














**Table 1: Where to find soils data and information to help implement the UKFS on Soil at key stages of the forest management cycle**

UKFS Requirements and Guidelines for soils at each forest management stage	Existing data which can help provide background information	How to obtain further detail required	
<b>Pre-application and scoping stage</b>			
<p><i>Peat depth</i></p>  24  25	<p>Soil Guideline 24: Avoid establishing new forests on soils with peat exceeding 50 cm in depth and on sites that would compromise the hydrology of adjacent bog or wetland habitats</p> <p>Soil Guideline 25: Consider the balance of benefits for carbon and other ecosystem services before making the decision to restock on soils with peat exceeding 50 cm in depth</p>	<p><a href="#">Carbon and peatland 2016 map</a> - areas where peat is likely to be found (but not its depth)</p> <p>No suitable map available</p>	<p>Peat survey</p> <p>Peat survey</p>
<p><i>Vulnerability to erosion</i></p>  19	<p>Soil Guideline 19: Consider planting woodland to protect erosion-prone soils and intercept sediment-laden run-off</p>	<p>OS mapping layer (scale 1:10,000) available on most digital maps, to identify gradient</p>	<p>Soil survey alongside aerial photography, topography and vegetation</p>
<p><i>Risk of slope failure</i></p>  18	<p>Soil Guideline 18: On steep slopes where there is a risk of slope failure or serious erosion, consider alternatives to clearfelling</p>	<p>OS mapping layer (scale 1:10,000) available on most digital maps, to identify gradient</p>	<p>Interpretation using soil type alongside aerial photography, topography and vegetation</p>
<b>Work plan stage</b>			
<p><i>Soil type and suitability</i></p>  1	<p>Soil Good Forestry Practice Requirement 1: The quality of forest soil should be protected or enhanced in terms of its physical, chemical and biological properties</p>	<p><a href="#">National soil map of Scotland</a> (covers the whole of Scotland at a scale of 1:250,000)</p> <p><a href="#">Soil map of Scotland (partial cover)</a> (covers agricultural areas and adjacent uplands at a scale of 1:25,000)</p> <p>The soil types in parts of the National Forest Estate can be found on the <a href="#">UK Soil Observatory website</a></p>	<p>Use field evidence (e.g. from soil pits) and interpretation (e.g. from topography, vegetation and current land use)</p>
<p><i>Vulnerability to erosion</i></p>  16	<p>Soil Guideline 16: Address the risks of soil erosion as part of the forest and operational planning processes</p>	<p>OS mapping layer (scale 1:10,000) available on most digital maps, to identify gradient</p>	<p>Interpretation using soil type alongside aerial photography, topography and vegetation</p>
<p><i>Soil fertility</i></p>  21	<p>Soil Guideline 21: Choose tree species and silvicultural systems that are well suited to the site and, with the exception of short rotation forestry or short rotation coppice, do not require continuing inputs of fertilisers</p>	<p><a href="#">Ecological Site Classification Decision Support System (ESC-DSS)</a></p>	<p>For ESC, use evidence collected from field surveys rather than default values</p>
<p><i>Risk of increased acidification</i></p>  2	<p>Soil Guideline 2: On soils classified as at high risk of increased soil and water acidification (regardless of water body status) avoid short rotation forestry or short rotation coppice, and the harvesting of whole trees, forest residues and tree stumps</p>	<p>Map of <a href="#">Catchments vulnerable to acidification</a></p>	<p>Not needed</p>
<b>Forest operations</b>			
<p><i>Soil fertility</i></p>  2  20  22	<p>Soil Good forestry practice Requirement 2: Forest soil fertility levels should be maintained to safeguard the soil's character and productive potential</p> <p>Soil Guideline 20: Ensure the removal of forest products from the site, including non-timber products, does not deplete site fertility or soil carbon over the long term and maintains the site potential</p> <p>Soil Guideline 22: Minimise the use of inorganic fertilisers and confine these to areas where analysis clearly shows management benefits</p>	<p>No maps suitable for forestry are available</p>	<p>Soil survey</p>
<p><i>Vulnerability to compaction or erosion</i></p>  10	<p>Soil Guideline 10: On sites vulnerable to compaction and erosion, consider the weather and aim to carry out operations during dry periods; plan ahead for changes in the weather that could affect site conditions</p>	<p>OS mapping layer (scale 1:10,000) available on most digital maps</p>	<p>Interpretation using soil type alongside aerial photography, topography and vegetation</p>
<p><i>Soil acidity</i></p>  3	<p>Soil Guideline 3: On brownfield sites, consider ameliorating excess soil acidity by incorporating alkaline materials</p>	<p>No maps available</p>	<p>Soil analysis of selected samples</p>
<p><i>Risk of increased acidification</i></p>  1	<p>Soil Guideline 1: Avoid filling trenches, created for mounding on restock sites, with fresh brash. This applies only to soils that are at high risk of increased acidification and / or to catchments identified by SEPA as failing or at risk of failing good status due to acidification</p>	<p>Map of <a href="#">Catchments vulnerable to acidification</a></p> <p><a href="#">Water classification hub</a> – catchments identified as failing / at risk of failing good status due to acidification</p>	<p>Not needed</p>