

# Undertaking an Environmental Impact Assessment in Forestry and preparing an Environmental Statement



Forestry Commission



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# Undertaking an Environmental Impact Assessment in Forestry and preparing an Environmental Statement



## Introduction

The Forestry Commission (FC), as the Government Department responsible for regulating forestry in Great Britain is, under the EIA Regulations, the 'competent authority' for forestry projects. Similarly, the Forest Service (FS) is the competent authority for Northern Ireland. The FC/FS determine whether or not an EIA is required, advise on the scope of the Environmental Statement, and decide whether or not the project can be given consent.

Within the forestry sector an EIA is undertaken and an ES prepared where a proposal is a "*relevant project*" (as defined below).

The purpose of this Forestry Practice Guide is to explain the overall Environmental Impact Assessment (EIA) process and to help you prepare an Environmental Statement (ES).

The advice given in this booklet is based on our experiences and the good practice gained from them. However, we will periodically review this booklet to take account of the most up to date practices.

An EIA is an assessment of the potential significant environmental effects of a proposal. The ES can be thought of as the report about these significant effects. It must focus on the main impacts of the proposal and present these impartially. Before you start to prepare your ES, it is essential that you discuss the potential environmental impacts of the work with us. The purpose of an EIA and its ES is to provide decision makers and other interested parties with as full an understanding of the consequences of the proposal as possible. Decisions can then be made on whether or not the proposal can proceed or should be amended before any work is started. Improved knowledge of the consequences allows easier identification of projects with potentially significant adverse effects. Appropriate steps can then be taken to minimise or remove these. In addition the opportunity can be taken to strengthen any beneficial impacts.

A well-prepared ES, written in plain English as a well structured and impartial account will demonstrate that potential significant impacts associated with a proposal have been considered in depth. Both the EIA process and the preparation of the ES should improve communication between all those with an interest in the proposal including the planning authorities, other statutory bodies and special interest groups. ES's must also be made available to the public to allow anyone with an interest a chance to read and make comments about the proposals.

While the current formal use of EIA emanates from European legislation and applies to all forms of development, it has been in use in the UK since the 1970s. Informally the use of EIA in the project planning process has been adopted by many successful organisations internationally as a means to improve project planning. This means that possible environmental effects of a proposal are considered at an early stage. Forestry has been subject to EIA since 1988. Subsequently there have been amendments to the Regulations in 1998 and 1999.



The Regulations that apply today are:

*The Environmental Impact Assessment (Forestry) (England and Wales) Regulations 1999 [SI 1999/2228]*

<http://www.opsi.gov.uk/si/si1999/19992228.htm>

The Environmental Impact Assessment (Forestry) (Scotland) Regulations 1999 [SI1999/43]

<http://www.opsi.gov.uk/legislation/scotland/ssi1999/19990043.htm>

The Environmental Impact Assessment (Forestry) Regulations (Northern Ireland) 2000

<http://www.opsi.gov.uk/sr/sr2006/20060518.htm>

## The Screening process

The FC and FS are first charged with deciding whether or not a project requires assessment; "the Forestry Commission (or Forest Service), as the competent authority must decide whether or not a project *"is likely to have significant effects on the environment by virtue, inter alia, of its nature, size or location"*. This process is called "Screening" and is a distinct process from "Scoping".

## The Scoping stage

The Scoping stage takes place once a decision has been made that the proposals will require our consent i.e. that they are likely to have a significant effect on the environment.

A guidance booklet about the Screening process is available on the web page below. Also available on this page is a booklet explaining the scoping process, a scoping checklist, an EIA Review checklist and other published studies and reports.

<http://ec.europa.eu/environment/eia/eia-support.htm>

EIA is only required for relevant projects, which can be identified by asking the following questions:

### a. Is the proposal covered by the Regulations?

In the case of forestry the Regulations cover four categories:

- New planting (including Christmas trees, new natural regeneration and coppice stools);
- Deforestation or forest removal (for conversion to another type of land use, i.e. not replanting/regeneration);
- Forest roads (their formation, alteration or maintenance); and
- Forest quarries (for obtaining materials for forest roads).

### b. Will the proposals have a significant impact on the environment – sufficient to require an EIA?

The Forestry Commission, in deciding whether proposals might have a significant effect on the environment will take account of:

- the UK Forestry Standard;
- UK Biodiversity Action Plan;
- published guidelines in relation to the forestry projects covered by the EIA Regulations;
  - the characteristics of the project } Refer to Schedule 3
  - location; } of the Regulations
  - characteristics of the potential impact }





The first thing you must do is to submit a sufficiently detailed description of the proposed project to enable us to give a screening opinion. Please remember that we can give you informal guidance before you prepare this. We will weigh up the likely effects of the proposal in conjunction with advice from other bodies before we make a decision.. The principal issue we will consider is whether or not the project will have a significant effect on the environment. We will use factors such as nature of the project, size or location in arriving at our decision.

If the area of the project falls below agreed area thresholds (see [Appendix 5](#)), it is more than likely that the project will not require consent from the Forestry Commission or Forest Service. In exceptional circumstances, if the work was considered likely to have a significant effect on the environment, a Direction may be issued that an EIA will be required.

**A "relevant project" is therefore normally one that is above the area thresholds and will have a significant effect on the environment.**

You should note however that you may still require the consent of statutory organisations for afforestation projects which fall below the specified area thresholds.

## Deciding the scope of the Environmental Statement

Once it has been decided that consent for the project under these Regulations is required, we will ensure that the process is properly conducted and that the ES provides the information we need that will allow us to make a decision. The need for early dialogue with FC/FS is therefore important. We will inform relevant bodies (local authorities, National Park Authorities, the countryside bodies\* and NGOs) of our decision that a project requires consent. We will also ask them to make any useful information available to you.

- \* **England** - Countryside Agency, English Nature, Environment Agency;
- Wales** - Countryside Council for Wales, Environment Agency;
- Scotland** - Scottish Natural Heritage, Scottish Environmental Protection Agency, Deer Commission for Scotland, Historic Scotland, Crofters Commission;
- Northern Ireland** - Environment and Heritage Service.

If you need specific information or you need to find out about other sources of help, you can obtain information from these organisations directly. Much of the information you require will be available on the Internet or can be provided as electronic documents. All public bodies have a duty to give you information. They may make a reasonable charge for administrative and copying costs. Public bodies will not comment on the merits of the proposal at this stage but they can offer advice. It is good practice to keep them informed and involved as preparation of the ES progresses.

You should also consider getting information from other authoritative sources, such as voluntary bodies, community councils, and knowledgeable individuals (see [Appendix 2](#)).

The ES should focus on the main impacts of the proposed work. The person carrying out the assessment should identify these. The essential tone of the ES should be one of impartiality without seeking to justify the proposals. Please note that if the assessment



is inadequate, or does not deal with pertinent elements or does not deal with them in enough detail, we may not accept the statement as a competent presentation and we may ask you to re-visit some issues or re-write some sections. It is therefore important to ensure you scope your assessment adequately. The FC/FS can assist you with this process. They will also provide advice throughout the assessment process and preparation of the ES.

It may be useful to discuss the advice you have received from Public Bodies with us so that we can ensure that advice is consistent. Once we accept the ES we will evaluate the project proposal and make a decision about whether to give consent to the project with or without conditions.

## The benefits of carrying out an Environmental Impact Assessment

You would probably have had to consider these effects on order to comply with the requirements of the UK Forestry Standard, background guidance, relevant legislation and say, if you are applying for grant, the rules of a country specific grant scheme. Undertaking EIA should result in a better planned and more sensitively designed project. For larger or complex schemes, the benefits of formalising the process into an EIA are considerable for all parties.

We must ensure that all opinion is properly considered. You should normally arrange to send a copy of the final version of the ES to the community or parish council for their comments. Details of the proposal will also appear on our Public Register of Environmental Impact Assessments and in local newspapers. If we have to notify other parties directly, we will discuss this with you.

## Structure, content and style of an Environmental Impact Assessment

### Format

There is no set format for an ES but it must be well organised with numbered pages and paragraphs. You must also provide maps, diagrams and tables, where they will aid understanding illustrated but not too lavishly. Summarise important points at the end of long sections of text. You must acknowledge all external sources of information including references to books, papers, reports and opinions from experts, specialists or other stakeholders.

### Content

The regulations specify the range of information that an ES must include. We only expect your ES to cover in detail the items that are identified at the scoping meeting as potentially significant to your project. However, if issues subsequently come to light that were not raised at the scoping meeting, these will also need to be fully considered. You must also consider the environmental elements listed at [Appendix 1](#). You do not need to cover in detail elements **that will not be significantly impacted** by the proposals. One suggestion is to list these in a table with the reasons why they are considered not to be significant. Appendix III sets out the possible contents of a statement.



## Bias

Be objective when preparing your ES. You should not understate adverse effects or over-emphasise beneficial ones. Your ES should read as though prepared by a neutral observer and should neither support nor oppose the proposal, merely set out the evidence gathered on the likely impact if it were to go ahead. While there may be instances where subjective opinions are necessary these should be identified. The key to a useful ES is the honest presentation of objective evidence.

## Technical language

Anyone should be able to read your ES. You can simplify the text by putting all detailed technical information in Appendices. If you do this, you must give the appropriate cross-references. However this should not mean that the ES does not present objective evidence, merely that care is taken to ensure that a range of readers easily understands it. When referring to animal and plant species use English language names with the Latin in italic or in brackets. Avoid jargon as far as possible (See non-technical summary).

## Presentation

You will need to make copies of your ES. We will tell you exactly how many copies are needed. Glossy documents are not necessary, as long as the report is clear. Quality of information rather than presentation is the main aim.

## Uncertainty and unknowns

Use scientifically established facts as far as is possible. If there is some degree of uncertainty, include and attribute 'informed judgements' and opinions of scientists or knowledgeable individuals. Where gaps in data or knowledge exist, these should be stated.

## Methods

Include a note on the methods and techniques used in surveys and to identify and assess impacts, possibly as an appendix. This will establish confidence in the suitability and accuracy of the information provided.

## Timing

Carrying out the assessment involves various elements that are time-critical. For example if you need to assess the impact of the project on nesting habitats or say rare flora such as orchids you will only be able to do this at certain times of year. Planning the timing at the outset is therefore important and the following elements should be considered:

- Bird surveys – for most breeding birds surveys should be done between March and May, and for most wintering birds between October and March;
- Bat and mammal surveys;
- Vegetation surveys – needs to be done in the relevant growing season;
- Water sampling – if a catchment-based assessment is required, sampling must be done in high flow conditions: summer droughts can delay the project.
- Planning meetings – it may be agreed to present the ES to a planning committee; dates of meetings and notice for papers can be obtained from the local planning office.
- Local consultation – time should be allowed for discussion and presentation to parish or community councils.
- The planting season and time for plant ordering.

Remember that non-contentious schemes are processed more quickly.



# Undertaking an Environmental Impact Assessment – getting it right first time

The underlying ethos of impact assessment is being aware of potential adverse impacts and taking appropriate steps to avoid or reduce these. The use of an assessment team and adequate liaison with appropriate organisations and individuals to identify and assess the significance of impacts is vital. It is unlikely that one person will have sufficient breadth and depth of knowledge to adequately cover all the specific topics that the assessment must cover. In most assessments specialist knowledge will be required in relevant areas such as landscape design, flora, fauna (particularly birds and mammals), archaeology, soils, geology and hydrology, (in addition to silviculture). Professional assistance is available from an increasing number of qualified consultants. In many instances, specialist input will be the most expedient way to ensure that you properly cover the relevant issues. Specialist input also adds credibility to the results of the assessment.

EIA is a systematic analysis and can be thought of as having a progressive series of distinct stages. The full benefits of EIA can only be accrued if the process is initiated early in the project planning process and is carried out in an open manner.

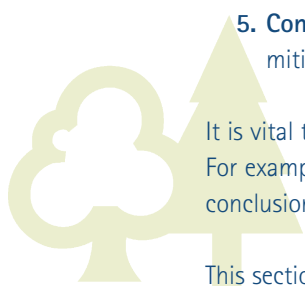
## Steps in the process

The following steps in the process can be identified, although it should be remembered that this is an iterative process, with feedback and interaction between the various steps throughout the process.

- 1. Scoping** – Scoping (carried out at the scoping meeting) is the process of identifying the range and agreeing the priority of issues to be addressed. This is one of the most important stages in the EIA process as the scoping report will, in addition to taking account of the views of all interested parties, provide a focus for the assessment.
- 2. Site and Project Description** – Give a factual and objective description of the site and of the proposal. The description of the site should provide general scene setting or baseline information. What do we know about the site already? Alternative project proposals should also be discussed. This should include specific baseline data on only those elements on which there will be a significant impact.
- 3. Impact Identification and Prediction** – Identify and predict the impacts. Present details of the with-project and without-project predictions.
- 4. Assessment of Impact Significance and Mitigation** – When you consider the likely changes that might be caused by the project, you should state clearly what they are and how significant they might be. Then give information about how you intend to mitigate their effects.
- 5. Conclusion** – A statement of the significance of impacts remaining following mitigation including details of the level of residual impact.

It is vital that you understand the purpose of each stage and consider them separately. For example, it is confusing to have discussion and opinion in the descriptive section, or conclusions interfering with the quantification of impacts.

This section provides some selected guidance about how to conduct your assessment and what to include in your ES. It is important to remember that you will only need to cover **significant** items in depth.







## Organising the scoping meeting

The scoping meeting helps to identify the issues that may be potentially significant that you will have to address in detail. A leaflet that describes the process is available from the Forestry Commission website on the "Applying for Consent" page. Remember that you can also get a copy of the EU produced version on <http://ec.europa.eu/environment/eia/eia-support.htm>

### Who to invite

You should invite all necessary organisations and individuals that may have an interest in the project. This meeting helps the proposer to identify and focus on the relevant issues.

The scoping meeting should involve statutory consultees, such as Scottish Natural Heritage, Historic Scotland, National Park Authorities, local planning authorities and any other parties that may have useful information to contribute. It is vital that those who attend the scoping meeting are well prepared and able to clearly present the issues that they consider are significant to the project. **You must send details of the proposal and the site at least ten days in advance of the meeting to all those who will attend.** Whenever they have identified an issue as potentially significant they must be able to clearly explain and justify how they have made that assessment.

### Site visit

The participants in scoping may find it helpful to visit one or two strategic viewpoints at the site. This may help them to get a consistent understanding of the site and focus the "round-table" discussion.

### Getting the discussion started

After an introduction from the chair the proposer is invited to outline the proposal. Comments are then sought through a 'round-table' discussion. It assists the process if all parties are given good notice, have visited the site and have brought as much information as possible to the meeting. If preliminary survey work has been done or draft plans prepared, they should be made available to consultees in good time. The use of matrices and checklists may help people to identify key issues.

*Note - In England and Wales FC staff will attend the meeting but we will expect the applicant to chair it. In Scotland, FC staff may chair the meeting.*

### Get to the significant issues

You will be able to limit consideration of the less-significant impacts. Those present at the scoping meeting will guide you as to where the focus of attention in the assessment should lie. However it is likely that the EIA process itself will uncover aspects that could not have been foreseen. Even if identified at a later date these will also have to be fully addressed within the Environmental Statement.

### Being specific

During the scoping exercise it is important to be specific about issues. For example identifying broad issues such as 'effect on hydrology' is less helpful than establishing the effect on a particular aspect of water quality or quantity if this is the significant issue.

### Data collection

The scoping process should also identify suitable techniques for data collection, methods of predicting changes in environmental parameters and for assessing impact significance. This should avoid potential problems (once the assessment has been completed) about the credibility of techniques used and resulting data.



## Keep a record

You must keep a detailed and agreed record of the scoping meeting including the written comments of those unable to attend. This must include a summary of the key issues, who identified them and the reasons given. It is also important to record the topics that were not considered significant and the reasons for this. The record should be included as an appendix in the ES.

## Describing the site

### General

The site description should provide a general picture of the site as it currently exists. This sets the 'baseline', against which changes can be assessed (see Appendix III). This 'baseline' should include a note about the stability of the existing state. Remember that the provision of detailed data should be restricted to only those elements considered during the scoping process to be potentially significantly impacted. While it is necessary to provide details of the current situation, it is also important that you predict future environmental trends in the absence of the project going ahead – the 'without-project scenario'. This is necessary in order to assess realistically the impact of the proposal.

Describe the site using maps such as location, roads and tracks, soils, topography, significant viewpoints and statutory designations.

If you introduce data into an assessment, you should quantify this, if appropriate, so that analysis can take place. Use established methods for data collection to ensure that data can be statistically validated. For example there is an accepted method for undertaking a breeding bird survey. For non-quantifiable aspects, such as landscape character, agreed guidelines and methodologies should be applied. In the absence of hard data other information is helpful e.g. expert testimony, respected opinion and analogous situations are acceptable in an ES provided they are derived from competent attributed sources such as Scottish Natural Heritage.

### People and community

Social and community factors are increasingly important elements in the decision making process. In determining the importance of the project to local people, consider the number of those who live within or near it, those who make their living from it at present, those who use it or use it for recreation.

### Presenting proposals to the local community

We strongly advise that you present your proposals to local communities at a formative stage. Seeking local views on the proposal during the scoping process is one way of doing this. People who may be affected by a proposal are more likely to react constructively if they are contacted at an early stage. A good way of doing this is to ask the chairman of the local community or parish council if you can make a presentation as part of a council meeting. You may also wish to consider arranging a public meeting to discuss your proposals. Include any issues the council raise and any formal response in this section.

### Land use

Set the proposal in context by giving a short description of the current land use.

### Flora and Fauna

We advise that you employ a specialist contractor to provide descriptions of the local species and communities of plants and animals where required. Use the National



Vegetation Classification (NVC) to describe vegetation. A breeding bird survey may well be required. Remember that this can only be carried out between March and May. The use of the site for foraging by animals and birds is less easy to pin down. The knowledge of countryside bodies, gamekeepers, farmers, foresters, local nature clubs and wildlife trusts and NGOs can be helpful in providing comprehensive detail.

You might find the IEEM Guidelines for Ecological Impact Assessment helpful  
<http://www.ieem.net/ecia/introduction.html>

In some situations there will be arguments against revealing the location of protected species. If this is the case we will advise you how to handle the issue.

Record the status of each habitat type by reference to national statutory designations such as EU habitats directive and national biodiversity action plans. A tabular format helps to summarise the areas (see table below as an example). Further details, including the site map, can be placed in an appendix.

Table 1

Habitat	NVC	Area	Status
Acid grassland		35ha	
Native Woodland	W11 W14	2ha	UKBAP

Having considered the national status, the regional and local importance of habitats can then be described. Check if there is a Local Biodiversity Action Plan that can be referred to. Local views and habitat designations can be discussed in the assessment section, when considering the significance of local impacts.

The importance of species identified should be described in this section. The following table sets out one approach:

Table 2

Species	Abundance			Status	Significance
	Local	Regional	National GB		
Otter	C	C	R	P	M
Goshawk	C	R	R	EU	H

*Abundance:* C = Common, R = Rare, EN = Endangered

*Status:* P = Protected, EU = EU Birds Directive, R = Red Data Bird List

*Significance:* H = High, M = Medium (project may need to take into account),  
 L = Low (unlikely to need further consideration)

## Landscape

Give a brief description of the landscape character drawing on any existing work, for example landscape character assessments. Any cultural heritage interests should also be identified for example objects significant to archaeology, architecture, science or technology. Identify the main viewpoints from roads, footpaths and public places. Make an assessment of the prominence and quality of the views. Any 'before' illustrations – of the site itself – should be referred to in this section. Remember this must be data that can be assessed it must not be a report supporting the design presented.

A copy of the Landscape and Visual Impact Assessment Guidelines available from the Landscape Institute might be a useful publication.

<http://www.landscapeinstitute.org/publications/landscapeonline.php>



## Cultural Heritage

Any cultural heritage interests should also be identified. For example, you should include objects significant to archaeology, architecture, science or technology. This must include, but should not be limited to, any sites designated by law. You should set out all the potential impacts, and whether they would be direct on the cultural heritage asset itself or on its wider setting if adjacent or close to it. This requires an understanding of the asset and its context and you may wish to seek specialist advice on presenting these aspects in the ES. As with the landscape assessment, this must be data that can be assessed objectively; it must not be a report supporting the design presented

## Land use context

Consider the site in relation to the surroundings. Give a map that shows the neighbouring land use and relationship to the site itself. For example a footpath crossing the site should be extended to show where it goes beyond the boundary. Show archaeology on the site itself in relation to other adjacent sites. Also consider water issues such as downstream uses, e.g. distillery, public supply.

In some areas scoping may have identified the diversity of land use and potential cumulative impact as an issue. If so, the overall area and percentage of forestry can be set out in 5, 10 and 15 Km radii from the centre of the site in question. Recent site history is also useful, for example land use change in the last 5 years. In areas with a high proportion of forest cover, break down the areas by age and species. If habitats are considered to be of importance, the different habitat types within the vicinity can be tackled in a similar way.

## Climatic factors

It is expected that increasing consideration will be given in the EIA process to the impact of projects in relation to mitigating and adapting to climate change and you should therefore consider the need to describe the likely implications for your site. For example, considering the implications of afforestation & deforestation on carbon sequestration or the release of soil carbon, or the likely future implications of climate change predictions on species distribution or flood risk. Tools for calculating the carbon implications of forestry projects are being developed, and further advice on all aspects of forestry and climate change will be included in guidelines accompanying the revised UK Forestry Standard. In the meantime, guidance is available on relevant aspects of climate change in existing Forestry Practice Guidelines.

## Do-nothing option

Describe the likely future condition of the site in the absence of the project going ahead. For example, is the site likely to regenerate naturally, or be subject to grazing pressure?

# Describing the project

Whichever type of proposal is being assessed, the scoping stage and Environmental Statement should contain a description which should comprise:

- 1. Purpose:** A statement of the objectives and outcomes of the project; such as forestry yields and native woodland creation, habitat linkages, access to forest blocks, quarrying of material etc
- 2. Plan:** A site plan identifying all the elements of a proposal such as roads, fencing, site compound, and any affected 'sensitive areas' (see Appendix 5), with a clear key and scale.
- 3. Areas:** A tabular statement of the areas involved. In the case of a farm woodland scheme, include what will happen to those areas that will remain unplanted. Remember that the EIA process can be an iterative one and the final design of the project may change from the original idea





4. **Design:** The survey, analysis and design of the proposal in both elevation and plan. Give landscape views showing the "before" and "after" site. See *FC Forest Landscape Design Guidelines*
5. **Alternatives:** Set out the alternatives considered, including the do-nothing option (e.g. no planting or road) as well as a mixed option, (e.g. planting only part of the site). Consideration of alternative sites will only arise where these are realistic, for example planting alternative areas of a farm or estate or choosing alternative road lines or quarry sites. Do however consider alternatives to the proposed project. Alternative routes should be presented for road construction projects.
6. **Methods:** How will you implement the project? Include any site preparation, cultivation, sedimentation plan, drainage or harvesting plan in the Appendix. Also include the proposed timescale for implementation and any proposed phasing of the work. Describe your proposed use of pesticides and fertilisers. Road construction projects should contain details of phases of construction and use/maintenance.

## Predicting the environmental effect

You must predict the changes that would result if the project proceeds. You must describe and quantify the significance of all the possible changes as accurately as possible.

Divide the effects of predicted changes into categories, (e.g. flora, fauna, people), and set out the basis on which the changes are predicted. You can summarise the effects in a table. For each issue, compare the existing situation to the proposed, stating whether the effect will be short, medium or long term.

Some changes will be permanent but others will be temporary. For example fertiliser run off on a planting site could be short term and temporary (even then, it is possible that the effect on the environment could be long term or permanent), while cessation in the use of agricultural chemicals in the lowlands will confer a permanent change.

Wherever possible quantify the predicted impacts of the project. Predictions will usually be subject to a degree of uncertainty. Indicate the possible range of outcomes and the degree of confidence in predictions. Include a range of outcomes. For example the potential increase of the badger population in extended woodland may vary.

Where the impacts are not clear-cut, you can make a prediction but you must back this up with a reasoned case. Give details of the methods you use to predict the impact and state any assumptions. It may be possible to deal with some elements by reference to analogous situations or research results. References are vital to support the conclusions and make these transparent to the reader.

Table 3

An example of a summary table is shown below.

	Existing	Proposed	Change	Nature of Change	Comments
Molinia Grassland	20ha	3ha	-17ha	Short term Permanent	
Broadleaf Woodland	4ha	9ha	5ha	Medium term Permanent	Removal of grazing will allow existing to regenerate.
Curlew	4 pairs	1 to 2 pairs	-2 to 3 pairs	Medium term Permanent	Estimated by surveyor



You can also show land use changes in a tabular way by extending the tables shown in the descriptive section.

Give details of changes in the landscape. Visual impacts such as the main changes from important viewpoints can be presented in a tabular form.

## How to determine significant impact and mitigate it

This section of the ES comprises a reasoned judgement on the significance of each of the impacts and any measures taken to mitigate the effects.

### Determination of significant impact

Based on the information contained in Table 3, assess each of the elements. Consider the wider picture and bring other information into the argument by referring for example to research findings, analogous experience or expert opinion. For each issue you must clearly state whether the potential impact will be significant or not significant. *You must include the methodology you have used to reach this conclusion.* This is a vital part of the process because the judgement you make about significance is not verifiable unless you show the methodology you used to arrive at this decision.

When assessing the anticipated change from the current baseline, take account of the stability of the existing state.

### Threshold of Concern (TOC)

The TOC defines the magnitude and severity of change in the environmental element that would be considered to be significant. It clearly indicates the boundary between significant and non-significant impacts. For example, in discussing skylark populations the national decline should be cited: for otters recent re-colonisation.

### Grouping impacts

Some impacts will have linkages and are therefore best grouped together, e.g. Moorland habitats and their associated communities. However at this stage, it is particularly important to avoid bias in this section and the ES must be forthright and honest in recognising any negative impacts.

### Minor impacts

Minor impacts identified in the previous section can be dismissed at this stage, although you should give details of the reasons for eliminating them. It will be helpful to include clear guidance from the scoping meeting here.

### Significant impacts

These should not be confined to the detrimental effects. For example, the creation of new-native woodland is likely to have a number of significant environmental benefits and so in the final analysis, both the positive and negative effects should be considered.

### Mitigation

You need only take measures to mitigate those impacts you have identified as significant. Give full details of measures you will take to lessen significant adverse impacts. For example, you might mitigate the potential impacts of a planting scheme on important fishing by managing riparian areas and minimising cultivation of the site.



Provision to cut the vegetation in unplanted areas may help to preserve non-woodland habitats or sites of archaeological interest. Other measures may include aspects of the design of the scheme, changes to work techniques, or changes to the timing of operations.

Mitigation measures must be new amendments to the proposal. For each impact that requires mitigation you should indicate what the residual level of impact will be and re-determine its significance against the Threshold Of Concern.

## Summary

Having discussed all the impacts in the previous sections, the statement provides additional information for the "decision-maker", summarising the significant effects and any necessary mitigation measures. A tabular format could be used to list the elements describing these in terms of their time-scale and permanence.

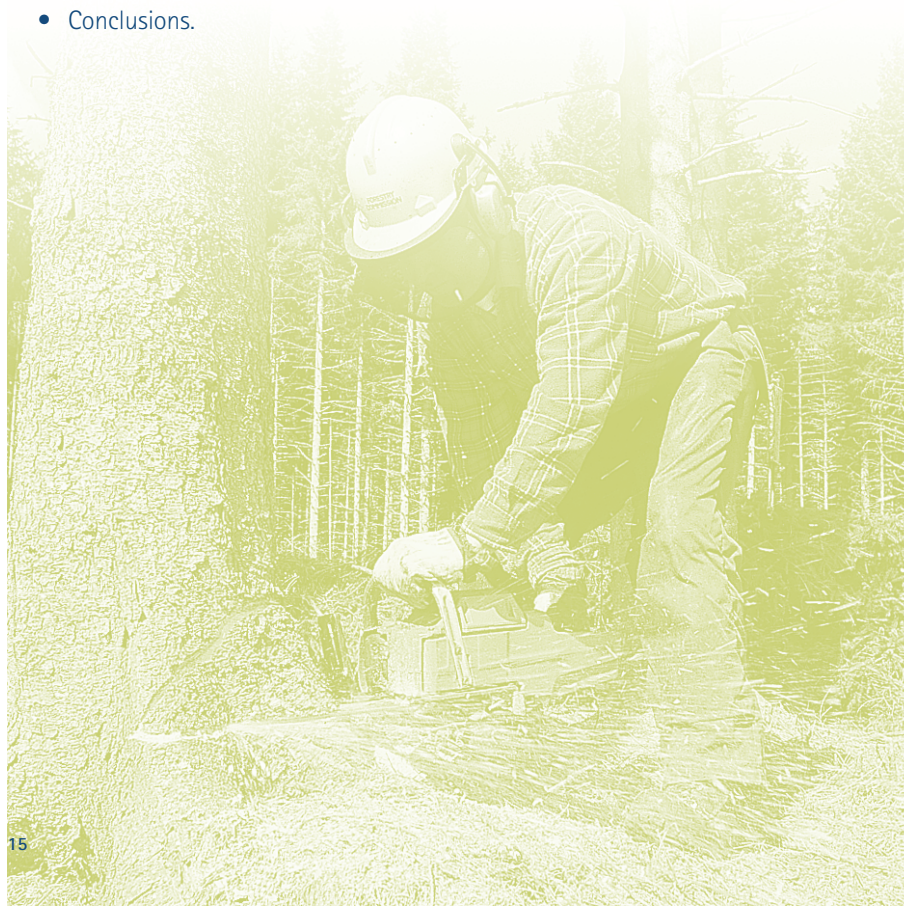
## Non-Technical Summary

The ES must include a one or two-page summary (on A4), in non-technical language.

Put this inside the front cover of the ES.

The summary must include:

- The purpose and nature of the project.
- An area summary.
- A brief resume of the information presented in the ES, detailing the key issues relating to environmental elements and the final determination of impact significance.
- Conclusions.





# Appendices

## Appendix 1

### Information to be supplied in an Environmental Statement

#### 1. The Regulations specify that the ES shall include:

- a. a description of the project, comprising information about the site of the project and the design and extent of the proposed operation;
- b. the data necessary to identify and assess the main effects which the project is likely to have on the environment;
- c. a description of the likely significant effects of the project, direct and indirect, on the environment, explained by reference to its possible impact on: - human beings; flora; fauna; soil; water; air; climate, the landscape; the interaction between any of the foregoing; material assets (including the architectural and archaeological heritage); the cultural heritage.
- d. Where significant adverse effects are identified with respect to any of the foregoing, a description of the measures envisaged in order to avoid, reduce or remedy those effects; and
- e. A summary in non-technical language of the information specified above

#### 2. The Regulations specify that the ES may include further information on any of the following matters;

- a. the physical characteristics of the project and the land use requirements;
- b. the main characteristics of the production process proposed, including the nature and quality of the materials to be used;
- c. the estimated type and quantity of expected residues and emissions (including pollutants of water, air or soil, noise, vibration, light, heat and radiation) resulting from the project;
- d. (in outline) the main alternatives (if any) studied by the proposer and an indication of the main reasons for his choice, taking into account the environmental effects;
- e. the likely significant direct and indirect effects on the environment of the project which may result from a. the use of natural resources; b. the emission of pollutants, the creation of nuisance and the elimination of waste;
- f. the forecasting methods used to assess any effects on the environment about which information is given under sub paragraph e; and
- g. any difficulties, such as technical deficiencies or lack of knowledge encountered in compiling any specified information.

In sub paragraph e "effects" includes secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects. Where further information is included in an environmental statement pursuant to 2 above the Regulations require that a non technical summary of that information shall be provided



## Appendix 2

### Sources of Environmental Information

You can also get more information and guidance about the EIA process on the European Commission website <http://ec.europa.eu/environment/eia/eia-support.htm>

#### 1. Government Organisations

Forestry Commission, 231 Corstorphine Road, Edinburgh EH12 7AT  
Tel: 0131 334 0303 • Fax: 0131 334 3047  
e-mail: [enquiries@forestry.gsi.gov.uk](mailto:enquiries@forestry.gsi.gov.uk)

##### England

Natural England 1 East Parade, Sheffield S1 2ET  
Tel: 0114 241 8920 • Fax: 0114 241 8921  
e-mail: [enquiries@naturalengland.org.uk](mailto:enquiries@naturalengland.org.uk)

English Heritage, Customer Services Department, PO Box 569, Swindon SN2 2YP  
Email: [customers@english-heritage.org.uk](mailto:customers@english-heritage.org.uk)  
Tel: 0870 333 1181 • Fax: 01793 414926  
e-mail: [customers@english-heritage.org.uk](mailto:customers@english-heritage.org.uk)

##### Scotland

Historic Scotland, Longmore House, Salisbury Place, Edinburgh EH9 1SH  
Tel: 0131 668 8600  
e-mail: [hs.inspectorate@scotland.gsi.gov.uk](mailto:hs.inspectorate@scotland.gsi.gov.uk)

GIS shape files for locating cultural heritage assets available from the GIS Manager at: [James.steel@scotland.gsi.gov.uk](mailto:James.steel@scotland.gsi.gov.uk)

Scottish Natural Heritage to Great Glen House, Leachkin Road, Inverness IV3 8NW  
Tel: 01463 725000 • Fax: 01463 725607  
e-mail: [enquiries@snh.gov.uk](mailto:enquiries@snh.gov.uk)

##### Wales

Cadw, Welsh Assembly Government, Plas Carew, Unit 5/7 Cefn Coed, Parc Nantgarw Cardiff CF15 7QQ  
Tel: 01443 33 6000 • Fax: 01443 33 6001  
e-mail: [Cadw@Wales.gsi.gov.uk](mailto:Cadw@Wales.gsi.gov.uk)

Countryside Council for Wales, Enquiry Service, Maes y Ffynnon, Penrhosgarnedd Bangor, Gwynedd LL57 2DW  
Tel: 0845 1306 229 • Fax: 01248 355782

##### Northern Ireland

Forest Service, Dundonald House, Upper Newtonards Road, Belfast BT4 3SB  
Tel: 02890 524480 • Fax: +0044 2890 524570  
e-mail: [customer.forests@daer.dardni.gov.uk](mailto:customer.forests@daer.dardni.gov.uk)

Northern Ireland Environment Agency  
Contacts list: <http://www.ni-environment.gov.uk/other-index/contacts.htm>





## Appendix 2 continued

### 2. Local Authorities

Please refer to your Local Authority for further information.

### 3. Other sources of environmental information

Voluntary conservation organisations listed in Forestry Commission *'Forest Nature Conservation Guidelines'*.

Water authorities and fishery boards listed in Forestry Commission *'Forests and Water Guidelines'*.

Archaeological bodies listed in Forestry Commission *'Forests and Archaeology Guidelines'*.

Landscape organisations listed in Forestry Commission *'Forest Landscape Design Guidelines'*.

Recreation organisations listed in Forestry Commission *'Forest Recreation Guidelines'*.

## Appendix 3

### Suggested contents for ES

#### 1. Non-technical Summary

#### 2. Introduction

- The reasons an assessment was called
- Conclusions of the scoping meeting
- Summary of potentially significant impacts, both positive and negative

#### 3. Site Description

It should include where appropriate, geology, soils elevation, aspect, topography, hydrology, vegetation, fauna, history of land use including archaeology, current land use including recreational use, landscape and its context, and any statutory designations.

- Land use context
- History of land use
- Statutory designations
- Where an Indicative Forestry Strategy exists, state whether the site is in the 'preferred', 'potential' or 'sensitive' category for afforestation or make reference to local forest framework
- Set out in the ES where all or part of the site is within or likely to affect a sensitive site e.g.
- Site of Special Scientific Interest
- Special Protection Area
- Special Area of Conservation
- Candidate Special Area of Conservation
- National Nature Reserve
- National Park
- Area of Outstanding Natural Beauty
- National Scenic Area
- Environmentally Sensitive Area
- Scheduled Ancient Monument or listed building
- Maps - location, contour, soil, vegetation, land use
- Human beings
- Geology



- Soils
- Elevation
- Aspect
- Topography
- Hydrology
- Vegetation
- Fauna
- Flora
- Water
- Air
- Climate
- The landscape
- The cultural heritage

#### 4. Description of Proposals

- Location, (outline map)
- Area statement – tabular
- Purpose of proposals
- Alternative uses of site (if any)
- Alternative sites (if any)
- Work methods and design
- Phases of the project
- Materials Residues and emissions (roads and quarries)
- Associated works

#### 5. Prediction of Impacts

For each impact detail:

- The change from the existing or baseline conditions
- The nature of the change- magnitude, duration, permanency, reversibility
- Confidence in prediction
- Relation to standards/statutory designations/plans and policies
- Explain basis for predictions
- Method of impact identification
- Discuss any difficulties encountered, including any uncertainties and unknowns

#### 6. Significant Impacts and Mitigation

For each impact discuss:

- Approach to evaluation
- Threshold of concern
- For all significant adverse impacts consider methods to
- Avoid impacts
- Reduce impacts
- Compensate for impacts
- Remedy impacts
- Discuss effectiveness of proposed mitigation measures
- Quantify the residual impacts

#### 7. Summary statement of the significant impacts



## Reference List

Countryside Commission 1991 Environmental Assessment: the treatment of landscape and countryside recreation issues. Countryside Commission, Cheltenham.  
Forestry Commission 1995 Forests and Archaeology Guidelines,  
Forestry Commission 1994 Forest Landscape Design Guidelines,  
Forestry Commission 2004 Reducing Pesticide use in Forestry Practice Guide, .  
Forestry Commission 1990 Forest Nature Conservation Guidelines,  
Forestry Commission 1991 Establishing Farm Woodlands Management Handbook,  
Forestry Commission 1991 Community Woodland Design Guidelines,  
Forestry Commission 2003 Forests and Water Guidelines (4th Edition)  
Forestry Commission 1992 Forest Recreation Guidelines,  
Forestry Commission 1992 Lowland Design Guidelines,  
DANI 1993 Afforestation - The DANI Statement on Environmental Policy, Belfast  
Landscape Institute and Institute of Environmental Assessment, Guidelines for landscape and visual assessment, 2002. Spons  
Institute of Environmental Assessment, Guidelines for baseline ecological assessment, 1995. Spons

In addition, the Forestry Commission publishes a variety of Research Information Notes. The Forestry Commission's publications are available from:

Forestry Commission Publications  
PO Box 25  
Wetherby  
West Yorkshire  
LS23 7EW

Tel: 0870 121 4180  
Fax: 0870 121 4181  
E-mail: [forestry@capita.co.uk](mailto:forestry@capita.co.uk)



## Appendix 4

### Conducting a scoping meeting

#### Format

- Scoping is the key to focussing attention on key issues during the assessment and when preparing the Environmental Statement (ES) on those relevant subjects that have been identified as likely to have a significant impact. The same process can also be used with applications for country specific grant schemes that involve any of the forestry projects or felling applications, to identify key issues. Those attending should have had sufficient information in advance to allow them to consider the issues from their point of view.

#### Introduction to the meeting

- Ask for introductions from those present: who they are and the organisation they represent.
- Ask if those attending are aware of anyone else who should be present but is not
- Give apologies received from those people who could not attend.
- Outline the purpose of the meeting: not to solve problems but to discuss and decide which issues need to be considered during the EIA process.
- Explain that FC/FS will write to the proposer (copied to all those people attending and those unable to attend) and formally list the issues that must be addressed, once the scoping meeting report has been accepted.

#### Order of the meeting

- Proposer outlines the proposals: this is an opportunity to clarify any areas of uncertainty e.g. type and location of fencing or cultivation.
- Representatives' appraisals: the chair asks each of the representatives to outline their consideration of the proposals including any issues of significance and their relevance to the proposed project. Where possible, baseline conditions and levels of change that would result in a significant impact should be given. These can be specifically requested.
- This part of the meeting should give plenty of opportunity to fully discuss the relevant points including availability of data, survey methods, method of evaluation, alternatives and mitigation.
- Correspondence in absentia: the chair will inform those present of any points which have been raised in correspondence from individuals or organisations unable to attend.
- Summing up: Then Chair will outline the reasons why an EIA is required. If it has been decided that there is a need to visit the site to look at a particular aspect, the chair will encourage this to be done at an early opportunity. The Chair should also summarise the issues that have been considered to be relevant and also those that it has been decided are not significant





## Appendix 5

### Forestry project area thresholds

Operation	Threshold where any part of the land is in a sensitive area	Threshold where no part of the land is in a sensitive area
Afforestation	2 hectares where the land is in a National Park, Area of Outstanding Natural Beauty (AONB) or National Scenic Area (NSA). No threshold in other sensitive areas (see list below)	5 hectares
Deforestation	0.5 hectare where the land is in a National Park, AONB or National Scenic Area (NSA). All projects in other sensitive areas (see list below)	1 hectare
Forest Roads	All projects	1 hectare
Forest Quarries	All projects	1 hectare

#### Definition of 'sensitive areas':

For the purposes of the table shown in Appendix V the definitions of 'sensitive areas' are as follows:

- National Nature Reserve or Site of Special Scientific Interest; Area of Special Scientific Interest in Northern Ireland;
- National Parks;
- The Broads;
- A World Heritage Site;
- Scheduled Ancient Monuments;
- Area of Outstanding Natural Beauty;
- Natural Heritage or National Scenic Areas;
- A site designated or identified as a candidate Special Area of Conservation;
- The New Forest Heritage Area;
- A site classified or proposed as a Special Protection Area.

#### Acknowledgments

*With grateful thanks to those FC staff who commented upon the original text and particularly to Ian Gray (ProForest) and Simon Brooks (SNH) for their invaluable contributions and suggested amendments.*