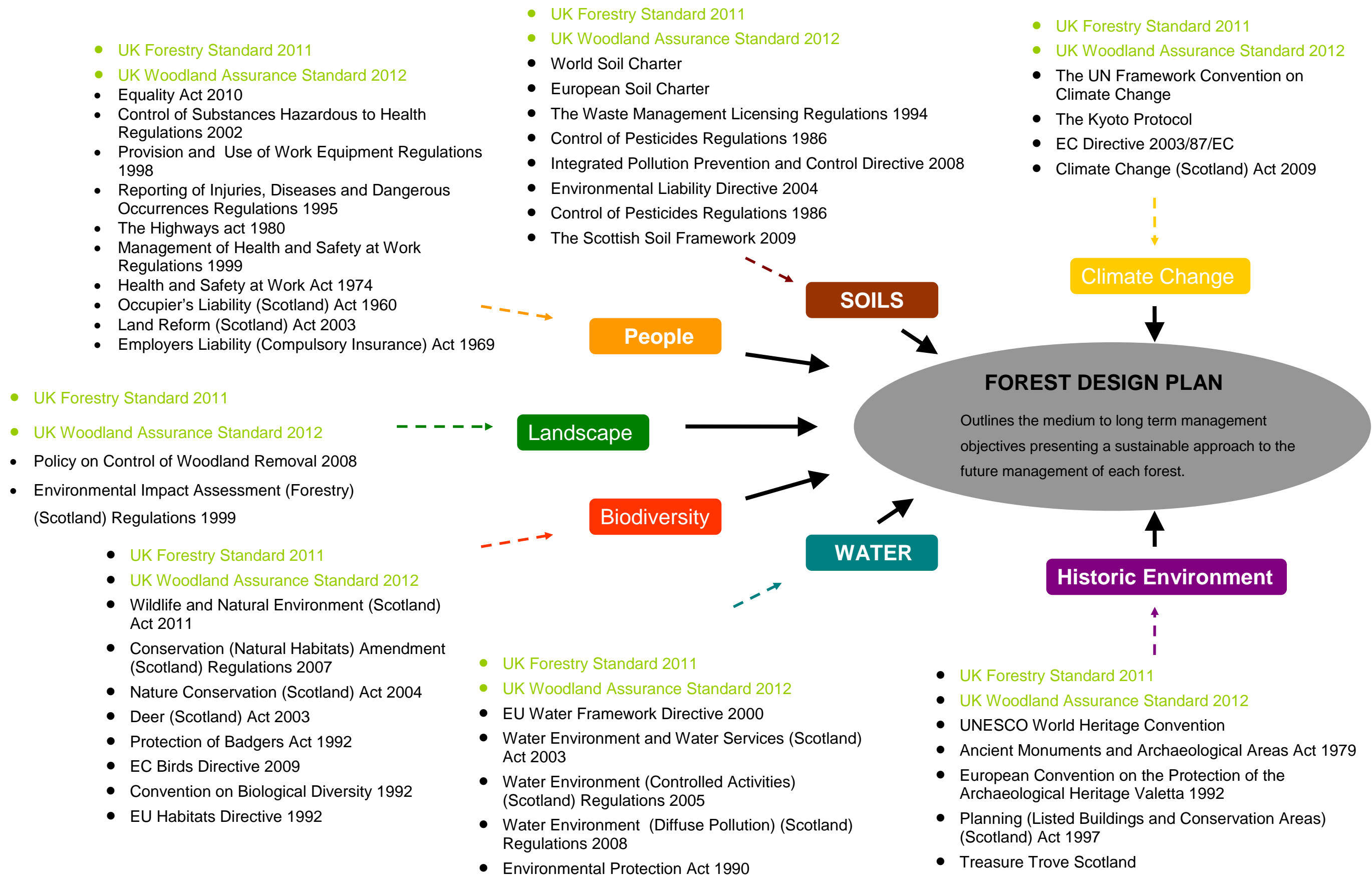
District IRS FD  
Date 23<sup>rd</sup> of June 2014

H&I Conservancy

Approval Date.....

Date approval ends:.....

APPENDIX 2: KEY POLICIES AND GUIDANCE



## Appendix 3: Forest Design Plan Consultation Record

Consultee	Address	Date contacted	Date response received	Issue raised	Forest District Response
General Public: Public drop in session– with neighbours & community council invited	Glenmoriston Millennium Hall	08/01/14	Comments received during session.	<a href="#">..\Full plan\Public drop in session-comments 08-01-14.pdf</a>	<p>LISS works within Invervigar will remove tree regeneration from the sanatorium. Detailed proposals have been developed to enhance visitor experience at Torr Dhuin and benefit local tourism.</p> <p>A82 works will be delivered in accordance with the A82 Management Strategy. Impact will be minimised through good communication with community and use of off peak working.</p> <p>Forest blocks at Torgoyle and Balintombuie will be managed under LISS to maintain woodland cover. An element of windblow will be removed through thinning operations to open up informal footpaths.</p> <p>Development of the Moriston wind farm proposal will follow due process and approval will be subject to the decision of the Scottish Government Energy Consents Unit in consultation with stakeholders.</p>
<b>Statutory</b>					
Highland Council	Robert Patton, Principal Officer, Land, Telephone (01463) 702 285, Email <a href="mailto:robert.patton@highland.gov.uk">robert.patton@highland.gov.uk</a>	31/03/14	No response received		
SEPA	<b>Dingwall office</b> Graesser House Fodderty Way Dingwall Business Park DINGWALL, IV15 9XB Tel: 01349 862021 Fax: 01349 863987	31/03/14	15/04/14	<p>No Issues</p> <p>In terms of maintaining water quality, we support the restoration and mitigation proposals within the draft Plan. The proposal to restore 8.5 ha of blanket bog at Balnacarn within the plan's lifetime is also welcomed, as too is the longer term aspiration to restore a greater extent at that forestry coupe and also at a second site.</p> <p>We can confirm that we would support the principle of this plan if formally consulted by the Highlands and Islands Conservancy</p>	No further action required

SNH	Highland Office Fodderty Way, Dingwall Business Park, Dingwall, IV15 9XB Tel: 01349 865333	31/03/14	08/04/14	Request for more information regarding potential operational impact on the designated features and identify appropriate mitigation. Recommend The Fort Augustus GCR is identified in the key features map. Request for specific deer management plan. Support native woodland restoration proposals and Invasive species control.	Appropriate Assessment for the FDP, regarding the potential impact on the Moriston SAC has been included within the FDP Appendix.  Fort Augustus GCR added to key features map & implications for management included in text.  Deer Management Unit plan included in FDP Appendix.
Historic Scotland	Historic Scotland Longmore House Salisbury Place Edinburgh EH9 1SH Tel: + 44 (0) 131 668 8600	31/03/14	28/04/14	Welcome the commitment to safeguarding archaeological sites in the draft plan.  Stressed importance of monitoring Wades Road, to ensure that any increase in visitor numbers do not damage the monument. Positive regarding proposals for Torr Dhuin.	Monitoring proposals for Wades road included in FDP text.
<b>Non statutory</b>					
Bear Scotland	BEAR Scotland Limited BEAR House Inveralmond Road Perth PH1 3TW	31/03/14	No response received		
RSPB	North Scotland Regional Office E-mail: nsro@rspb.org.uk Telephone: 01463 715000 Etive House Beechwood Park Inverness IV2 3BW	31/03/14	No response received		
Woodland Trust  Steve Morris	STEVE MORRIS stevemorris3@btinternet.com  01320340235	28/03/14	Meeting 28 <sup>th</sup> March	Raised potential for riparian woodland restoration along Allt Laiardh.  Supported native woodland expansion proposals.	Coupe phasing was altered to include a section of felling adjacent to the watercourse within the first phase, this will enable riparian woodland restoration over a shorter timescale.
Ness & Beaully Fisheries Trust	Corff House Beaully Inverness Shire IV4 7BE	31/03/14	No response received		
<b>Neighbours</b>					
Trees for life	Trees for Life, 272 Pineridge, The Park, Findhorn Bay, Forres IV36 3TZ,	31/03/14	Meeting 11 <sup>th</sup> April	Support native woodland restoration proposals. Identified potential for collaborative working to restore native woodland along	Future habitat & species proposals altered to include Low input native woodland along roadside, riparian woodland along river and an area of productive pinewood within the



	Scotland, UK			River Moriston. Would like to see productive forestry changed to low input native woodland along A887 "straight mile" opposite Bhlairaidh	matrix.
Glen Moriston Estate	Glenmoriston Estate, Inverness-Shire, Invermoriston IV63 7YA	31/03/14	No response received		
Achlain Estate	<b>Achlain Estates</b> Ltd - Fishing And Hunting, Inverness, Iv63 7yn,Achlain	31/03/14	No response received		
Fort Augustus CC	<i>Fort Augustus Glenmoriston Community Council c/o Memorial Hall , Oich Road, Fort Augustus, PH32 4DJ</i>	31/03/14	No response received		
Drumnadrochit CC	Pam Lucas (Chairman) Incheachart Triangle, Incheachart	31/03/14	26/05/14	Restoration of Native Woodlands is highly commended.  Alternatives to clear felling, despite current high demand for Timber, with attention to silviculture would be welcomed.  Continuation of the A82 Project is essential, since a great deal of our business is concentrated on the safety of that Route.  Broadleaved Woodlands yielding quality hardwood and wood fuel would receive our support.  In employment terms , provision of continuity of work for specialist contractors is considered essential.  Run of river Hydro with community involvement is highly desirable , in a balanced and controlled proposal.  Preservation of unique sites and enhanced visitor provision are subjects which we promote locally	No further action required
Dalchreichart residents Association	Agnes Bell 01320 340 327 Agnes Bell: 01320 340 327 s Bell: 01320 340 327	31/03/14	Drop in session 15/04/13	Request for timber haulage Timing controls to minimise impact on local residents Requested works to improve General	Timber haulage restrictions to minimise potential impact will be advanced in the work plan process for each felling coupe within the Dalchreichart area.  Plans for interpretation for Wades road have been

				Wades as a long distance walking route between Glen Moriston and Fort Augustus.	included in the FDP.
Sam Cornelious	Auchterawe , Fort Augustus	25/03/14	26/03/14	Trees adjacent to Auchterawe sub (scheduled for felling in phase 2) station are providing visual screening for local residents.	Following a site visit the stand has been changed to a Long Term Retention within the FDP; with the caveat that future felling will be required in the event of tree instability posing a risk to OHPL and / or plant health issues.

## Appendix 4: Fort Augustus FDP Brief

### Background Information

The Fort Augustus Forest Design Plan is a merger of the previous Inchnacrdoch and Moriston Forest Design Plans. The Fort Augustus Forest Design Plan area is situated in Inverness-shire, on the North shore of Loch Ness. The FDP area covers a total of 9887ha of largely mixed coniferous forest with a considerable area of open hill ground. The forests within the plan span from Fort Augustus in the South, along the A82 corridor, to near Drumnadrochit in the East and Dalchreichart in the West. The forests are predominantly productive and of high significance for bio-diversity. The plan area supports a number of protected species and contains a large element of PAWS; this includes fragmented elements of the Dundreggan and Achnaconeran Core Pinewood areas. Sitting within the catchments of River Moriston and River Oich the forest plays a significant role in water management. The forests form a prominent feature of the local landscape, as a backdrop to Loch Ness, Fort Augustus, Invermoriston and the main tourist route to the West coast along the A887. There is a high recreation interest in localised areas around Fort Augustus and the nationally recognised Great Glen Way passes through the plan area.

### Vision

To restore native woodland at a landscape scale, and in the long term, to restore natural processes throughout the native woodland and open habitat from Glen Moriston to Fort Augustus. This will be achieved by working in partnership with Trees for Life and other native woodland owners to deliver a common vision for native woodlands in the wider landscape.

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## Brief & Objectives

The forest design plan will be drawn up in line with the key themes of Scotland's National Forest Estate and strategic directions 2013-2016, but with a particular reference to actions identified by the Inverness, Ross and Skye District Draft Strategic Plan. These are:

- Healthy
- Productive
- Treasured
- Accessible
- Cared for
- Good Value

The six key themes of the strategic directions have been drawn and developed upon from the Scottish Forest Strategy (2006) and other key sectoral strategies. Of particular significance to the Fort Augustus FDP is the regional Highland Forest and Woodland Strategy (2006) and the FCS A82 Management Strategy.

FDP objectives;

1. The restoration of native woodland at a landscape scale over the next 50 years.
2. To minimise risk posed to people and the A82 trunk road through good design and practice.
3. To protect and enhance the water quality of the Ness catchment.
4. To promote resilience of the forest to the future challenges of climate change.
5. To strengthen ties with the local community and enhance the landscape of the Great Glen and Loch Ness.
6. Sustainable timber production within Inchnacardoch and the productive native woodland zones.

The National Forest Estate in Inverness, Ross and Skye Forest District is managed with the spirit of all targets specified in Scotland's National Forest Estate and strategic directions. However, it is accepted that each individual forest can only contribute to a limited number of strategic targets as a high priority area. The following table describes how Inverness, Ross and Skye Forest District will achieve the objectives listed above, with specific reference to the appropriate Forest District Strategic Plan targets. The targets that are considered fundamental to the delivery of the aims of this forest design plan – the critical success factors – are highlighted in red in the table below. The delivery of these elements will be the primary factors by which the plans success is judged

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at mid-term review and full revision (5 & 10 yrs respectively):

National key commitment & applicable FDP objective	How this forest will contribute to IRS District Strategic Plan actions:	How we will monitor the achievement of this target.
<b>Healthy</b> (FDP: 2 & 4)		
We are committed to high quality silviculture and increasingly using alternatives to clearfelling.	We have rationalised the forest area managed under LISS to appropriate sites and stands, where this will achieve most ecological and landscape benefit. Where appropriate we will manage young stands for conversion to a LISS through the FD thinning program.	<p>Thinning &amp; LISS Interventions will be controlled by the Programme Manager and delivered by the Operations team.</p> <p>75% Site visits will be used to assess the delivery of the FDP objectives.</p> <p>Commercial forest will be established to OGB4 standards and subject to Stocking Density Assessment.</p> <p>PAWS sites will be routinely monitored by the Environment team.</p>
We will help the Estate adapt to and become more resilient to the impacts of climate change.	<p>We will undertake annual surveys to assess the progression of Dothistroma Needle Blight (DNB) within the FDP area.</p> <p>We will reduce inoculum levels and the potential for DNB to spread within the Plan area by targeting badly infected stands for felling in the next two phases and remove the majority of Lodge Pole Pine stands over the next 20 years.</p>	<p>DNB surveys will be controlled and implemented by the IRS Planning team. This will assess the spread of the infection and when measured against plant health felling, formally at the mid term review, can be used to assess the effectiveness of the LP removal programme.</p>

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	<p>Even aged forest within Inchnacardoch and Moriston will be restructured through phased clearfelling.</p> <p>Species composition will be diversified through restocking and natural regeneration following clearfell. Silvicultural mixtures will be favoured within the productive conifer forest and native woodland restoration will be matched to the site type.</p> <p>We will reduce risk of extreme weather events, to people and property, associated with the forest through the work of the A82 Project. Mature conifer forest will be gradually felled and re-established with Low input native woodland that will promote soil stability and future resilience of the trunk road.</p>	<p>75% felling Site visits will be used to assess site and soil conditions and assign the appropriate restock species in alignment with FDP objectives.</p> <p>Sites managed for natural regeneration will be monitored through a regular programme of site assessment implemented by the environment team. Survey results will be recorded on a GIS database.</p> <p>Achievement of the felling and future habitat and species proposals will be monitored by the Planning Forester at year 5 and 10 reviews.</p>
<p>We are committed to dealing with invasive plants and animals that</p>	<p>We will continue a programme of Rhododendron removal within the Inchnacardoch and Creag Nan Eun</p>	<p>The Environment team will programme all invasive plant removal and monitor the effectiveness through regular site surveys.</p>

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threaten habitats and biodiversity.	forests. We will continue a programme of exotic conifer removal, where bio-diversity is threatened, on restoration PAWS sites.	
<b>Productive</b> (FDP: 6)		
We aim to provide at least three million cubic metres (nationally) of softwood timber every year on a sustainable basis.	We will invest in a phased programme of forest road extensions ( <i>Inchnacardoch &amp; Bhlaraidh,</i> ) and necessary upgrade works in order to facilitate timber harvesting within forest that currently lacks infrastructure. Sustainable softwood timber production from the FDP area will contribute to the annual district production targets.	Civil engineering will deliver the construction and upgrading of all roading within the district and monitor progress through work programming. Completed construction works will be routinely recorded on a GIS database.  Timber production will be managed using the FD workplan system and coordinated by the FD programme manager to ensure programmes match forecast and market commitments.  We aim to achieve all clearfell production, in line with the management coupe plan and the volumes detailed in the coupe summary of this plan, explaining any variances where they occur. To be reviewed at years five and ten by the Planning Forester.
We Intend to manage at least a quarter of our expanding broadleaved woodlands to produce quality hardwoods and wood fuel.	40ha of existing broadleaved woodland will be managed with fuel wood production as a main objective. Over the next 50 years of restructuring we have identified a gross area of 295ha that will be managed to produce quality native hardwood timber and wood fuel.	Achievement of the felling and future habitat and species proposals will be monitored by the Planning Forester at year 5 and 10 reviews.  All commercial restocking will be assessed to OGB4 standard through Stocking density assessments. Establishment and stewardship of the productive broadleaf stands will be delivered by the local Operations team.
We will use our work programmes to promote the development of the	Over the next 25 years the FDP area will continue to provide work for specialist steep ground harvesting contractors,	The Harvesting and Marketing team will manage the delivery of Steep ground harvesting contracts.

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forestry and land management sectors.	contributing to the development of this skills resource through a sustained provision of work.	Achievement of the felling within the first phase of the FDP and suitability of future felling coupe proposals will be assessed by the Planning Forester and the Harvesting and Marketing team at the year 5 and 10 reviews.  Development of the contract resource will be measured through future work tendering processes.
We aim to realise the Estate's renewable energy potential, whilst achieving a reasonable balance with other objectives.	We will continue to work with E.on, on the Moriston wind farm proposal, and Green Highland Renewables, on the consented Allt Phocaichain and Allt Larairidh run of river hydro schemes, following due process we aim to develop renewable energy generation potential on the National Forest Estate. We will continue to investigate the potential for small scale, community, renewable energy schemes.	Forest Renewables will measure Mega Watts generated on the National Forest Estate and assess progress against Scottish Government targets for a 100% of Scotland's gross annual electricity consumption to be generated from renewable sources by 2020.  The Forestry Liaison Officer will ensure that for each scheme on the NFE that the terms of detailed proposals, as agreed between the developers and IRSFD, are implemented in accordance with industry best practice.  Progress on renewable energy development will be monitored through quarterly Programme Board Meetings between IRSFD, Forest Renewables and developers.
<b>Treasured</b> (FDP: 5)		
We are committed to creating more uniquely special places across the Estate and to delivering benefits to an increasingly diverse range of Scotland's people.	We will develop detailed management prescriptions to preserve and enhance the special qualities of unique features such as the Torr Dhuin iron age fort and the Allt na Criche Cathedral trees.  We will continue the programme of visitor zone work along recreational facilities at	Site objectives will be agreed prior to operations and detailed using the work plan system. Operations will be delivered in collaboration between the Recreation and Tourism and Operations team and monitored continually through site visits.  The Recreation and Tourism Forester will monitor the delivery of the all visitor zone works.



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	Allt na Criche, Torr Dhuin and the Muir.	
<b>Accessible</b> (FDP: 5)		
We will continue to invest available resources into high quality facilities that encourage and help visitors experience and enjoy the outdoor environment	<p>We will design management coupes – working closely with the FCS Landscape Architect - to enhance the landscape with particular reference to the areas visible from the main tourist routes along Loch Ness, the back drop to Fort Augustus and the “low road to the isles” A887.</p> <p>We will work with the Tourism Business Improvement District to continually improve the visitor experience.</p> <p>We will complete the Great Glen Way alternative route project in the spring of 2014 and continue working in partnership with the ranger service to deliver a high quality recreation experience on the route.</p>	<p>We will consult with the FCS Landscape Architect and ensure that landscape design follows best practice. Coupe shapes will be audited by the planning forester at years five and ten.</p> <p>IRS representatives will attend TBID meetings and FC relevant outcomes &amp; proposals will be developed within the appropriate district team.</p> <p>The Recreation and Tourism Manager will monitor the progress of the Great Glen Way Alternative Route construction. Together with the Great Glen Way Ranger service we FCS staff will undertake both qualitative and quantitative monitoring of Great Glen Way users.</p>

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<b>Cared For</b> (FDP: 1 &3)		
<p>Across Scotland we are restoring around 85% of areas on ancient woodland sites to largely native species. The remaining areas will be enhanced through our management</p>	<p>We aim to gradually restore the FC Landholding in Glen Moriston to native woodland over the next 50 years.</p> <p>We will work in partnership with neighbours Trees For Life to restore native woodland at a landscape scale within Glen Moriston.</p> <p>We will create a robust native woodland habitat network from Allt na Criche to Achlain and Levishie to Ruskich wood, linking restored PAWS and Core pinewood areas.</p>	<p>Native Woodland Restoration will be delivered in collaboration between the Environment and Forest Management team. Progress will be audited by the Planning Forester against the Future Habitat and Species proposals detailed in the FDP at the year 5 &amp; 10 review.</p> <p>An annual meeting will be held with Trees For Life to agree priorities for working, special projects and assess progress on native woodland restoration proposals of this plan. The Environment Forester will co-ordinate shared working on the NFE.</p> <p>The Environment Manager will monitor the management and restoration of PAWS using a routine programme of site surveying.</p>
<p>Across Scotland we plan to increase broadleaved tree cover from the current 8% woodland cover to around 20%.</p>	<p>We will increase broadleaf tree cover, on suitable sites through the re-establishment of "Low Input" native woodland, Riparian woodland and commercially managed Productive Native Broadleaves, with appropriate deer management.</p>	<p>Native Woodland Restoration will be delivered in collaboration between the Environment and Forest Management team. Appropriate species choice will be agreed at the harvesting 75% visit and recorded in the workplan. Progress will be audited by the Planning Forester against the Future Habitat and Species proposals detailed in the FDP at the year 5 &amp; 10 review.</p>
<p>Across Scotland we are committed to maintaining the best woodland &amp; open habitats in good ecological condition.</p>	<p>Improve habitat linkage and preserve water quality through Long term Riparian woodland restoration along tributaries of the River Moriston SAC. Use LISS where appropriate in sensitive locations along the Moriston catchment.</p> <p>Restoration of native woodland linking the</p>	<p>The status of water bodies will be monitored at year five and ten reviews by the Planning Forester, using SEPA data.</p>

## Document running title

<p>Across Scotland, we will identify particularly vulnerable species for which the NFE is important and take specific conservation action.</p>	<p>Levishie Oakwood SSSI to a wider native habitat network.</p> <p>Continued monitoring of key species present in the area, black grouse, red squirrel, juniper, goshawk, osprey and wood ant.</p> <p>Undertake field surveys to quantify montane scrub species on the open hill ground and build future management prescriptions.</p> <p>Adapt &amp; apply management techniques following, best practice, to improve habitat for vulnerable and protected species.</p>	<p>Progress will be audited by the Planning Forester against the Future Habitat and Species proposals detailed in the FDP at the year 5 &amp; 10 review.</p> <p>The Environment Manager will co-ordinate and supervise the delivery of all species surveying and monitoring. The results will be incorporated into local systems and used through the work plan process to influence management proposals.</p>
<p>We safeguard archaeological sites through our planning and management and recognise special places and features with local cultural meaning.</p>	<p>Maintain the recently restored Achlain bridges and promote use of Wade's military road as a long distance walking route.</p> <p>Raise awareness of Torr Dhuin, a key archaeological feature through improved interpretation and signage.</p> <p>Apply best practice to all operations involving archaeological features.</p>	<p>The Environment Manager will ensure that archaeology is monitored using the existing SAM Plan system and ensure that operations do not damage sites through the work plan system.</p> <p>The Recreation and Tourism Team in collaboration with the FCS Archaeologist will deliver the proposed upgrade of interpretation and signage at Torr Dhuin and will be responsible for the promotion of the Wades military road as a long distance walking route.</p>

## Document running title

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<b>Good Value</b>		
We will seek a diverse range of income sources to underpin the cost of managing the estate, and we will continually look for ways to achieve best value in delivery of public benefits.	We will continue to diversify income through standing sales, direct production, firewood & niche marketing of specialist products, sale of venison from deer management activities and where appropriate renewable energy generation on consented developments.	The Area Operations manager will work with the Programme Manager, using the production forecast system to meet future timber supply commitments of long and medium term contracts.

## Forestry Commission Scotland – Inverness, Ross &amp; Skye Forest District

**Evaluation of the need for an Appropriate Assessment of a Forest Design Plan which may have a significant effect on a European site.**

((The Conservation of Natural Habitats, &c.) Regulations 1994. Regulation 48.)

**1. Name of European site affected by the application and current status**

River Moriston SAC; 8361

**2. Features of European interest****1. SAC**

**Atlantic salmon**  
**Fresh water pearl mussel**

Habitats in **bold** are represented within the area of impact of the proposal

**3. Details of proposal**

**Name** Moriston/Inchnacardoch Forest Design Plan

**Description of proposal:** 10 year management plan for 9953 ha of forest between Glen Moriston and Inchnacardoch by Fort Augustus. The forest within Glen Moriston (5518 ha) lies in the water catchment for the river Moriston.

The plan includes proposals for felling, restocking and the upgrade and maintenance of forest roads.

**4. Assessment of impact on European interest**

***Is the proposal directly connected with or necessary to the management of the site?***  
**Yes/No**

No, the proposal is outside, but immediately adjacent to the designated area. The proposal is directly connected to the designated site through a series of tributaries that run through the plan area and into the river Moriston. Therefore, the plan does have the potential to directly influence the status of the protected features in the designated area.

The NFE borders the river Moriston SAC for approximately 23km of the 29km extent of the designated area. Out of that run the NFE only actually comes up to the bank of the river for approximately 6.0km. Over the rest of the run the river is detached from the forest by a strip of private land under various other land uses (road, field, development, woodland).

Fresh water pearl mussels: In 2013, FCS had 12 water courses that flow from the forest in to the river Moriston surveyed for suitability for fresh water pearl mussels (FWPM). Of these, only two were judged to have some potential for the designated species, but no evidence of FWPM was found: Allt Loch Cuileig and Allt Baile nan Carn. Additionally, both of these water courses are currently well detached from the known beds of mussel, which makes the likelihood of them being colonised extremely low. However, the surveyors did report that the same watercourses do contribute towards brown trout (*Salmo trutta*) populations. These, along with the form, sea trout (*Salmo trutta morpha trutta*), play an important part in the life cycle of the FWPM. Therefore, any actions that damage the status of the fish population in the tributaries could have a knock-on effect to the status of the designated feature.

Atlantic Salmon (*Salmo salar*): The FWPM surveyors did report that the same watercourses do have potential to contribute towards the status of the Atlantic Salmon to some degree; mostly in the lower reaches since all of the burns flow off steep valley sides. However, the full extent of this potential was not the focus of the survey.

***Is the proposal likely to have a significant effect on the European interest on the designated site?***

**Yes/No - No**

**SAC –**

The main risk to the SAC features arises from any water borne sediment that washes out from the forest and into the river Moriston. This could be caused by tree harvesting beside watercourses or poor drainage management in the forest drains and along forest roads.

The highest risk of sedimentation from forest roads and drainage is associated with the section of road between grid reference NH40484734 and NH38171633.

By implementing the requirements of UK Forest Standards on water, soil and species conservation during forest operations and subsequent restocking, FCS are confident that there will be no significant effect on any of the qualifying interests of the SAC.

**What would be the outcome on the site if the proposal is not approved?**

The effect would probably be neutral. In the wider context, failure to approve the plan would prevent the continued maintenance of forest drainage infrastructure and the removal of non-native conifers and its conversion to native woodland systems.

## **5. Conclusions**

***Will the proposals adversely affect the integrity of the European site?***

No. The proposed plan will not have an adverse impact on the designated features.

## **6. Conditions required (if any)**

Application of UK Forest Standard guidelines and consultation before any proposed change in the management regime.

## **Signed**

G Drake-Brockman  
Environment Manager  
April 2014

**Monument:**  
**SM ref:**

**Tor Dhuin Fort**  
**794**

**Forest District:**  
**Plan start:**  
**Plan finish:**

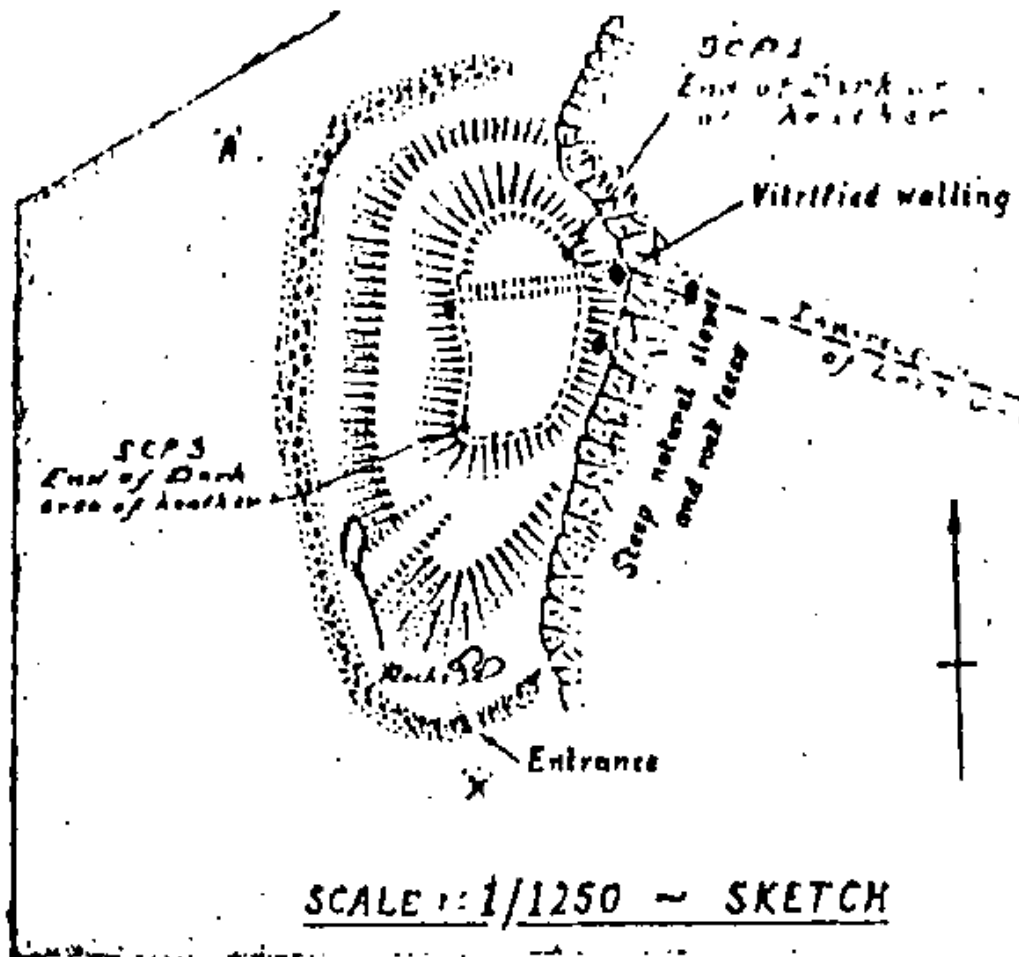
Inverness, Ross and Skye  
1/04/10  
31/03/15

**Grid ref:**  
**National Monuments Record**  
**Number:**  
**FC ref:**  
**Compartment:**

NH 348 069  
NH30NW1

**MMP prepared by:**  
**HS Casework area:**

**Matt Ritchie**  
**NW**



Sketch from OS record card 1964



*Detail of ramparts at N end*





*Detail of fort interior, view facing S*

## [1] GENERAL DESCRIPTION

Tor Dhuin is a well preserved example of an impressive late Iron Age or early historic vitrified fort. It is similar in age and function to Craig Phadrig and Dun da Lamh - all three of great importance as a result of their 1st millennium AD connections. They could be described as Pictish citadels, symbols of power dominating both tribal territory and crucial communication routes.

*The fort is roughly oval on plan and measures c.19m from N to S by c.10m within an overgrown vitrified wall c.3.5m thick in the N where it is best preserved. Neither wall faces nor entrance are visible - although a possible location for a timber entranceway can be observed on the NE side. A trench across the N half is probably an excavation trench. Outside the dun and enclosing the summit of the knoll are the poor remains of a wall which survives mainly as a terrace. A short stretch of wall core survives in the N and the discontinuous footings of the outer wall face can be traced in the N, W, and S arcs. Although there is some tumble below on the slope, the poor state of this wall suggests it has been robbed to build the dun. A gully leading up the slope in the SW is the entrance. It cuts through the line of the wall where its NW side is flanked by a line of earthfast stones, but its SE side is obscured and the width of the entrance is uncertain. Near the base of the knoll is a boulder-faced rubble wall with an entrance in the S. The inner face is visible for about 11m in the NW and one or two outer facing stones at this point give a wall thickness of 1.7m. A line of earthfast stones flanking the entrance suggests that here the wall increased to c. 3m. The other side of the entrance is mutilated and the width cannot be ascertained. Although Cotton (M A Cotton 1954) states that "traces of vitrification have been observed in this wall", only pieces that have fallen from the dun can be seen, and it is undoubtedly not vitrified. Visited by OS (21 October 1970)*

*The outer face of the medial wall can also be traced in the E above the crags some 4.0m outside of and below the vitrified wall. Here are several large lumps of vitrification but these have probably dropped down from the dun wall. One stone on the W side of the entrance through the outer wall indicates an entrance width of 1.7m. Visited by OS (6 September 1974).*

Forts of this type are characteristic of the Iron Age and radiocarbon dating has established initial construction in the 4<sup>th</sup> or 5<sup>th</sup> centuries BC. However, excavation at Craig Phadrig in 1971 found evidence to suggest that the ramparts were later refurbished - and artefacts from the interior of the fort suggest an occupation phase in the 6<sup>th</sup> or 7<sup>th</sup> century AD. These forts may have been occupied and reused on several occasions through time.

The process of vitrification occurs when a timber-framed stone-built rampart is destroyed by fire – and the heat generated is so intense that the core of the rampart melts. Recent experiments have shown that this is very difficult - and it is unlikely that forts were vitrified accidentally or as a result of destruction during a siege. Ceremonial destruction, using large amounts of wood, is considered more likely.


## [2] HISTORIC SCOTLAND MONUMENT WARDEN REPORT(S)


Date of visit	Site Condition Score	Deterioration Risk Score	Historic Scotland Priority Index
20/01/2005	3	2	3.61

### [3] OBJECTIVES OF MANAGEMENT

<b>Objective</b>	<b>General aims and objectives</b>
CONSERVATION	The main objective of management is to ensure the stable condition of the monument.
ACCESS	Access to the monument will continue. There is an informal path up to the fort from the forest track.
INTERPRETATION	There are no current plans to provide on-site interpretation.

### [4] ISSUES REQUIRING ATTENTION: POTENTIAL OR EXISTING THREATS

<p>CONDITION OF MONUMENT</p>  <p><i>View of ramparts on W side</i></p>	<p>The monument is in a stable condition. The recent management works have really made a difference. The massive rampart, deep ditch and stretches of vitrified walling are now readily visible.</p> <p>20-JAN-2005, AC</p> <p><i>The site was revisited when the bracken had died back. The structure of the fort appears to be intact with an excavation ditch to the N end of the inner structure. Access to the upper levels of the fort is presently to the S end over the outer bank and around the ditch and over the secondary, inner bank and the main bank of the upper structure. There is tumble across the ditch to the N of the point of access. To the N the inner face of the outer bank appears to be lined with large stones. On the NW arc of the outer bank there is a large amount of tumble, it is possible that this is the remains of a structure. Although in the summer the vegetation on the fort makes it almost impenetrable, when the bracken dies back the remaining trees do not appear to be causing damage. There are a number of places where trees have been felled in the past and left on the fort and there is some regen. It may be felt that clearance of this site is inappropriate (issues of health and safety), however management should include the removal of the conifer regen.</i></p>
<p>FOREST OPERATIONS</p>	<p>The harvesting of the surrounding area will be planned and organised to avoid any damage to the monument in the course of</p>

	<p>harvesting and timber extraction. No replanting will take place within the scheduled area. Opening up the surrounding conifer crop to aid the views will be worked into the Forest Design Plan at the next opportunity.</p>
<p>VEGETATION / NATURAL REGENERATION</p>	<p>Bracken and gorse clearance is required during the plan period and all the small regenerating trees should be removed.</p>
<p>BUFFER ZONE</p>	<p>No replanting will take place within 20m of the scheduled area.</p>
<p>PUBLIC AND OTHER ACCESS</p>  <p><i>View of path on S side</i></p>	<p>The Scottish Outdoor Access Code ensures the public right to responsible access.</p> <p>The current way marked track is clearly well-used and the informal path up onto the fort now readily accessible. This path is in the right place for modern access (the fort was likely entered by wooden superstructure over the ramparts - there is no clear entrance), although the situation where it is beginning to erode the lower rampart should be monitored.</p>

## [5] SPECIFIC WORK PROPOSED IN THE PLAN PERIOD

<b>Detail of work</b>	<b>Detail of time / condition of response</b>
Monitor the condition of the monument and ensure the removal of all intrusive scrub vegetation and regeneration.	If required, clearance will occur at least once every year and will be undertaken by FCS Forest District staff. All scrub vegetation and naturally regenerating trees within the scheduled area will be cut off at ground level using appropriate hand or power tools and removed. Any seedlings will be removed by pulling out by hand.  Bracken encroachment shall be controlled throughout the scheduled area as necessary on an annual basis through strimming and/or chemical spraying, as appropriate.
	No work will be undertaken in the scheduled area other than work previously agreed with Historic Scotland and detailed in this plan.

## [6] ARRANGEMENTS FOR MONITORING

<b>Type of monitoring</b>	<b>Detail of recording</b>
FCS staff will formally inspect the condition of the monument once every year and alongside the Historic Scotland Field Monument Warden during the next scheduled visit within the Historic Scotland Field Monument Warden programme.	A brief file note will be prepared describing the condition of the site as found. A copy of this file note will be sent to the local Historic Scotland Inspector of Ancient Monuments.

## **AGREEMENT TO THE PLAN**

This is an agreement under section 17 of the Ancient Monuments and Archaeological Areas Act 1979. Only works which are carried out in fulfilment of the Occupier's obligations and which are specifically identified in this Agreement are deemed to have been granted Scheduled Monument Consent under the Ancient Monuments Class Consents Order (*Scotland*) 1996. The Occupier must apply for the Secretary of State's Consent prior to undertaking any further works affecting the Area.

Signed on behalf of Forestry Commission

by:

Date of signature:

**FCS Archaeologist**

Signed by Historic Scotland on behalf of the

Scottish Ministers by:

Date of signature:

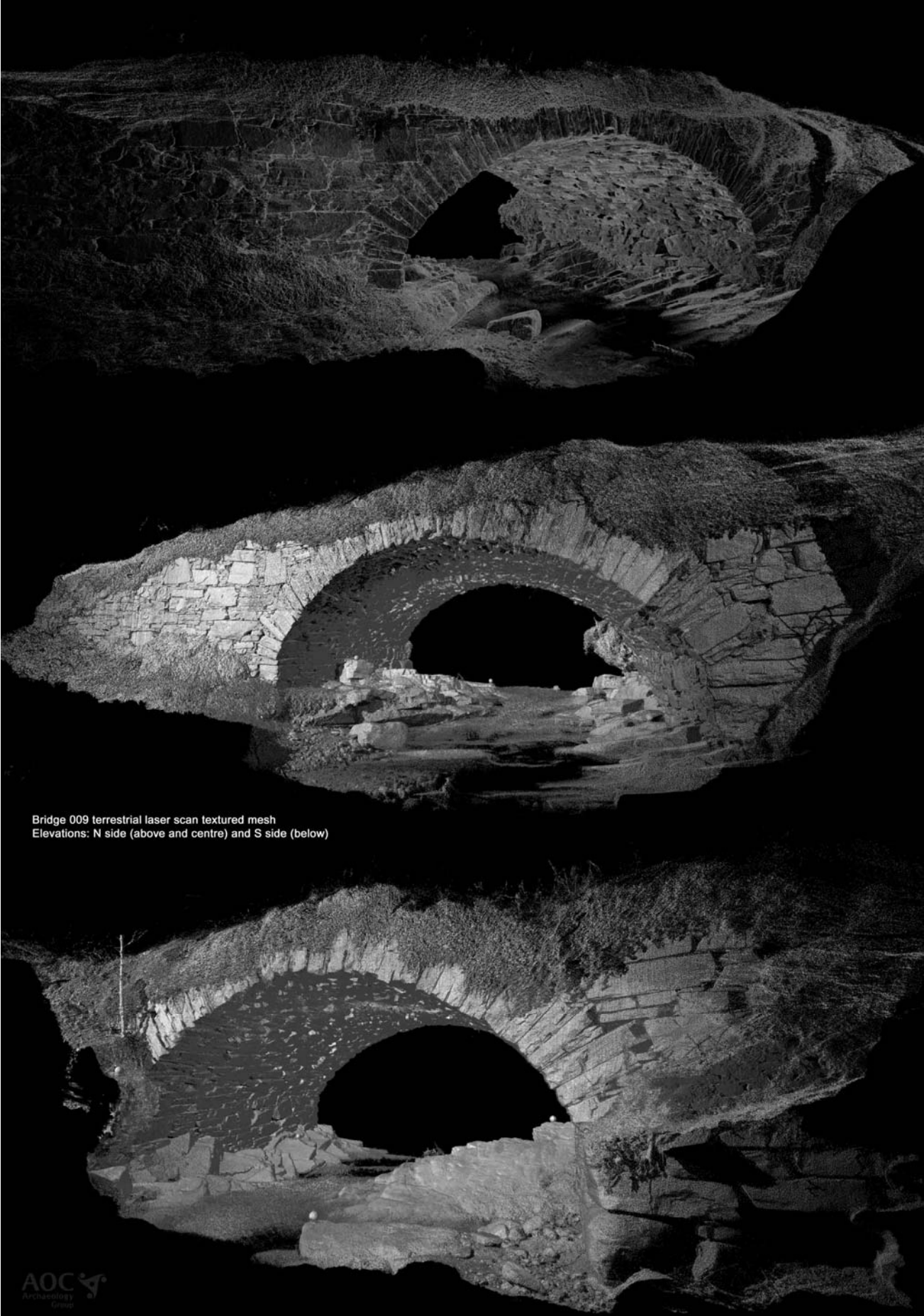
**Monument:** Fort Augustus - Bernera military road, 570 SE of Achlain  
**SM ref:** 11483

**Forest District:** Inverness, Ross & Skye  
**Plan start:** 01/04/14  
**Plan finish:** 31/03/24  
**MMP class:** 2

**Grid ref:** NH 282 121  
**NMRS:** NH21SE 13  
**FC ref:**  
**MMP prepared by:** Matt Ritchie  
**Site visit:** (Date) 06/06/2013  
(Attendees)



*Bridge 009 (the NE bridge) after consolidation*

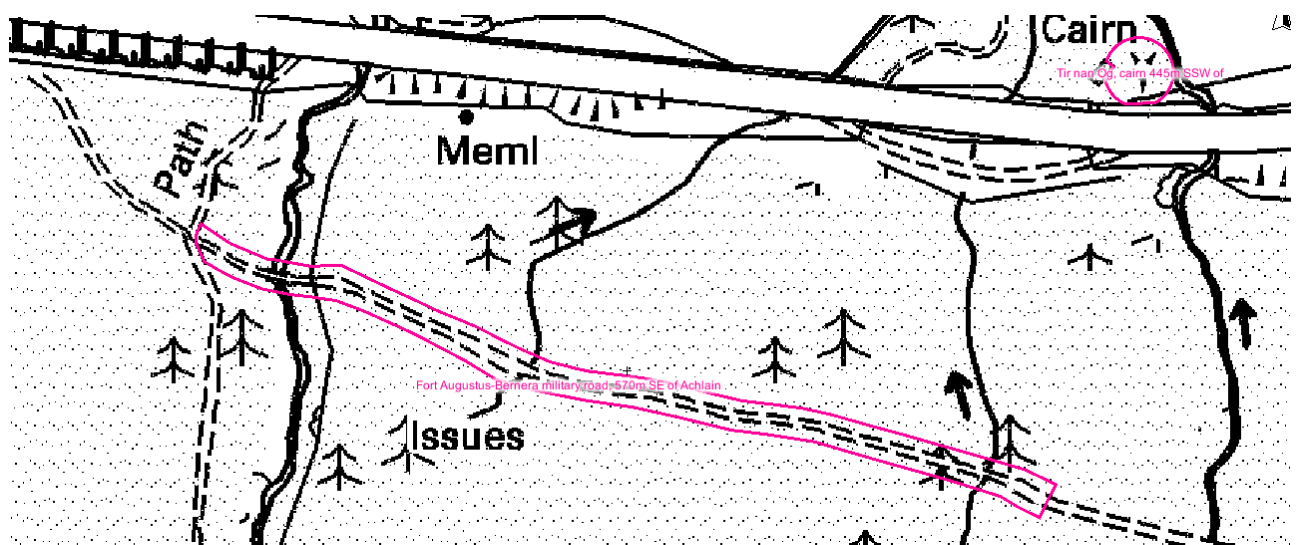


Bridge 009 terrestrial laser scan textured mesh  
Elevations: N side (above and centre) and S side (below)



## [1] GENERAL DESCRIPTION

The monument comprises a stretch of 18<sup>th</sup> century military road and includes two bridges. The road now survives as a grass- and moss-covered track that is approximately 340m in length with an average width of 5.3m. There are two well-preserved single-arch masonry bridges (and a third, currently undesignated, is situated immediately to the SE). The Fort Augustus to Bernera military road was built by Major William Caulfeild in 1748-53 to link the Hanoverian garrison at Fort Augustus to the barracks in Glenelg some 70km to the W. A drove route from Skye and Glenelg was utilised and metalled for troops, carts and artillery. Caulfeild's road appears on Roy's military survey of 1747-55. The road ceased to be maintained after 1784 as the Jacobite threat dissipated. Thomas Telford bypassed some sections which were unsuitable for carriages as part of the Parliamentary Road building programme in 1808-11.



Crown copyright FC 100025498 2014

General George Wade began construction of the military road network in the Highlands between the years of 1725 and 1733. He built over 400km of road and about 40 bridges, linking the barracks of Fort William, Fort Augustus, Inverness and Ruthven. The network was greatly extended by Major William Caulfeild between 1740 and 1767. In 1769, Thomas Pennant wrote of the work that *"these roads, by rendering the Highlands accessible, contributed much to their present improvement and were owing to the industry of our soldiery... [forcing their] way through rocks supposed to be unconquerable."*

Prior to a programme of consolidation and repair, laser scan surveys of the bridges were undertaken in order to inform conservation methodology and enhance the historic environment record. The subsequent excavation and recording of the bridges was undertaken in order to record the character of the bridge surfaces prior to any changes required during conservation work. The overall aims of the archaeology programme were to record any archaeological deposits and structural features associated with the bridges that would be uncovered during conservation work. The core of the arch comprised upright voussiers pinned and locked together with small slabs and packed with a gravelly and sandy soil at the surface. The voussiers and smaller pinning slabs were also clearly visible in the underside of the structure, with gaps evident where slabs had fallen out. The stone masons supported the arch with a steel frame, timber and sandbags, realigning slipped voussiers and repining them from above.


## [2] HISTORIC SCOTLAND MONUMENT WARDEN REPORT(S)

Date of visit	Site Condition Score	Deterioration Risk Score	Historic Scotland Priority Index
07/03/2008	4	3	5

## [3] OBJECTIVES OF MANAGEMENT

<b>Objective</b>	<b>General aims and objectives</b>
CONSERVATION	The main objective of management is to ensure the stable condition of the monument.
ACCESS	Access to the monument will continue.
INTERPRETATION	Interpretation is not appropriate at this site.
SETTING	n/a (continuous cover).

## [4] ISSUES REQUIRING ATTENTION: POTENTIAL OR EXISTING THREATS

<b>Issue</b>	<b>General descriptions with specific details</b>
<p>CONDITION OF MONUMENT</p> <p><i>Historic Scotland Monument Warden Report (07/03/2012)</i></p> 	<p>The monument is in a stable condition, with the three bridges having been consolidated in 2013.</p> <p><i>The site lies on the N facing slope within the Inverwick Forest above the River Moriston and to the S of the A887, Invermoriston to Sheil Bridge. The monument, a military road c.340m long E-W and up to c.5.5m wide includes 2 single span bridges and at least 2 culverts. The site has been planted with trees along the edge of the road and it is likely that the road has been used as an access track for forestry operations in the past. There are a number of forwarder tracks crossing the road but these do not appear to have been used recently. Most of the trees on the N side of the road have been removed recently but there are still trees growing on the S side of the road and several trees have fallen across the road recently, ideally these should be cut into pieces and removed. The road surface is covered with grass and is in a reasonably stable condition, the cutting and removal of the trees will prevent further damage by root activity and wind blow. There is a short stretch of ditch and bank visible on the S side of the road between the 2 culverts, it is likely that there was a ditch and bank along most of the stretch of</i></p>

	<p>road but it is no longer visible due to the trees planting. The W culvert is partially collapsed and the E culvert has been partially exposed by a wind blown tree. The W bridge is the larger structure with substantial abutments, it is c.13m E-W by c.4m wide. It is in a reasonable condition but there has been an area of old damage at the SE end where some of the cope stones appear to have fallen off the bridge in the past. The E bridge is much smaller c.6.5m long by c.3.5m, there is a large slab of bedrock to the SW of the bridge and a tree beside the SE of the bridge. The structure of this bridge is less substantial and it may also have lost cope stones in the past. Although mainly covered with grass the road surface is intermittently visible through the grass cover of both bridges. The road and bridges would benefit from the removal of the trees but as the road passes through a mature plantation clearance may need to be delayed until the surrounding forest is clear felled to prevent damage from wind blow. There are small regen trees growing on the road and these should be removed and a programme of regular monitoring begun to prevent regen becoming established on the monument.</p>
FOREST OPERATIONS (if appropriate)	<p>Any harvesting work will be planned and organised to avoid any damage to the monument in the course of harvesting and timber extraction. No replanting will take place within the scheduled area.</p>
BUFFER ZONE	<p>A buffer zone of 20m will be retained.</p>
VEGETATION / NATURAL REGENERATION	<p>The bridges and road surface are grass-covered with no scrub vegetation.</p>
PUBLIC AND OTHER ACCESS	<p>The Scottish Outdoor Access Code ensures the public right to responsible access.</p>

## [5] SPECIFIC WORK PROPOSED IN THE PLAN PERIOD

The following operations are proposed within the Plan Period:

Detail of work	Detail of time / condition of response
Monitor the condition of the monument and ensure the removal of all intrusive scrub vegetation and regeneration.	If required, clearance will occur at least once every year and will be undertaken by FCS Forest District staff or contractors. All scrub vegetation and naturally regenerating trees within the scheduled area will be cut off at ground level using appropriate hand or power tools and removed. Any seedlings will be removed by pulling out by hand.
	No work will be undertaken in the scheduled area other than work previously agreed with Historic Scotland and detailed in this plan.

## [6] ARRANGEMENTS FOR MONITORING

Type of monitoring	Detail of recording
FCS staff will formally inspect the condition of the monument once every five years and alongside the Historic Scotland Field Officer during the next scheduled visit within the Historic Scotland Field Officer programme.	The Forest District will record when any major management action (described within this plan) was undertaken (i.e. year action undertaken) within the Designated Historic Assets Register.

## AGREEMENT TO THE PLAN

This is an agreement under section 17 of the Ancient Monuments and Archaeological Areas Act 1979. Only works which are carried out in fulfilment of the Occupier's obligations and which are specifically identified in this Agreement are deemed to have been granted Scheduled Monument Consent under the Ancient Monuments Class Consents Order (*Scotland*) 1996. The Occupier must apply for the Consent of the Scottish Ministers prior to undertaking any further works affecting the Area.

Signed on behalf of Forestry Commission  
Scotland by:  
Date of signature:

**FCS Archaeologist**

Signed by Historic Scotland on behalf of the  
Scottish Ministers by:  
Date of signature:

**Appendix 8 – Coupe Summary (CSM6) Phase 1 & 2 (2014 – 2024)**

**Table 1 – Clearfell & re-establishment**

Coupe Number	Fell Year	Area (Ha)	Volume M3ob	Comments	Restock Prescription	Restock Phase
05185	2015	15.7	6904	A82	Low input native woodland	Phase 1
05656	2016	0.5	113	FTR	Natural regeneration of Low Input Native Woodland	Phase 1
05301	2016	14.8	11348	A82	Low Input Native Woodland	Phase 1
05584	2016	31.5	10208		Productive Pinewood	Phase 2
04824	2016	19.0	6283		Productive Conifer, Riparian Woodland & Productive pinewood	Phase 2
04612	2016	2.7	295	Visitor zone	Productive pinewood	Phase 2
05787	2017	35.6	11326		Productive pinewood	Phase 2
70017	2017	35.6	8749	DNB	Productive pinewood, Riparian woodland, open	Phase 2
11008	2017	1.9	1978	Niche market	Low input native woodland	Phase 2
04908	2017	102.9	18924	DNB	Productive Conifer & Low Input mixed woodland, Open	Phase 2
05315	2018	9.4	2482	Riparian restoration	Low input native woodland	Phase 2
18003	2018	7.6	0	FTR	Nat regeneration of Low Input Native Woodland	Phase 2
15020	2018	19.2	6495		Productive Broadleaves	Phase 2
04841	2018	1.9	0	FTR	Low input native woodland	Phase 2
04716	2018	44.7	17192		Productive Conifer & Riparian Woodland	Phase 2
05340	2019	26.1	5851		Productive Pinewood & Low Input Native Woodland	Phase 2
04623	2019	1.0	174	LP Removal	Productive Conifer	Phase 2
04267	2019	51.5	13731	DNB	Productive Conifer & Low Input Native Woodland	Phase 2
05008	2019	27.2	8326		Productive Conifer & Productive Broadleaves	Phase 2
	<b>Total Phase 1</b>	<b>449.1</b>	<b>130379</b>			
05931	2020	22.4	10502		Productive Pinewood & Riparian Woodland	Phase 2
70008 & 05310	2020	58.5	7858	DNB	Productive Pinewood & Low Input Native Woodland	Phase 3
09006	2020	46.9	28345	A82	Low input native woodland	Phase 2
16073	2020	51.8	15823	DNB	Productive Conifer & Riparian Woodland	Phase 3
04041	2020	8.2	2385	Visitor zone	Productive Conifer	
04476	2020	6.4	2347	Visitor zone	Productive Conifer	Phase 2
05863	2021	24.6	7530	DNB	Productive Pinewood & Riparian Woodland	Phase 3

70016	2021	42.6	3361	DNB	Productive Pinewood & Riparian Woodland	Phase 3
05914	2021	32.7	9252		Low Input Native Woodland	Phase 3
04856	2021	12.4	2615		Productive Pinewood & Low Input Native Woodland	Phase 3
04686	2021	54.5	12839	DNB	Productive Conifer & Riparian Woodland	Phase 3
71022	2022	83.0	13791	DNB	Low Input Native Woodland	Phase 3
05585	2022	16.0	9420		Productive Pinewood & Low Input Native Woodland	Phase 3
05688	2022	11.7	7037	A82	Low input native woodland	Phase 2
04165	2022	12.5	5343		Productive Pinewood & Riparian Woodland	Phase 3
10005	2023	33.4	10179		Low Input Native Woodland & Productive Pinewood	Phase 3
05924	2023	2.5	738		Low Input Native Woodland	Phase 3
05404	2023	11.1	3921		Productive Pinewood	Phase 3
04894	2023	52.2	13858	DNB	Productive Conifer & Low Input Native Woodland	Phase 3
04221	2023	7.3	2451	A82	Productive Broadleaves	Phase 3
05060	2024	18.9	8130		Low Input Native Woodland, Riparian Woodland & Productive Pinewood	Phase 3
05689	2024	35.2	10074		Productive Pinewood & Low Input Native Woodland	Phase 3
05365	2024	4.1	2078	A82	Low Input Native Woodland	Phase 3
05529	2024	9.2	4166		Low Input Native Woodland	Phase 3
10036 & 05002	2024	24.1	9706	A82	Low Input Native Woodland	Phase 3
	<b>Total Phase 2</b>	<b>682</b>	<b>203749</b>			
	<b>Total FDP</b>	<b>1131.1</b>	<b>334128</b>			

**Table 2: Re-establishment of existing fallow within FDP (2014 – 2024)**

Coupe Number	FDP Phase	Area (Ha)	Prescription
5891	Phase 1	33.8	Low Input Native Woodland
11002	Natural regeneration	18.9	Low Input Native Woodland
5625	Phase 1	14.5	Productive Pinewood, Low Input Native Woodland & Riparian Woodland
10034	Phase 1	13.1	Low Input Native Woodland
5436	Natural regeneration	7.7	Low Input Native Woodland
10002	Natural regeneration	10.1	Low Input Native Woodland

10016	Phase 1	34.8	Productive pinewood, Low Input Native Woodland
5374	Natural regeneration	18	Low Input Native Woodland
18012	Natural regeneration	12.3	Low Input Native Woodland & Riparian Woodland
5042	Natural regeneration	12.4	Low Input Native Woodland
05232,79,41,485	Natural regeneration	15.6	Low Input Native Woodland
16044	Phase 1	129.3	Productive Conifer & Low Input Mixed Woodland
16049	Phase 2	22.2	Productive Conifer & Riparian Woodland
4067	Phase 1	33.8	Productive Conifer & Productive Pinewood
04873 & 04692	Phase 1	27.8	Productive Conifer & Riparian Woodland

**Table 3: New Planting**

Coupe No	Phase	Gross Area (Ha)	Type
04075	Phase 2	11	Low Input Mixed Woodland
05272	Phase 2	16.7	Productive Pinewood

Sites designated for natural regeneration will be assessed on a 3 – 5 Year cycle.

Within the plan period a maximum of 33.2ha will be selectively felled across the forest (417Ha) managed under CCF, in accordance with the parameters outlined in section 5.14.

Over the plan period we are Clearfelling 1131.1Ha and restocking 859.1Ha. A total of 103.1 ha are to be managed for natural regeneration. The difference between the restocking figure and clearfell figure is accounted for largely by the fallow system (3 – 5 Years post felling). A small reduction in designed open space is accounted for in Coupe 04908 & 70017.

Maps 6.1, 6.2, 6.3 & 6.4 spatially detail all of the proposed felling & restocking within the FDP.

## Appendix 9: Management prescriptions on the National Forest Estate- Native Woodland

Soil Group	Soil Types Relevant to IRS FD	Characteristics	Aim*	Species Prescription for Habitat Types Predominating in IRS Forest District
1	Brown Earths	Soils with typically good aeration and drainage throughout the profile and well-incorporated organic matter. These soils are mainly * fertile and allow deep rooting. Likely vegetation to be encountered includes fine grasses, holcus, bracken, bramble, foxgloves, violets and a diverse range of herbs. * However Podzolic Brown earths where nutrients have been leached are "Very Poor"	NW	W19 Juniper wood with sorrel on 1, 1u, 1z and 1b from sheltered sites up to sub alpine areas with DAMS < 22 W18 Scots pine with heather on 1z in cool to warm with DAMS < 18 W11 Upland oak-birch with bluebell on 1, 1u and 1z in cool to warm with DAMS < 18
3 & 4	Podzols & Ironpan Soils	Developed on Acid * soils with high rainfall where nutrients are flushed into the lower horizons of the soil profile. Frequently induration or an impenetrable pan will prevent good drainage, resulting in a need to break this impediment with suitable cultivation that will allow freer draining and greater rooting depth.  Vegetation common to these soils are ericaceous plants, grasses including deschampsia flexuosa, nardus, carex and molinia. Light bracken and feather mosses may also be present. * NOT fertile soils	NW  RW	W18 Scots pine with heather on 3, 3m, 4, 4z and 4b Not in Sub-alpine climate, (Cool to Warm) DAMS < 18. W19 juniper wood with sorrel on 3 and 4b Possible up to Sub-alpine zone W17 Upland oak-birch with blaeberry on 3s and 3ms Mainly in Lower Cool to warm climate zone. DAMS < 18.
5	Groundwater Gleys	Dominant vegetation is commonly Deschampsia caespitosa, Holcus, salix spp and herbs. Occuring where a shallow water table causes waterlogging and therefore subject to compaction and poorly oxygenated. The soil is permeable but is affected by a fluctuating ground-water table. Moderate nutrient availability.	NW  RW	W7 Alder-ash with yellow pimpernel on 5 and 5f Cool to Warm. Sheltered to Moderately exposed. (DAMS <16)
6	Peaty Gleys	Very Poor to medium nutritional availability, these soils are indicated by Molinia, Calluna and Erica spp, with sphagnum prevalent in the North and West.  High winter water table can be expected and good drainage will be required to achieve best results.	NW	W18 Scots pine with heather on 6z "moist" to "fairly dry" W4 Birch with purple moor-grass on 6 and 6b. Cool to Warm. DAMS < 18.
7	Surface Water Gleys	Differing from groundwater gleys in that waterlogging is caused not by a high water table, but by induration preventing adequate drainage leading to a seasonally fluctuating water table. Resulting anaerobic conditions will restrict rooting.  Indicative vegetation includes Holcus, Juncus, Nardus and Deschampsia caespitosa. Again poor to moderate nutritional availability can be expected.  Drainage will be required along with micro site cultivation such as mounding.	NW	W11 Upland oak-birch with bluebell on 7b W18 Scots pine with heather on 7z possibly on margins leading to drier knolls. W7 Alder-ash with yellow pimpernel on 7, 7b and 7z Cool to Warm. Sheltered to Moderately exposed. (DAMS <16)
8	Flushed Basin Bogs	Juncus spp are prevalent. A shallower peat type, nutrient rich and containing some mineral grains. Peat is black in colour.	NW	W4 Birch with purple moor-grass on 8b and 8c.
9	Molinia Bogs	Often existing on hillsides where flushing is more pronounced. Moderate nutrition available.	NW  OG	W4 Birch with purple moor-grass on 9a, 9b, 9c and 9d suitable for the transitional areas at the margins between productive forest blocks and peatland restoration sites. 9e Trichophorum, Calluna, Eriophorum, Molinia Bogs will not be planted or restocked - restoration of peatland.
10	Unflushed Flat or Raised Bogs	Sphagnum dominated bogs, formed as peat levels rose to form a dome, reliant on precipitation for moisture and nutrients. Mineral grains are absent and the peat is reddish-brown and tends to be deeper.	OG	10b Upland flat or raised bogs – priority areas for peat restoration.
11	Unflushed Blanket Bogs	Calluna, Eriophorum, Trichophorum Bogs including the hill peats located on upland plateaux and hillsides deeply dissected by burns.	OG  OG	11a A rare peatland type mainly restricted to the driest eastern uplands 11b,c,d Unflushed blanket bogs - priority areas for peatland restoration
14	Eroded Bogs	Very poor nutritional status characterised by bog asphodel, deer grass, bog cotton etc. Can be dominated by either deep and frequent eroded areas (haggs) or frequent pools of standing water (flows). Very deep peat.	OG  OG	14 & 14h Hagged bogs – unsuitable for forestry or woodland – peatland habitat 14w Pooled bogs – common across Northern Scotland forming the 'Flows' – peatland.
15	Littoral Soils	Formed on coastal sands and shingles, such as the dunes found at Morrich More near Tain. The category is split into shingle (15s), dunes (15d) and then sands with varying water table depths (15e,w,g,i). These sands can be distinguished by various levels of mottling. Coastal grasses and heathland plants predominate.	NW	W16 Lowland oak-birch with blueberry limited to "Warm" climate



\*NW – Native Woodland Expansion / RW – Riparian Woodland Expansion / OG – Managed Open Ground e.g. peatland restoration

NB – These prescriptions must be adopted within the local context set out in the main body of this FDP. Climate must be included as a determining factor in final species selection.

- Planting will generally become a mosaic of the woodland types recommended above, dictated by local conditions and agreed after “75% Site Completion Visits”
- Particular note should be made of the inadvisability of planting the peatland types 10 – 14 that may predominate on marginal FD sites
- No native woodland type likely to be suitable on sites wetter than SMR “Very Moist” and veg indicating SNR <4.5
- Due to Chalara fraxinea no new planting / restocking of Ash will be undertaken, this will be reviewed with new guidance from Forestry Commission Plant Health.
- Natural regeneration of Ash will be accepted where it occurs.

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## Appendix 10: Management prescriptions on the National Forest Estate - Productive Forestry

Soil Group	Soil Types Relevant to IRS FD	Characteristics	Species Prescription for Commercial Restocking
1	Brown Earths	Soils with typically good aeration and drainage throughout the profile and well-incorporated organic matter. These soils range from very rich to poor and usually allow deep rooting. Likely vegetation to be encountered includes broad leaved grasses, (e.g. Yorkshire fog, Bent), bracken, bramble, foxgloves, violets and a diverse range of herbs.	<p>Douglas Fir on Poor (must be without heather) to Rich fertility with Moist to Dry soil moisture. Desirable intimate or group mixture; European Larch*, Norway Spruce or Western Red Cedar. Generally in sheltered areas with sufficient rainfall</p> <p>Sitka or Norway Spruce on Poor to Medium fertility with Wet to Fresh soil moisture. Desirable intimate or group mixture; each other or European/Hybrid Larch</p> <p>Scot's Pine in Podzolised areas on Poor to Medium fertility with Moist to Dry soil moisture. Desirable intimate or group mixture; Japanese/Hybrid or European Larch*</p> <p>European Larch on Medium to Rich fertility with moist to Moderately Dry soil moisture. Desirable intimate or group mixture; Scot's Pine or Douglas Fir</p> <p>Japanese/Hybrid Larch* on Poor to Medium fertility with Very Moist to Fresh moisture. Desirable intimate or group mixture; Scot's Pine</p> <p>Sycamore on Medium to Rich fertility with Moist to Fresh soil moisture. Desirable intimate mixture: Ash† or European Larch*</p> <p>Where improved climatic conditions allow:</p> <p>Sessile Oak on Medium to Rich fertility with Moist to Slightly Dry soil moisture. Pedunculate Oak (Local seed source if possible) on Medium to Rich with Very Moist to Fresh soil moisture. Desirable intimate/group or blocky mixtures include; Norway Spruce, European Larch*, Western Red Cedar, Silver Birch or Ash</p> <p>Silver Birch on Poor to Medium with Very Moist to Fresh soil moisture. Desirable intimate or group mixture: Oak or Scot's Pine</p> <p>*Ash on Rich fertility with moist to Fresh soil moisture and less acidic sites. Mix in groups with; Sycamore, Oak or Beech</p>
3	Podzols	<p>Develop on unfertile acid soils with high rainfall where nutrients are flushed into the lower horizons of the soil profile. Very poor fertility. Induration or an impenetrable pan will prevent good drainage, resulting in a need to break this impediment with suitable cultivation that will allow freer draining and greater rooting depth.</p> <p>Vegetation common to these soils are ericaceous plants, grasses including Wavy hair, Matt and Purple moor grass. Light bracken and feather mosses may also be present.</p>	<p>Scot's Pine with Moist to Dry soil moisture. Desirable mixture; intimate mixture with Hybrid Larch*</p> <p>Sitka Spruce with Wet to Moist soil moisture. Mix with; Lodgepole Pine in wetter areas or Japanese/Hybrid Larch*</p> <p>Japanese/Hybrid Larch* with Very Moist to Fresh soil moisture</p> <p>Where improved climatic conditions allow:</p> <p>Sessile Oak (not on 3m) with Moist to Fresh soil moisture. Desirable mixture; Hybrid Larch, Scot's Pine or limited Norway Spruce</p>
4	Ironpans	<p>Develop on free draining acid soils with high rainfall. The transfer of aluminium and iron in solution down through the soil profile develops an ironpan that is impervious to water and root penetration. Breaking of the ironpan is desirable, so as to allow drainage of the site and a potential increase in soil rooting volume and nutrient availability.</p> <p>Vegetation and fertility is similar to that of Podzols above</p>	<p>Scot's Pine with Moist to Dry soil moisture. Desirable mixture; Japanese/Hybrid Larch</p> <p>Japanese/Hybrid Larch* with Very Moist to Fresh soil moisture. Desirable mixture; Scot's Pine</p> <p>Lodgepole Pine in elevated areas with Wet to Fresh soil moisture</p> <p>Sitka or Norway Spruce (4 &amp; 4b) with Wet to Fresh soil moisture. Desirable intimate or group mixture; Lodgepole Pine in wetter areas or Japanese/Hybrid Larch or Scot's Pine.</p> <p>Sycamore (4b only) with Moist to Fresh soil moisture. Consider intimate mixture with Japanese/Hybrid Larch*</p> <p>Cultivation that includes amelioration of the ironpan will be considered.</p>
5	Groundwater Gleys	<p>Dominant vegetation is commonly Tufted hair grass, Willows and herbs. Occurring where a shallow water table causes waterlogging and therefore subject to compaction and poorly oxygenated. The soil is permeable but is affected by a fluctuating ground-water table. Moderate nutrient availability.</p>	<p>These areas are generally presumed to be open or riparian zones.. Where rooting depth is adequate:</p> <p>Sitka or Norway Spruce on Medium to Rich fertility with Very Wet to Moist soil moisture. Consider adding blocks of Downy Birch and Alder</p> <p>Intimate mix of Downy Birch and Common Alder on Poor fertility with Very Wet to Moist soil moisture</p>

6	Peaty Gleys	Very Poor to Rich nutritional availability, these soils are indicated by Purple moor grass, Calluna and Cross-leaved heath, with sphagnum prevalent in the North and West.  High winter water table can be expected and good drainage will be required to achieve best results.	Sitka Spruce on Poor to Medium fertility with Wet to Fresh moisture. Experience in IRS FD suggests this crop will rarely establish as a pure stand without fertiliser input. Intimate mix with Lodgepole Pine in wetter and poorer areas or with Japanese/Hybrid Larch* in more Pozolised areas. Consider adding blocks of Downy Birch  Downy Birch on Poor to Medium fertility with Very Moist to Fresh soil moisture
7	Surface Water Gleys	Differing from groundwater gleys in that waterlogging is caused not by a high water table, but by lateral surface-water movement through the soil profile developing a seasonally fluctuating water table. Resulting anaerobic conditions will restrict rooting. Indicative vegetation includes Tussock grass and Creeping Buttercup. Again poor to moderate nutritional availability can be expected.  Drainage will be required along with micro site cultivation such as mounding.	Sitka or Norway Spruce on Medium fertility with Wet to Fresh soil moisture. Desirable mixture; each other, Japanese/Hybrid Larch* or with Lodgepole Pine in wetter poorer areas  Where improved climatic conditions allow:  Pedunculate Oak on 7b Medium to Rich fertility with Moist to Fresh soil moisture. Desirable group or blocky mixture; Norway Spruce
8	Flushed Basin Bogs	Rushes are prevalent. A shallower peat type, nutrient rich and containing some mineral grains. Peat is black in colour.	Please note that there is a presumption against planting areas of deep peats where reasonable productive growth rates are not achievable due to intact hydrology and/or challenging climate.  Forestry Commission Scotland is currently forming a policy for dealing with these soil types. Forest Enterprise Scotland will issue Guidance once a policy is in place. It may be considered that more fertile, flushed peats and areas of deeper peat where hydrology has been irreversibly compromised will remain suitable for restocking.  Where areas of deeper peat are encountered in intimate mosaic with more favourable soils Sitka Spruce (QSS) will be favoured in a mixture with Lodgepole Pine of disease resistant provenance or hybrid larch. On these more nutritionally challenged sites a proportion (up to 20%) of soil improving species such as birch will be considered.
9	Molinia Bogs	Often existing on hillsides where flushing is more pronounced. Moderate nutrition available.	
10	Unflushed Flat or Raised Bogs	Sphagnum Moss dominated bogs, formed as peat levels rose to form a dome, reliant on precipitation for moisture and nutrients. Mineral grains are absent and the peat is reddish-brown and tends to be deeper.	
11	Unflushed Blanket Bogs	Calluna, cotton-grass, deer grass bogs including the hill peats located on upland plateaux and hillsides deeply dissected by burns.	
14	Eroded Bogs	Very poor nutritional status characterised by bog asphodel, deer grass, bog cotton etc. Can be dominated by either deep and frequent eroded areas (haggs) or frequent pools of standing water (flows). Very deep peat.	
15	Littoral Soils	Formed on coastal sands and shingles, such as the dunes found at Morrish More near Tain. The category is split into shingle (15s), dunes (15d) and then sands with varying water table depths (15e,w,g,i). These sands can be distinguished by various levels of mottling. Coastal grasses and heathland plants predominate.	Corsican cannot be considered due to the current DNB moratorium on planting therefore Scot's Pine either pure or in intimate, group or blocky mixture with Birch.  Downy/Silver Birch depending on climate

NB – These prescriptions must be adopted within the local context set out in the main body of this Forest Design Plan. Climate, (along with soils) must be included as **the** determining factor in final species selection.

- Planting will generally become a mosaic of the species recommended above and will include areas of non-productive open ground and broadleaf riparian zones. Species choice will be dictated by local conditions and agreed after site visits by management staff.
- No commercial forestry type likely to be suitable on sites wetter than SMR "Very Moist" and vegetation indicating SNR <4.5
- Origin for SS is QSS. However where conditions are sub-alpine then ASS is preferred
- Mixed stands mean that each species occupies at least 20% of the canopy. Blocky areas should aim to cover the area that 3-4 mature trees would cover. Mixtures may need management to favour one or more species. Intimate mixtures of broadleaves with Sitka Spruce or Scot's Pine will normally result in the conifer's dominating overtime so planting in blocks is often the better option.
- \* Due to current plant health restrictions there will be no planting of Larch species, Ash or Lodge pole pine (with the exemption of Alaskan provenance Lodge pole pine), this will be reviewed throughout the life of the plan in accordance with industry best practice.

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## **Appendix 11: Open habitat management prescriptions**

### **Overall aim**

To ensure that the network of open habitats of European and national importance within the plan area (blanket bog, dry and wet heaths and mountain scrub) are maintained as functional ecosystems and that their ecological value is preserved and enhanced through appropriate management practice.

To manage the heath habitats to favour some of the associated Species Action Framework as defined by Scottish Natural Heritage (SNH) such as black grouse.

### **Survey and Monitoring**

Further detailed habitat surveys will be undertaken to identify the distribution and condition of mountain scrub species within the open habitat.

Monitoring will be used to assess the ecological condition of open habitats and identify pressures (over grazing, exotic tree colonisation). Survey prioritisation will be applied to habitats according to their ecological importance:

- A. European importance under the Habitat Directive.
- B. UK BAPHAP.

Routine deer population monitoring will be undertaken by the Deer Management team using dung counts.

### **Management prescriptions**

#### *Heathland*

To diversify the horizontal and vertical structure of heath and create a mosaic of dry and wet heath habitats through use of low density grazing schemes, appropriate cutting or burning regimes. Heath management will also be undertaken to favour species such as black grouse which have been recorded within the upland areas of this plan. To maintain open areas of dry and wet heaths of European and national importance and encourage its extension through the control of the shrub and tree encroachment and ensure that there is less than 20% tree cover.

#### *Blanket Bog*

To maintain open areas of active peat bogs, of European importance as defined in the Habitat Directive, through the control of shrub and tree encroachment and that no new planting is carried out on such habitat types. An allowance, of under 20% native tree or scrub cover, will be permitted to reflect the intricate mosaic between upland heaths, blanket bogs and open upland birch and native pine woods on other blanket bog of non European importance. Small scale restoration of afforested blanket bog will be undertaken in Balnacarn (8.5Ha) post tree removal, through blockage of ditches to raise the water table and encourage reactivation of the blanket bog.

#### *Mountain scrub*

The aim is to encourage the establishment of mountain scrub as a transitional zone between the woodland and mountain habitats where appropriate. Following more detailed survey of these plant communities, where appropriate over the long term, mountain scrub populations will be established or extended through planting and natural regeneration as indicated on the Future Habitat and Species Proposals. New planting of mountain scrub is not currently planned to be undertaken within the plan period 2014 – 2024.

#### *Cross habitat*

An appropriate deer control programme and cull programme, continually reviewed and refined through population monitoring, will be applied.

## Inverness, Ross and Skye forest district

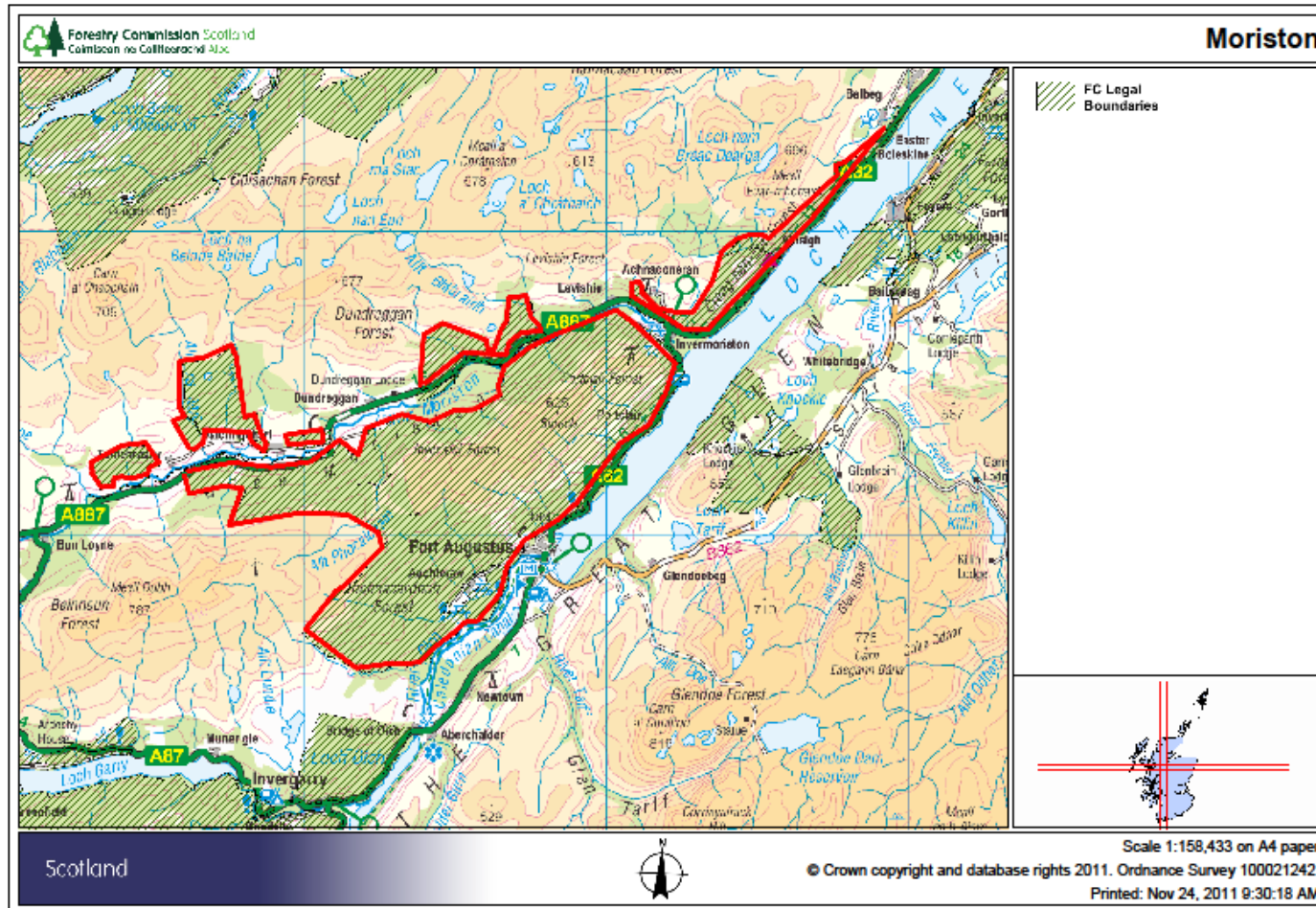
### Deer management unit plan

<b>Deer Management Unit Name:</b>	Moriston
<b>Deer Management Unit Number:</b>	51736 Formally Fort Augustus 51802
<b>Associated Deer Management Group:</b>	The blocks at Tomcrasky and Blaridh are part of Glenmoriston DMG The rest is not within a DMG area
<b>Main Objectives &amp; Key Issues of Unit:</b>	Commercial, native woodland and open habitats Partial deer fence used. Deer fence is between FC and neighbour where they manage for red deer. Deer fence used between FC and Achlain, Balmacaan, Inverwick and Dundreggan (TFL) Tomcrasky has some deer fencing. Repair & maintain existing deer fencing as shown on map 2.
<b>Deer Management Methods &amp; Resources Used:</b>	Ranger, permission in Dalchreichart
<b>DMU Area &amp; Current Forest Structure Plus Forecast of Structure in 10 Years:</b>	9962ha Structure- see design plan. Largest deer population numbers occurring in dense plantation with limited access. Proposals for road extensions and restructuring of forest will increase opportunities for effective deer control. Increase in "soft species" over the FDP period will require targeted control and where appropriate use of internal fence enclosures.
<b>Population Assessment Method Used:</b>	Routine Strath Caulidh dung count Last undertaken 12/13
<b>Population Modelling:</b>	Deer movement is high
<b>Cull Targets:</b>	Target deer density: 5 per km <sup>2</sup> 285 – 451 per annum for next five years.
<b>Historical Cull Figures:</b>	<i>See cull record sheet</i>
<b>Deer Population Density Figures:</b>	2004-14 per 100ha. 2007- 8.5 per 100ha Dalreichart blocks- 2010- 23per 100ha Whole area 2013- 9 per 100ha
<b>SNH Authorisations:</b>	Night and OOS woodland
<b>Other Relevant information:</b>	The West Tomcrasky block is a disposal .

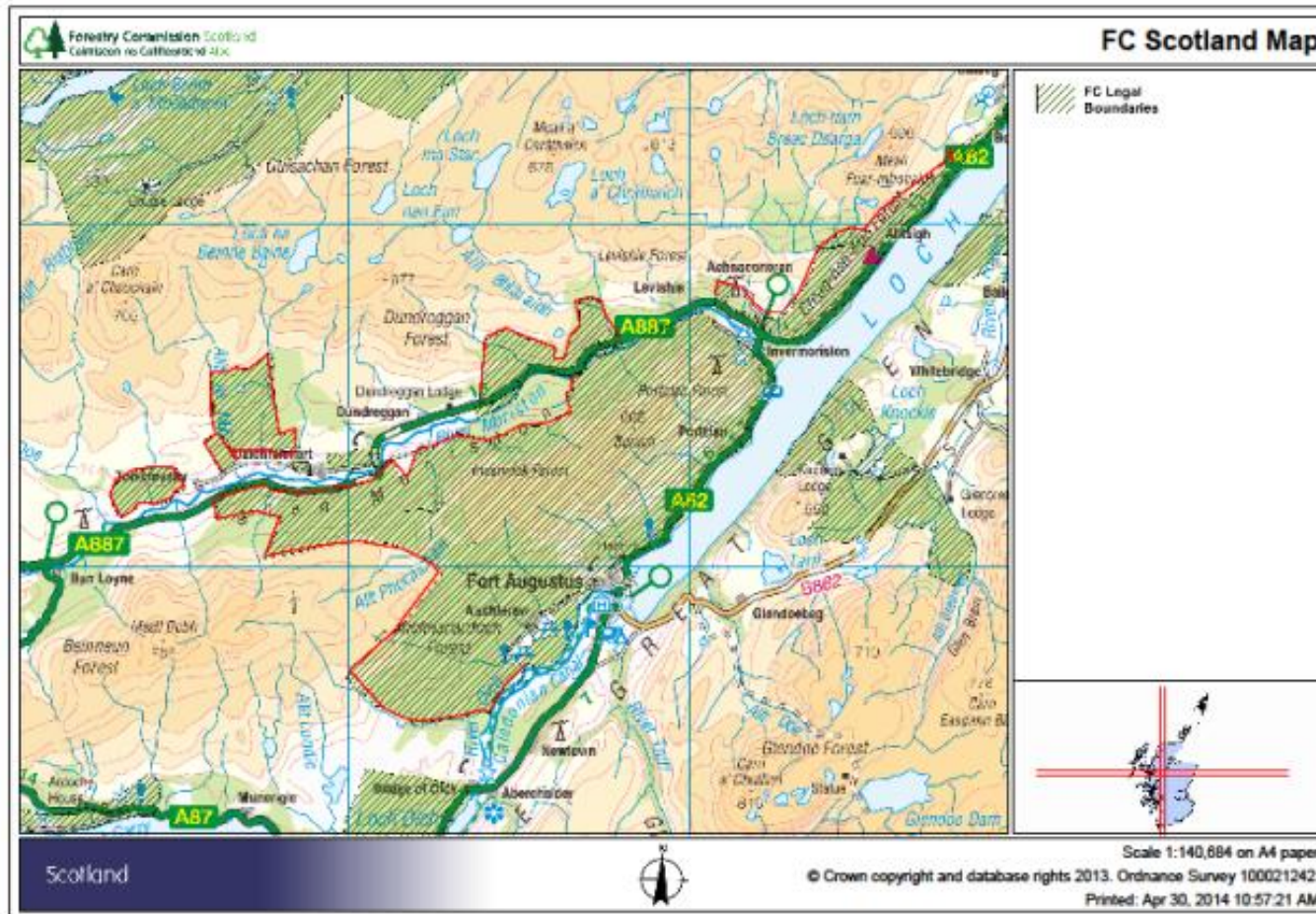
**Cull Record Sheet**

YEAR	RED						ROE						SIKA						Overall Population Density (No of Deer per 100 Ha)
	Actual			Target			Actual			Target			Actual			Target			
	M	F	C	M	F	C	M	F	K	M	F	K	M	F	C	M	F	C	
2002																			
2003																			
2004																			
2005																			
2006																			
2007																			
2008																			
2009	98	12	65				15	13	4				57	32	17				
2010	12	13	59				11	7	4				35	12	3				
2011	16	12	54				11	7	7				34	47	17				
2012	16	20	13				9	19	19				44	55	45				
2013	14	13	68				4	15	8				43	43	28				

# Map 1: Moriston Deer Management Unit



Map 2: Existing Boundary Deer Fences





## Appendix 13: Tolerance Table

	Adjustment to felling coupe boundaries	Timing of restocking	Change to species	Windthrow response	Adjustment to road lines
<b>FC Approval not normally required (record and notify FC)</b>	<10% of coupe size. On A 82 coupes up to 1 Ha or 10%.	Up to 7 planting seasons after felling (allowing fallow periods for hylobius).	Change within species group E.g. Scots pine to birch,  Non-native conifers e.g Sitka spruce to Douglas fir,  Non-native to native species (allowing for changes to facilitate Ancient Woodland policy).	<b>Low sensitivity area</b> Low sensitivity area Where wind throw or death from disease or other environmental factors represents more than 60% of the crop the area including standing trees within the affected area may be felled.	<b>Low sensitivity area</b> Creation of turning points/ loading bays. Deviation of <100m either side of the predicted centre line of the road/ track.  <b>High sensitivity area</b> Deviation <75m in either direction from centre of road/track.
<b>Approval by exchange of letters and map</b>	10-15% of coupe size. On A82 Coupes 1-5 Ha.	7 years +	Change of coupe objective that is likely to be consistent with current policy (e.g. from productive to open, open to native species).	<b>Low sensitivity area</b> As above to include up to 5ha of standing crop beyond the affected area to a wind firm or reasonable edge. Areas where wind throw represents less than 60% of the standing crop. <b>High sensitivity area</b> Areas where windthrow represents >60% of the standing crop	<b>Low sensitivity area</b> Deviation of 100-150m in either direction from centre of road/track.  <b>High sensitivity area</b> Deviation of 75-100m in either direction from centre of road/track.
<b>Approval by formal plan amendment</b>	>15% of coupe size. On A82 coupes over 5 Ha.		Major change of objective likely to be contrary to policy, E.g. native to non-native species, open to non-native,	<b>Low sensitivity area</b> Wind thrown or affected area where area greater than 5 Ha (of healthy crop) required to reach a wind firm or reasonable edge. <b>High sensitivity area</b> Felling of standing trees beyond the area of wind throw.or affected area.	Deviations exceeding the above.

The consultation tolerances contained within this table are the standard recommended tolerances that have been agreed with Highland Conservancy complying with OGB36 Forest Design Planning and CSM6, published by Forestry Commission, Edinburgh.

Stands adjacent to felled areas will be retained until the restocking of the first coupe has reached a minimum height of 2m except where windblow or disease mean felling must be brought forward. In these circumstances, restocking will be delayed to achieve the required age diversity

## Appendix 14 – Bibliography

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