



Loch Eck Land Management Plan

M7 Slope Stability & Infrastructure Constraints

Legend

- Hydro Infrastructure
- Forest Roads
- Overhead Powerlines
- LMP Boundary
- A815 Trunk Road
- Recorded Landslips

Slope Stability Risk Score

- Low
- Low to Moderate
- Moderate to High

Areas of inaccessible mixed conifer occur where cliff faces and small areas on rough rocky terrain make harvesting impracticable. In many of these areas windblow has created a tangled mass of fallen and standing timber often with extensive areas of dense conifer regeneration. Intervention in these areas is not feasible, however these areas do provide cover and a complex forest structure with some ecological benefits, and they may also play a role in stabilising slopes and acting as boulder and debris traps. This protection forestry effect may improve water quality and reduce nutrient deposition in the oligotrophic Loch. The Slope Stability Report by Coffey recommended clearing woody debris from gullies and burns to avoid the risk of temporary dams failing and leading to a surge of debris and water downstream. Access and safe working in these areas is problematic, expensive and conflicts to some extent with other research work with a more ecological approach. Inspection and take down of specific dam locations on the key burns may be a practical compromise. Many of these inaccessible areas are PAWS areas and much of the regeneration is Western Hemlock, however intervention and removal of Western Hemlock within these areas would be prohibitively expensive and very difficult to carry out safely and effectively. The return period for follow up work would also be fairly short.

There is potential for boulder movement and landslips outwith the areas assessed for slope stability. Road formation and harvesting needs to take account of these factors in any operational planning and risk assessment.

Most of the Plan area falls within the Loch Eck catchment which serves as a drinking water supply and is a Drinking Water Protected Area. In addition to meeting the UKFS and the Forests & Water Guidelines operations on site must comply with additional requirements as detailed in the Guidance on Forestry Activities near Scottish Water Assets. Materials used in road construction need to be inert and of low erodibility. Other than natural regeneration along the forest margins no woodland expansion is proposed which might impact on water yield. Many of the riparian areas contain mature native woodland and riparian buffers have been widened at restocking over the last plan period. Buffers to protect water quality and the enhancement of the riparian and loch shore habitats provide a range of ecological benefits. Water mains run along the east side of the A815 but this should have no impacts on forestry operations.

In landscape terms the impacts of powerline wayleaves is fairly low key due to the alignment. Overhead lines can constrain operations along the lower slopes and this constraint can be exacerbated by the proximity of roads and steep rocky ground.

Reducing the risk of adverse impacts on the drinking water supply is a planning and operational priority and this objective is directly linked to reducing the risk of landslips and slope stabilisation. The knock on effect of this would also be to increase the resilience of the other infrastructure including the A815 Trunk road, powerlines, housing and forest roads. Restructuring the forest to create non intervention protection forest on key areas could resolve multiple issues, but is not without problems, including species choice, establishment, and management of conifer regeneration.

Water Treatment Works

08/04/2018

Scale: 1:20,000 @ A3

