

# **Appendix A8.2**

Agriculture, Sporting and Forestry Impacts Assessment





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## **1.1. Potential Impacts**

### **Construction Phase Impacts**

#### Agriculture and Sporting

- 1.1.1. This section provides an overview of the land area lost for each holding identified as being impacted by the Proposed Scheme. An overview of potential impacts for each land holding is also provided.
- 1.1.2. Table A1.1 summarises the land lost in hectares (ha) for each holding by Land Class (LCA). The total agricultural land take is 55.8 ha.

Land Class (LCA)	Invereen Farm (ha)	Dalmagarry Farm (ha)	Dalmagarry Estate (ha)	Tomatin Estate (ha)	Moy Estate (ha)
4.1	-	3.75	0.02	15.75	1.05
4.2	-	-	-	-	0.44
5.1	-	-	-	-	-
5.2	1.29	6.00	3.21	4.91	4.56
5.3	1.53	-	1.98	2.95	2.03
6.1	-	-	-	-	-
6.2	-	-	1.06	-	0.36
6.3	0.23	1.29	0.39	0.60	2.40
Total	3.06	11.04	6.66	24.20	10.84

#### Table A1.1: Land Take of Holding for each Land Class (LCA)

#### Invereen Farm

- 1.1.3. The main loss to the farm will be land comprising improved grazing and some rough grazing (which incorporates the loss of landowners ability to claim payment entitlements) totalling 3.06 ha, which is just over 6% of the holding.
- 1.1.4. The loss of land to claim Region 1 entitlement is of particular importance as it is unlikely that alternative land in the area will be available to rent to link the entitlements to.
- 1.1.5. Drainage on the farm is outwith the Proposed Scheme footprint and will be unaffected. The existing water supply to the farmhouse crosses the A9 and so may be temporarily diverted during construction, although water supply will still be provided to the farm and supply will be fully reinstated post construction.
- 1.1.6. Farm rough shooting will be unaffected by the Proposed Scheme and there will be no other business impacts arising.
- 1.1.7. Access to and from the A9 may potentially be affected during construction. Some boundary features will impacted during construction, due to proximity to A9, but can be easily replaced.
- 1.1.8. The land holding is classed as medium sensitivity and the magnitude of change is low, resulting in a **Slight** impact significance.

#### Dalmagarry Farm

1.1.9. The main loss to the farm will be arable land, improved grazing and rough grazing (which incorporates the loss of landowners ability to claim entitlements) totalling 11.04 ha. Although this is under 5% of the holding, the land lost is some of the better classed land on the farm and is close to the farm steading.

- 1.1.10. The loss of Land to claim Region 1 entitlement is of particular significance as it is unlikely that alternative land in the area will be available to rent to link the entitlements too.
- 1.1.11. Drainage may be affected as some field drains are close to or within the footprint of the Proposed Scheme. The mains water supply for the farmhouse crosses the A9 and may be temporarily diverted during construction. Water supply will still be provided to the farm and will be fully reinstated post construction. The exact location of the water supply will be determined prior to construction and care taken during construction to minimise disruption.
- 1.1.12. The farm has shooting and fishing rights that are currently not exercised and will therefore be unaffected by the Proposed Scheme. Although the potential sporting land area will be reduced there will be no identifiable income loss compared to existing income.
- 1.1.13. The letting cottage may be temporarily affected by changes in access and elevated noise levels during construction, but this is not expected to significantly affect income.
- 1.1.14. Access to and from the A9 will potentially be temporarily altered during the construction phase and access to land on the other side of the A9 from the farm steading may be disrupted. Some boundary features will impacted during construction in particular fencing along the A9 boundary, which can be relocated
- 1.1.15. The land holding is classed as medium sensitivity and the magnitude of change is medium, resulting in a **Moderate** impact significance.

#### Dalmagarry Estate

- 1.1.16. The main loss to the estate will be land comprising mainly improved grazing and rough grazing with a very small loss of arable land.
- 1.1.17. The loss of land (which incorporates the loss of landowners ability to claim entitlements) totals 6.66 ha, which is 3.6% of the holding.
- 1.1.18. Drainage will not be affected as there are no field drains close to or within the footprint of the Proposed Scheme. Water supplies are all outwith the Proposed Scheme footprint.
- 1.1.19. The estate has extensive driven and rough shooting and fishing rights that are currently exercised and will be affected to an extent by the Proposed Scheme.
- 1.1.20. The letting of shooting days may be affected by changes in access and elevated noise levels during construction, but this is not expected to significantly affect income.
- 1.1.21. Access to and from the A9 will potentially be altered during construction and access to a cottage at the north end of the estate may be affected. Potentially some small fenced boundary features could be impacted during construction and need to be relocated.
- 1.1.22. The land holding is classed as low sensitivity and the magnitude of change is low, resulting in a **Slight** impact significance.

#### Tomatin Estate

- 1.1.23. The main loss to the estate will be land comprising mainly improved and rough grazing with a very small loss of arable land.
- 1.1.24. The loss of land (which incorporates the loss of landowners ability to claim entitlements) totalling 24.2ha, which is just under 10% of the agricultural holding, with the majority of the land lost being the higher quality arable land within the estate.
- 1.1.25. Drainage will not be affected as no field drains are close to or within the footprint of the Proposed Scheme. Water supplies are all outwith the Proposed Scheme footprint. Field boundaries could be impacted by construction and any fencing should be moved and replaced.



- 1.1.26. The farm has extensive driven and rough shooting and fishing rights which are currently exercised and will be affected to an extent by the Proposed Scheme.
- 1.1.27. The letting of fishing and holiday cottages may be affected due to temporary changes to access during the construction phase, but this is not expected to significantly affect income.
- 1.1.28. The land holding is classed as medium sensitivity and the magnitude of change is low, resulting in a **Slight** impact significance.

#### Moy Estate

- 1.1.29. The main loss to the estate will be land comprising mainly improved grazing and rough grazing with a small loss of arable land.
- 1.1.30. The loss of land (which incorporates the loss of landowners ability to claim entitlements) totalling 10.84 ha, which is under 5% of the agricultural holding.
- 1.1.31. Drainage will not be affected as no field drains are close to or within the footprint of the Proposed Scheme. Water supplies are all outwith the Proposed Scheme footprint.
- 1.1.32. The estate has extensive driven and rough shooting along with fishing rights, which as currently exercised will be affected to an extent by the Proposed Scheme.
- 1.1.33. Access to and from the A9 will potentially be affected during the construction phase. Disruption to fencing on field boundaries is possible and should be managed.
- 1.1.34. The land holding is classed as Low sensitivity and the magnitude of change is low and the impact significance **Negligible** to **Slight**.

#### Forestry Land

- 1.1.35. The impacts resulting from the construction phase comprise the following (all impacts are adverse):
  - Clearance of non-productive trees. Where woodland, not used for timber production, is felled for the purpose of construction of the Proposed Scheme on the land occupied by the trees.
  - Clearance of productive trees. Where woodland used for timber production is felled for the purpose of construction of the Proposed Scheme on the land occupied by the trees.
  - · Clearance of trees from long term retention / minimum intervention.
  - Disruption of access. Mainly limited to large-scale commercial forestry blocks where there is ongoing and intensive timber harvesting resulting in timber transport activity, the access for which may be disrupted.
  - Windthrow of commercial forestry beyond construction footprint. This occurs in mature stands of trees grown for timber, generally which have not been thinned. The trees therefore lack stability against the wind and, when the stand is partially felled, exposing an 'interior' edge, the remaining stand blows over. The costs of harvesting a windblown forest are far greater than for felling a standing forest, and cause substantial ground disturbance which hampers future operations including restocking.
- 1.1.36. It should be noted that the tree clearance impacts relate strictly to those areas under trees, and do not include areas of open ground within the forest or woodland. The tree clearance areas are therefore smaller than the areas identified under the operational impacts as permanent loss of ground, which includes both the area under trees and the area of open ground where it is an integral part of the forest/woodland.

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#### **Dalmagarry Estate**

1.1.37. Table A1.2 identifies the magnitude and significance of impacts resulting from the construction phase of the project.

#### Table A1.2: Magnitude and Significance of Impacts to Dalmagarry Estate

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	1.26 ha	Low	Clearance of non- productive trees	Low	Negligible/Slight
Access	80m	Low	Disruption of access	Low	Negligible/Slight

- 1.1.38. The area of trees cleared during the construction phase is extremely limited in relation to the larger woodland area of which it is part and is therefore a negligible/slight impact magnitude is predicted. The low sensitivity of the site returns an impact significance of **Negligible/Slight**. Open ground is not included in the above quantity.
- 1.1.39. Access is likely to be reduced or disrupted during the construction phase. However, given that the access does not service any commercial forestry, the magnitude of the impact is considered to be negligible. This combination of low sensitivity and negligible magnitude returns a **Negligible/Slight** impact significance.

#### Dalmagarry Quarry

1.1.40. Table A1.3 identifies the magnitude and significance of impacts resulting from the construction phase of the project.

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Commercial forestry	0.78 ha	Medium	Clearance of productive trees	Low	Slight
Commercial forestry	1.94 ha	Low	Clearance of productive trees	Low	Negligible/Slight

#### Table A1.3: Magnitude and Significance of Impacts to Dalmagarry Quarry

1.1.41. The clearance of productive trees is considered as two entities, as identified in the baseline: low sensitivity crop due to its young age, and medium sensitivity crop which is mature and capable of producing timber. The clearance of the former is only low in magnitude when considered in relation to the whole forest resource on this property, and therefore is assessed as having a **Slight** adverse impact. The clearance of the mature crops is of a similar area and is therefore also assessed as being of low magnitude, resulting in a **Negligible/Slight** adverse impact (by virtue of its medium sensitivity). The clear-felled areas have been excluded from the areas given in the Table A1.3 since it does not involve the clearance of productive trees.

#### Forestry Commission Scotland North

1.1.42. Table A1.4 identifies the magnitude and significance of impacts resulting from the construction phase of the project.

#### Table A1.4: Magnitude and Significance of Impacts to Forestry Commission Scotland North

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	5.65 ha	Medium	Clearance of non- productive trees and long term retention / minimum intervention	Low	Slight
Commercial forestry	4.56 ha	Medium	Clearance of productive trees	Low	Slight
			Windthrow of approx. 4.11ha of commercial forestry beyond scheme footprint	Low	Slight

- The extent of commercial forestry and environmental forestry being cleared for the 1.1.43. construction phase is relatively small scale in the context of this very large commercial forestry property, and as such the magnitude has been assessed as low. In combination with the medium sensitivity of the woods, this returns an impact of Slight but adverse significance. Note that open ground and felled quantities have been excluded from the area figures shown in the above table.
- 1.1.44. As a result of the felling of productive trees within the construction footprint. approximately 4.11ha of adjacent commercial forestry outside the footprint is at risk of windthrow. Within the context of this very large scale commercial forest property, this amount of windthrow is of low magnitude. On a medium sensitivity receptor this results in an impact of **Slight** but adverse significance.
- 1.1.45. It should be noted that the existing access to the commercial forestry land parcel L18 on the northbound side of the A9 at Moy will not be closed until the new access via the Lynebeg LILO is constructed. Furthermore it is not anticipated that access to land parcel L20 on the southbound side of the A9 via the B9154 will be affected by works during the construction phase.

Forestry Commission Scotland South

1.1.46. Table A1.5 identifies the magnitude and significance of impacts resulting from the construction phase of the project.

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	6.79 ha	Medium	Clearance of non- productive trees and long term retention / minimum intervention	Low	Slight





Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
			Windthrow of approx. 0.77ha adjacent non- productive trees	Negligible	Negligible/Slight

- 1.1.47. The clearance of non-productive trees and land will be relatively small scale and therefore assessed as low magnitude, resulting in a **Slight** but adverse impact. However, some of the stands are considered to be susceptible to windthrow and the partial clearance of such stands will likely result in an area of approximately 0.77ha beyond the construction footprint suffering windthrow. Given the small scale of this the magnitude is assessed as negligible and therefore the impact as **Negligible/Slight** but adverse.
- 1.1.48. Access may be temporarily disrupted during the construction phase, although alternative access will be in place before any existing access is disturbed so that no adverse impact to forestry operations results.

<u>Invereen</u>

1.1.49. Table A1.6 identifies the magnitude and significance of impacts resulting from the construction phase of the project.

#### Table A1.6: Magnitude and Significance of Impacts to Invereen

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	0.16 ha	Low	Clearance of non-productive trees	High	Moderate

1.1.50. The woodland resource on this property is very limited in size. Whilst the value/sensitivity of it is low, the loss of woodland in relation to the total woodland on the property is high, resulting in a **Moderate** and adverse impact. Note that the felled areas have been excluded from the area shown in Table A1.6 since it will not be subject to tree clearance.

#### Moy Estate

1.1.51. Table A1.7 identifies the magnitude and significance of impacts resulting from the construction phase of the project.

#### Table A1.7: Magnitude and Significance of Impacts to Moy Estate

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	0.80 ha	Low	Clearance of non- productive trees	Negligible	Negligible
Commercial forestry	2.1 ha	Medium	Clearance of productive trees	Low	Slight
			Windthrow of approx. 1.88ha of commercial forestry beyond scheme footprint	Low	Slight

1.1.52. There is an extensive woodland resource on Moy Estate, encompassing both environmental and commercial woodland. A very small quantity of environmental

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woodland will require clearance of trees and, in the context of the wider woodland resource, has been assessed as being of negligible magnitude, resulting in a **Negligible** but adverse impact.

- 1.1.53. A relatively small but concentrated area of commercial woodland will require clearance but, as above, in the context of the wider woodland resource, this represents a low magnitude, resulting in a **Slight** but adverse impact.
- 1.1.54. However, the felling of an area of commercial conifers is likely to lead to the destabilisation and windthrow of an adjacent 1.88ha of commercial forestry. Within the wider context of woodland on the estate, and the temporary nature of windthrow, this has been assessed as being of low magnitude, and therefore having a **Slight** but adverse impact.

#### Land belonging to Network Rail

1.1.55. Table A1.8 identifies the magnitude and significance of impacts resulting from the construction phase of the project.

#### Table A1.8: Magnitude and Significance of Impacts to Network Rail Land

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	0.48 ha	Low	Clearance of non-productive trees	Negligible	Negligible

1.1.56. A very small loss of woodland cover will result on Network Rail property. Given the very negligible quantities involved and the low sensitivity of the woodland, the impact will be **Negligible**.

Land belonging to Scottish Ministers

1.1.57. Table A1.9 identifies the magnitude and significance of impacts resulting from the construction phase of the project.

#### Table A1.9: Magnitude and Significance of Impacts to land belonging to Scottish Ministers

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	22.63 ha	Low	Clearance of non-productive trees	Medium	Slight/Moderate

1.1.58. The construction phase will result in the clearance of road-side non-productive trees. It represents a large area on this property within the locality and is therefore assessed as being of moderate magnitude. Against a site sensitivity of low, this results in a **Slight/Moderate** adverse impact.

<u>Tigh an Allt</u>

1.1.59. Table A1.10 identifies the magnitude and significance of impacts resulting from the construction phase of the Proposed Scheme.

#### Table A1.10: Magnitude and Significance of Impacts to Tigh an Allt

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	0.30 ha	Low	Clearance of non-productive trees	Medium	Slight/Moderate

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Commercial forestry	0.93 ha	Medium Clearance of productive trees		Medium	Moderate
			Windthrow of approx. 0.31ha beyond scheme footprint	Medium	Moderate
Access	62m	Medium	Disruption of access	Low	Slight

- 1.1.60. The clearance of non-productive trees from areas of environmental forestry is considered to be of medium magnitude given the small scale of environmental forestry on this small property. Given the low sensitivity of this woodland the impact of **Slight/Moderate** adverse significance.
- 1.1.61. Within the commercial forestry aspect of the property, two impacts arise, one directly (clearance of trees) and one indirectly (windthrow of remaining stand). Given the small scale of forestry on this property, both impacts are assessed as being of medium magnitude, which along with the medium sensitivity of the forestry brings about a **Moderate** and adverse impact.
- 1.1.62. Whilst access to the forests on the property would be disrupted, the area which it serves is very limited and access disruption is unlikely to be an impediment to the management of the forest. As such the impact is low in magnitude and **Slight** in significance.

#### Tomatin Estate

1.1.63. Table A1.11 identifies the magnitude and significance of impacts resulting from the construction phase of the project.

#### Table A1.11: Magnitude and Significance of Impacts to Tomatin Estate

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	6.71 ha	Low	Clearance of non-productive trees	Medium	Slight/Moderate
Commercial forestry	3.19 ha	Medium	Clearance of productive trees	Low	Slight
			Windthrow of approx. 5.14ha beyond scheme footprint	Medium	Moderate

- 1.1.64. The clearance of non-productive trees for the construction phase amounts to 6.71ha (excluding open ground). The environmental woodland resource on this estate is limited and, in this context, the magnitude of tree clearance is assessed as being medium. On a low sensitivity receptor this results in a **Slight** but adverse impact.
- 1.1.65. The construction phase will require the clearance of over 3ha of productive trees. In the context of a substantial commercial forest resource on the estate, this clearance represents only a low magnitude, and therefore a **Slight** but adverse impact.
- 1.1.66. However an additional impact is likely to occur outwith the construction footprint, namely the windthrow of approximately 5.14ha of productive forestry. Windthrow of this extent can be considered substantial and therefore be of medium magnitude which, for a medium sensitivity receptor, creates a **Moderate** and adverse impact.

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#### Land belonging to Tucker

1.1.67. Table A1.12 identifies the magnitude and significance of impacts resulting from the construction phase of the project.

#### Table A1.12: Magnitude and Significance of Impacts to Land belonging to Tucker

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	0.17 ha	Low	Clearance of non-productive trees and land	Low	Negligible/Slight
Commercial forestry			Clearance of productive trees	Medium	Moderate
			Windthrow of approx. 0.51ha beyond scheme footprint	Medium	Moderate
Access	175m	Medium	Disruption of access	Negligible	Negligible/Slight

- 1.1.68. The clearance of non-productive trees is very limited in size, even for this small property, so the magnitude is assessed as low. For a low sensitivity woodland, this returns an impact of Negligible/Slight significance.
- 1.1.69. The clearance of productive trees however comprises a substantial proportion of the commercial forestry resource on this property, and is therefore assessed as being of medium magnitude. On a medium sensitivity receptor this results in the impact being of Moderate adverse significance.
- 1.1.70. In addition to the clearance of productive trees, approximately 0.51ha of commercial forestry beyond the construction footprint is likely to be subject to windthrow.
- 1.1.71. Disruption to access is assessed as being of negligible magnitude due to the very small scale of the productive forestry it serves and the unlikeliness of timber transport to be an ongoing operation. As such the impact is assessed as being Negligible/Slight.

#### **Operational Phase Impacts**

#### Agriculture and Sporting

- 1.1.72. Potential impacts during the operational phase comprise the following;
  - permanent loss of land
  - changes to land drainage/flooding
  - permanent loss of ability to claim entitlements
  - changes to land access
  - disruption of sporting activities
  - disruption of services to land and buildings
  - changes to other business interests
  - impact on farm viability

#### Invereen

1.1.73. The main loss to the farm will be the permanent loss of land comprising improved grazing and some rough grazing and the loss of land (which incorporates the loss of



landowners ability to claim entitlements) totalling 3.06 ha which is just over 6% of the holding area.

- 1.1.74. The loss of Land to claim Region 1 entitlement is of particular importance as it is unlikely that alternative land in the area will be available to rent to link the entitlements to.
- 1.1.75. The water supply to the farmhouse, which currently crosses the A9, will be fully reinstated post construction.
- 1.1.76. Access to and from the A9 from the farm will potentially be significantly improved by the new access route from Tomatin GSJ resulting in safer entry to the main farm access. The longer access route is not considered to have a significant impact as access to/crossing of the A9 will be improved and this will not affect overall farm activities.
- 1.1.77. Boundary features are post and wire fencing and any that are lost or need to be moved can be replaced.
- 1.1.78. The sensitivity of the farm activities is shown below in Table A1.13.

	Sensitivity									
Farm Size	Land Quality	Farming System	Intensity of Farming	Sporting	Boundary Features (Fences)	Other Aspects (water supply)	Overall Sensitivity			
High	Low	Low	Low	Low	Low	Low	Medium			

#### Table A1.13: Invereen Farm Sensitivity

1.1.79. The magnitude of the impacts on the farm business is shown below in Table A1.14.

 Table A1.14: Invereen Farm Magnitude of Impact

	Magnitude of Impact								
Land loss	Severance	Access		Disruption of Sporting	Disturbance to Boundary Features	Other Aspects (water supply)	Overall Magnitude		
Low to Medium	Negligible	Negligible	Low	Negligible	Low	Low	Low		

1.1.80. The overall impact on the agricultural and sporting interests is assessed to be of **Slight** significance. The impact on the viability of the farming business is classed as Neutral.

#### Dalmagarry Farm

- 1.1.81. The main loss to the farm will be land comprising arable land, improved grazing and rough grazing and the loss of land (which incorporates the loss of landowners ability to claim entitlements) totalling 11.04 ha which is under 5% of the holding, however the land lost is some of the better classed land and is close to the farm steading. There will be some severance/loss of field areas between the new A9 mainline and the diverted Dalmagarry Burn.
- 1.1.82. Hydraulic modelling (refer to Appendix A10.2 Preliminary Flood Risk Assessment) has been used to predict the impact on depth and duration of flooding on land farmed by Dalmagarry for the 2, 5, 30, 100, 200 and 200 year with a 20% climate change allowance flood events. The results show that the Proposed Scheme will result in no more than a 30mm increase in flood water depth on agricultural land. The floodplain area will not be increased and flooding will be of a similar depth, frequency and duration

to the existing situation. Changes in water depth of less than 50mm are not considered significant in terms of disruption to farming activities and unlikely to result in any measurable economic change.

- 1.1.83. The removal of the flood relief culverts under the existing farm access road removes the existing flood pathway to the south of Dalmagarry Farm, thereby affording greater protection for farm buildings, and ensures that the new farm access road is out of the floodplain.
- 1.1.84. The loss of Land to claim Region 1 entitlement is of particular importance as it is unlikely that alternative land in the area will be available to rent to link the entitlements too.
- 1.1.85. Drainage may be affected as some of the field drains are close to or within the footprint of the Proposed Scheme.
- 1.1.86. The water supply to the main estate dwelling, which currently crosses the A9, will be fully reinstated post construction.
- 1.1.87. The farm has shooting and fishing rights which as currently not exercised will be unaffected by the Proposed Scheme.
- 1.1.88. The letting cottage may be affected by changes to the access and elevated noise as the A9 will be closer to the property than at present. A noise assessment has been undertaken for the Proposed Scheme and is provided in Chapter 17 Noise and Vibration, the findings of which has shown no significant increase in traffic noise from the dualled A9. Alternative access to the farm and letting cottage is provided from the A9 via Moy LILO or Lynebeg and the B9154.
- 1.1.89. The removal of the existing access for farm vehicles to the land within the east of the holding on the east side of the Funtack Burn (via the A9 and Ruthven Road (U2786) the A9/Ruthven Road junction will be closed by the dualling) is mitigated by the inclusion of a new access track. Post and wire fencing on field boundaries that are impacted can be easily moved and replaced.
- 1.1.90. The sensitivity of the farm activities is shown below in Table A1.15.

	Sensitivity										
Farm Size	Land Quality	Farming System	Intensity of Farming	Sporting	Boundary Features (Fences)	Other Aspects (drainage, water supply & access)	Overall Sensitivity				
Low	Medium	Low	Low	Low	Low	Medium	Medium				

#### Table A1.15: Dalmagarry Farm Sensitivity

1.1.91. The magnitude of the impacts on the farm business is shown below in Table A1.16.

	Magnitude of Impact								
Land loss	Severance	Access	Disruption of Farming	Disruption of Sporting	Disturbance to Boundary Features	Other Aspects (drainage, water supply & access)	Overall Magnitude		
Low to Medium	Low to Medium	Low to Medium	Low to Medium	Negligible	Low	Low to Medium	Low to Medium		

1.1.92. The overall impact on agricultural interests is assessed to be of **Slight to Moderate** adverse significance. The impact on the viability of the farming business is classed as Neutral/Adverse.

#### Dalmagarry Estate

- 1.1.93. The main loss to the farm will be land comprising arable land, improved grazing and rough grazing and the loss of land (which incorporates the loss of landowners ability to claim entitlements) totalling 6.66 ha, which is under 5% of the holding and mainly affects poorer ground.
- 1.1.94. Drainage will be unaffected as no field drains are close to or within the footprint of the Proposed Scheme.
- 1.1.95. Water supply to the main estate dwelling is not expected to be affected by the Proposed Scheme. Post and wire fencing on field boundaries that are impacted can be moved and replaced.
- 1.1.96. Disturbance to driven and rough shooting will potentially occur as road will be closer to shooting land, although this is unlikely have measurable effect on shooting income for the estate.
- 1.1.97. The sensitivity of the impacts on the farm business is shown below in Table A1.17.

#### Table A1.17 Dalmagarry Estate Sensitivity

	Sensitivity of Impact										
Farm Size	Land Quality	Farming System	Intensity of Farming	Sporting	Boundary Features (Fences)	Other Aspects (drainage & water supply)	Overall Sensitivity				
Low	Low	Low	Low	Low	Low	Low	Low				

1.1.98. The magnitude of the impacts on the farm business is shown below in Table A1.18.

#### Table A1.18 Dalmagarry Estate Magnitude of Impact

	Magnitude of Impact										
Land loss	Severance	Access	Disruption of Farming	Disruption of Sporting	Disturbance to Boundary Features	Other Aspects (drainage & water supply)	Overall Magnitude				
Negligible	Negligible	Low	Low	Low	Low	Low	Low				

1.1.99. The overall impact on the agricultural and sporting interests would be classed as **Slight** adverse significance. The impact on the viability of the farming business is classed as Neutral.

#### Tomatin Estate

1.1.100. The main loss to the farm will be land comprising arable land, improved grazing and rough grazing and the loss of land (which incorporates the loss of landowners ability to claim entitlements) totalling 24.2 ha which is just under 10% of the agricultural unit holding and mainly of the better ground.

- 1.1.101. Drainage will be unaffected as none of the field drains are close to or within the footprint of the Proposed Scheme. Post and wire fencing on field boundaries that are impacted can be moved and replaced.
- 1.1.102. Disturbance to driven and rough shooting may potentially occur as the road will be closer to shooting land, although this is unlikely have a measurable effect on shooting income for the estate. However, potential disruption to fishing activities may arise due to changes to access and this may have a detrimental effect upon this income.
- 1.1.103. Changes to the access to the estate letting cottage and lodge will be mitigated through the provision of alternative access arrangements. Access to the farm for timber and livestock vehicles will be accommodated within the Proposed Scheme.
- 1.1.104. The sensitivity of the impacts on the farm business is shown in Table A1.19.

	Sensitivity of Impact										
Farm Size	Land Quality	Farming System	Intensity of Farming	Sporting	Boundary Features (Fences)	Other Aspects (drainage and access)	Overall Sensitivity				
Medium	Medium	Low	Low	Low to Medium	Low	Medium	Medium				

#### Table A1.19: Tomatin Estate Sensitivity

1.1.105. The magnitude of the impacts on the farm business is shown below in Table A1.20.

#### Table A1.20: Tomatin Estate Magnitude of Impact

	Magnitude of Impact									
Land loss	Severance	Access	Disruption of Farming	Disruption of Sporting	Disturbance to Boundary Features		Overall Magnitude			
Medium	Negligible	Medium	Low	Low to Medium	Low	Medium	Medium			

1.1.106. The overall impact on the agricultural and sporting interests is assessed to be of **Moderate** significance. The impact on the viability of the farming business is classed as Neutral.

#### Moy Estate

- 1.1.107. The main loss to the farm will be land comprising arable land, improved grazing and rough grazing and the loss of land (which incorporates the loss of landowners ability to claim entitlements) totalling 10.84 ha, which is under 5% of the agricultural unit holding.
- 1.1.108. Drainage will be unaffected as none of the field drains are close to or within the footprint of the Proposed Scheme. Post and wire fencing on field boundaries that are impacted can be moved and replaced.
- 1.1.109. Disturbance to driven and rough shooting may potentially occur as road will be closer to shooting land, although this is unlikely have a measurable effect on shooting income for the estate. However, access to fishing activities on the River Findhorn may improve due to changes to access and this may have a positive effect upon this income.



- 1.1.110. Changes to the access to the estate letting cottage and lodge will be mitigated through the provision of alternative access arrangements. Access to the farm for timber and livestock vehicles will be accommodated within the Proposed Scheme.
- 1.1.111. The sensitivity of the impacts on the farm business is shown below in Table A1.21.

	Sensitivity of Impact							
Farm Size	Land Quality	Farming System	Intensity of Farming	Sporting	Boundary Features (Fences)	Other Aspects (drainage and access)	Overall Sensitivity	
Low	Low	Low	Low	Low to Medium	Low	Medium	Low to Medium	

#### Table A1.21: Moy Estate Sensitivity

1.1.112. The magnitude of the impacts on the farm business is shown below in Table A1.22.

#### Table A1.22: Moy Estate Magnitude of Impact

	Magnitude of Impact								
Land loss	Severance	Access	Disruption of Farming	Disruption of Sporting	Disturbance to Boundary Features	Other Aspects (drainage and access)	Overall Magnitude		
Low	Negligible	Low	Low	Low to Medium	Low	Low	Low to medium		

1.1.113. From the matrix the overall impact on the agricultural and sporting interests is assessed to be of **Slight** to **Moderate** significance. The impact on the viability of the farming business is classed as Neutral.

#### Forestry Land

- 1.1.114. The impacts resulting from the operational phase comprise the following (all impacts are adverse unless specified as beneficial):
  - Permanent loss of non-productive land. Where woodland not used for timber production is felled and the land use permanently changed to a non-woodland use. This includes land lost to new/upgraded access within the forest.
  - Permanent loss of productive land. Where woodland used for timber production is felled and the land use permanently changed to a non-forestry/timber use. This includes land lost to new/upgraded access within the forest.
  - Permanent loss of non-productive land long term retention and minimum intervention areas.
  - New /upgraded access (beneficial). New access location with the A9 with slip roads, and/or new/improved access within the forest itself.
- 1.1.115. It should be noted that the permanent loss impacts relate to both the area under trees, as well as the area of open ground integral to the forest/woodland. The permanent loss areas are therefore larger than the areas identified under the construction impacts, which considers only the loss of trees.

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#### Dalmagarry Estate

1.1.116. Table A1.23 identifies the magnitude and significance of impacts resulting from the operational phase of the Proposed Scheme.

#### Table A1.23: Magnitude and Significance of Impact to Dalmagarry Estate

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	2.82 ha	Low	Permanent loss of non-productive land	Negligible	Negligible
Access	80m	Low	Improved and extended hard- surfaced access (346m)	Negligible	Negligible

- 1.1.117. Land under environmental forestry will be permanently lost. Given the small scale of this loss in the context of the large area of environmental forestry on this property its magnitude is assessed as low, resulting in a **Negligible** impact.
- 1.1.118. Access will be improved and extended at Dalmagarry Estate. The access will be relatively short and will extend into areas of middle-aged environmental forestry where timber production is not an objective. Therefore, the magnitude of this impact is low, which, for a medium sensitivity receptor, results in an overall impact that is **Negligible**.

#### Dalmagarry Quarry

1.1.119. Table A1.24 identifies the magnitude and significance of impacts resulting from the operational phase of the Proposed Scheme.

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Commercial forestry	1.40 ha	Low	Permanent loss of productive land	Medium	Slight
Commercial forestry	0.78ha	Medium	Permanent loss of productive land	Low	Slight

#### Table A1.24: Magnitude and Significance of Impact to Dalmagarry Quarry

- 1.1.120. The area of low sensitivity commercial forestry subject to permanent loss from production is greater than that shown under the construction impacts as it now includes a felled area. The area is assessed as being of medium magnitude in the context of the total commercial forestry resource on this property; however due its low sensitivity the impact is assessed as being **Slight** adverse.
- 1.1.121. Conversely, the area of medium sensitivity forestry which would be permanently lost is relatively small and so its magnitude is assessed as being low, resulting in a **Slight** adverse impact.

#### Forestry Commission Scotland North

1.1.122. Table A1.25 identifies the magnitude and significance of impacts resulting from the operational phase of the Proposed Scheme.



Table A1.25: Magnitude and Significance of Impact to Forestry Commission Scotland North

Species/ feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	11.11 ha	Medium	Permanent loss of non-productive land and long term retention and minimum intervention areas	Low	Slight
Commercial forestry	5.54 ha	Medium	Permanent loss of productive land	Low	Slight
Access to large scale commercial forestry	1991m	High	New and upgraded access (3502m) with replacement of existing junction with A9 with new and improved junction	Medium	Moderate beneficial

- 1.1.123. The permanent losses of non-productive land (including open ground), and of long term intervention areas, are assessed as being of low magnitude within the context of this very substantial and extensive forestry resource. As both effects are on a medium sensitivity receptor, the impact is assessed as **Slight** but adverse.
- 1.1.124. Similarly, the area of productive land that will be permanently lost is small scale relative to the property and therefore of low magnitude, representing a **Slight** but adverse impact.
- 1.1.125. A substantial proportion of the existing access for this property will be upgraded. Furthermore, the existing junction between the internal forestry access and the A9 will be relocated and replaced with 'left on left off' slip roads. These represent large-scale changes, which are assessed as being of medium magnitude, rather than major, as the impacts allow business to continue as usual. The significance of the impact is however **Moderate** beneficial, due to the enhanced access/egress for timber transport to/from this high sensitivity forestry. The likely future business viability is considered to be Beneficial.

Forestry Commission Scotland South

1.1.126. Table A1.26 identifies the magnitude and significance of impacts resulting from the operational phase of the Proposed Scheme.

Table A1.26: Magnitude and Significance of Impact to Forestry Commission Scotland South

Species/ feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	7.24 ha	Medium	Permanent loss of non-productive land / long term retention	Medium	Moderate
Access	872m	Medium	New/upgraded access (872m) with replacement of existing junction with A9 with new and improved junction	Medium	Moderate beneficial

- 1.1.127. A substantial area of environmental forestry and long term retention will be permanently lost as a result of the operation of the new infrastructure within this smaller scale property. As such, the permanent loss of this area from long term retention is of medium magnitude, resulting in a **Moderate** but adverse impact.
- 1.1.128. The existing access in this commercial area of forestry will be upgraded to an extent, and the existing junction with the A9 relocated and replaced with a new and improved junction. Whilst the junction, in particular, is a substantial improvement over the existing junction, the area of forestry impacted by it is rather limited in scale and for this reason, together with the fact that business continues as usual, the impact has been assessed as medium. In combination with the sensitivity of the access, the overall impact is of **Moderate** beneficial significance. The likely future business viability is considered to be Neutral overall.

#### Dalmagarry Farm

1.1.129. Table A1.27 identifies the magnitude and significance of impacts resulting from the operational phase of the Proposed Scheme.

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	1.72 ha	Low	Permanent loss of non-productive land	High	Moderate
Access to large scale commercial forestry	272m	High	No additional journey length southbound. Northbound journeys will require 6.6km additional journey distance to Tomatin GSJ and back	Negligible (southbound) Low (northbound)	Slight (southbound) Slight/Moderat e (northbound)

#### Table A1.27: Magnitude and Significance of Impact to Dalmagarry Farm

- 1.1.130. Virtually all the environmental forestry on Dalmagarry Farm will be permanently lost. The magnitude is therefore assessed as high which, on a low sensitivity receptor, results in a **Moderate** and adverse impact.
- 1.1.131. Forestry access at Dalmagarry Farm will be similar to the existing situation in that the forestry access route to the north of the land ownership and adjacent to the Funtack Burn will be used heading towards Moy and connecting with the B9154 to Moy LILO. From the Moy LILO vehicles will have to turn left and travel either onwards southbound or travel approximately 3.3km to Tomatin GSJ and turn around to head north. For southbound journeys this represents an impact of negligible magnitude and therefore Slight significance and for northbound journeys the additional distance is considered to be an impact of low magnitude and is therefore an impact of Slight/Moderate significance. The likely future business viability is considered to be Neutral.

#### Invereen

1.1.132. Table A1.28 identifies the magnitude and significance of impacts resulting from the operational phase of the Proposed Scheme.



#### Table A1.28: Magnitude and Significance of Impact to Invereen

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	0.16 ha	Low	Permanent loss of non-productive land	High	Moderate
Commercial forestry	0.151 ha	Low	Permanent loss of productive land	Medium	Slight/Moderate

- 1.1.133. Whilst not a large area, virtually all of the environmental forestry land on this property will be permanently lost, and therefore represents a high magnitude. On a low sensitivity receptor this results in a Moderate and adverse impact.
- 1.1.134. In contrast, the permanent loss of commercial forestry forms a smaller proportion of the overall commercial interest, but is still assessed as being of medium magnitude. As the commercial forestry area is of low sensitivity the impact is assessed as being Slight/Moderate and adverse. The likely future business viability is considered to be Adverse (reduction in activity).

#### Moy Estate

1.1.135. Table A1.29 identifies the magnitude and significance of impacts resulting from the operational phase of the Proposed Scheme.

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	0.97 ha	Low	Permanent loss of non-productive land	Negligible	Negligible
Commercial forestry	2.10 ha	Medium	Permanent loss of productive land	Low	Slight
			New access, 587m	High	Moderate/Substantial beneficial

#### Table A1.29: Magnitude and Significance of Impact to Moy Estate

- 1.1.136. There is an extensive woodland resource on Moy Estate, encompassing both environmental and commercial forestry. The permanent loss of both types of forestry is assessed as being of negligible and low magnitude respectively, resulting in respective Negligible and Slight impacts, both of which are adverse.
- A new access route will be constructed along the length of a commercial forestry block, 1.1.137. providing safe access to the crop both for management and for timber transport to/from the A9 (via neighbouring Tuckers Wood). As such this represents a high magnitude which, on a medium sensitivity receptor, brings about a Moderate/Substantial beneficial impact. The likely future business viability is considered to be Beneficial.

#### Land belonging to Network Rail

1.1.138. Table A1.30 identifies the magnitude and significance of impacts resulting from the operational phase of the Proposed Scheme.

#### Table A1.30: Magnitude and Significance of Impact to Network Rail Land

Species/ feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	0.47 ha	Low	Permanent loss of non-productive land	Negligible	Negligible



1.1.139. A very small area of environmental forestry located at NH-76986-34112 will be permanently lost. In the context of the overall environmental forestry in this property in the locality this loss is of negligible magnitude. On a low sensitivity receptor the impact is therefore **Negligible**.

#### Land belonging to Scottish Ministers

1.1.140. Table A1.31 identifies the magnitude and significance of impacts resulting from the operational phase of the Proposed Scheme.

#### Table A1.31: Magnitude and Significance of Impact to Scottish Ministers Land

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	22.56 ha	Low	Permanent loss of non-productive land	Medium	Slight/Moderate

1.1.141. The permanent loss of non-productive land currently under environmental forestry covers a large area within the locality and is therefore assessed as being of medium magnitude. However, as the woodland it is of low sensitivity the impact is of **Slight/Moderate** adverse significance. The area includes open ground. The likely future business viability is considered to be Neutral.

#### Tigh an Allt

1.1.142. Table A1.32 identifies the magnitude and significance of impacts resulting from the operational phase of the Proposed Scheme.

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	0.30 ha	Low	Permanent loss of non-productive land	Medium	Slight/Moderate
Commercial forestry	0.93 ha	Medium	Permanent loss of productive land	Medium	Moderate
			New junction with new road (62m); upgraded entrance	Low	Slight, beneficial

#### Table A1.32: Magnitude and Significance of Impact to Tigh an Allt

- 1.1.143. The permanent loss of non-productive land on this property is of medium magnitude given the small scale of the property. However, given its low sensitivity, the impact is **Slight/Moderate**, but adverse. The likely future business viability for non-productive land is considered to be Neutral.
- 1.1.144. Similarly, the permanent loss of productive land is of medium magnitude in the context of the commercial forestry resource on this property. With a medium site sensitivity, the impact is assessed as **Moderate** and adverse. The likely future business viability for productive land is considered to be Adverse (reduction in activity).
- 1.1.145. The altering and upgrading of the existing access with a new, minor road, and improvement to the drive entrance, represents a low magnitude of impact on timber transport access, due to the very small forestry resource it serves. On a medium sensitivity receptor this results in a **Slight** Beneficial impact.

#### Tomatin Estate

1.1.146. Table A1.33 identifies the magnitude and significance of impacts resulting from the operational phase of the Proposed Scheme.

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Table A1.33: Magnitude and Significance of I	Impact to Tomatin Estate
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Species/ feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	7.74 ha	Low	Permanent loss of non-productive land	Medium	Slight/Moderate
			New access, 291m	Medium	Slight/Moderate, beneficial
Commercial forestry	3.18 ha	Medium	Permanent loss of productive land	Low	Slight
			Redundancy of approx. 0.41ha adjacent productive land	Low	Slight
			New access, 329m	Medium	Moderate, beneficial

- 1.1.147. Relatively large areas of environmental forestry will be permanently lost relative to the total environmental forestry interest on this property, so this impact has been assessed as being of medium magnitude. Given the low sensitivity of the woodland the impact is Slight/Moderate and adverse.
- 1.1.148. New access will be created into the environmental woodland (where there was none before). The access is of medium magnitude and, given the low sensitivity of the woodland, the impact is Slight/Moderate and beneficial. The likely future business viability for non-productive land is considered to be Neutral overall.
- The permanent loss of productive land currently under commercial forestry represents a 1.1.149. relatively small area in the context of the wider commercial forestry resource on this property. As such its magnitude is low which, on a medium sensitivity receptor, represents a Slight adverse impact.
- 1.1.150. The permanent loss of some parts of this land results in areas of productive land becoming fragmented into small areas. These areas do not lend themselves to commercial forestry and are therefore made redundant. The scale of this though is small in the context of the commercial forestry resource on this property so the magnitude is assessed as slight. This results in the impact being assessed as Slight but adverse.
- 1.1.151. A new access route will be constructed along the length of a commercial forestry block, providing safe access to the crop both for management and for timber transport to/from the A9 (via neighbouring Moy Estate and Tuckers Wood). As such this represents a medium magnitude which, on a medium sensitivity receptor, brings about a Moderate beneficial impact. The likely future business viability for productive land is considered to be Beneficial.

#### Land belonging to Tucker

Table A1.34 identifies the magnitude and significance of impacts resulting from the 1.1.152. operational phase of the Proposed Scheme.

#### Table A1.34: Magnitude and Significance of Impact to Tucker Land

Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Environmental forestry	0.17 ha	Low	Permanent loss of non-productive land		Negligible/Slight





Feature	Quantity	Sensitivity	Impact nature	Impact magnitude	Impact significance
Commercial forestry	2.09 ha	Medium	Permanent loss of productive land	Medium	Moderate
			New access 338m	Medium	Moderate, beneficial

- 1.1.153. A small and permanent loss of non-productive land will occur which is of low magnitude, even on this small property. The impact will be **Negligible/Slight** and adverse due to the low sensitivity of the woodland.
- 1.1.154. A permanent loss of productive land will occur, but represents a not insubstantial proportion of the woodland, so its magnitude is also assessed as medium. The commercial forestry is medium sensitivity so the impact of the loss is **Moderate** but adverse.
- 1.1.155. A new access route will be constructed through part of the forest. This opens up a large proportion of the commercial forestry resource on this property and eases management, resulting in a medium magnitude of impact. On a medium sensitivity receptor this returns a **Moderate Beneficial** impact. The likely future business viability in the context of loss of productive land and the new access is considered to be Neutral overall.
- 1.1.156. Public access for recreation is currently available for the woodland area and this will be retained in the operational phase of the Proposed Scheme. The new access route mentioned above is anticipated to provide improved access.

