Scottish Forestry
Coilltearachd na h-Alba

Undertaking an Environmental Impact Assessment in Forestry (2022)

Scottish Forestry is the Scottish Government agency responsible for forestry policy, support and regulation

Is e Coilltearachd na h-Alba a' bhuidheann-ghnìomha aig Riaghaltas na h-Alba a tha an urra ri poileasaidh, taic agus riaghladh do choilltearachd

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1. Introduction

The Environmental Impact Assessment (EIA) of projects is a key instrument of environmental policy. An EIA is required for new projects that are likely to have significant effects on the environment and will therefore require consent. Consent means the decision by the Competent Authority that the project can proceed as designed.

As the Scottish Government agency responsible for regulating forestry in Scotland, Scottish Forestry are responsible for administering The Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017 (the 'EIA Regulations').

As Competent Authority, we provide a screening opinion on whether or not EIA consent is required; advise on the scope and content of the EIA Report; and decide whether or not the forestry project can be given consent.

Forestry projects subject to the EIA Regulations are afforestation, deforestation, forest roads and quarries.

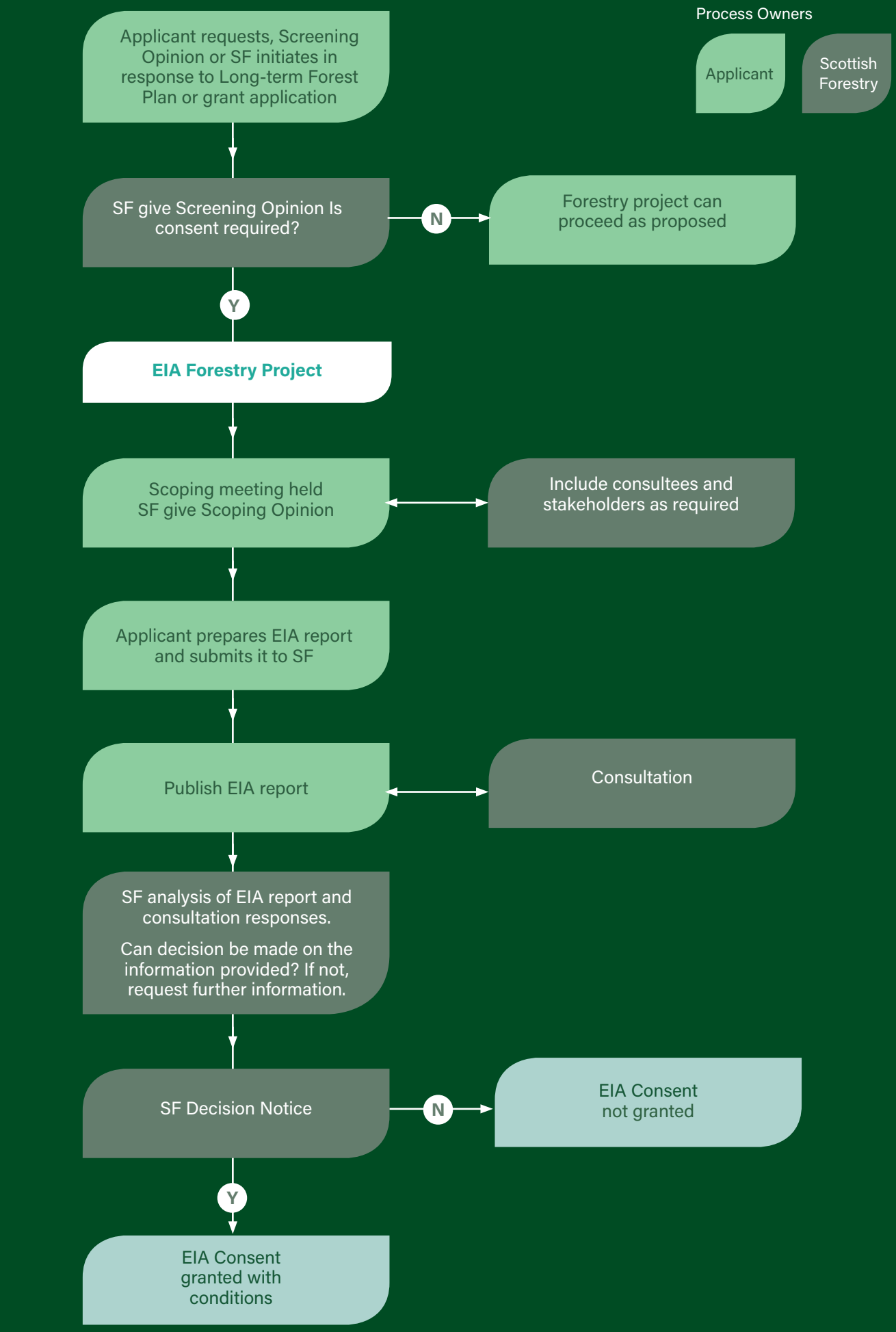
Our guidance on EIA for Forestry Projects provides details on all aspects of the process (outlined in Diagram 1), including thresholds for forestry projects, detailed screening information, scoping, and how we deal with breaches of the EIA Regulations.

The European Commission (EC) also provides guidance on the EIA process and has produced a series of booklets on screening, scoping and the EIA Report. You can download a copy of each of these booklets at: http://ec.europa.eu/environment/eia/eia-support.htm

This guidance relates to forestry projects which require EIA consent. It provides further details on the scoping and consent aspects of the EIA process and covers how to undertake an EIA, including the preparation of the EIA Report.

The EIA Report is the document prepared by the applicant, which must accompany an application for EIA consent. It captures the assessment of the potential significant effects of a forestry project on the environment and must present these impartially. Its primary purpose is to inform Scottish Forestry, the consultation bodies and other stakeholders with as full an understanding of the environmental implications of the proposal as possible. The EIA Report is discussed in greater detail in section 3.

Diagram 1 - EIA Process



1.1. Steps for undertaking an EIA

EIA is a systematic analysis of the likely significant environmental effects arising from a proposed project and can be thought of as having a progressive series of distinct stages.

The following steps in the process can be identified, although it should be remembered that undertaking an EIA is an iterative process, with feedback and interaction between the various steps through the process:

i. **Scoping** – (including 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 scoping will, in addition to taking account the views of all interested parties, provide a focus for the assessment and so informs the content of the EIA Report;

ii. **Site and Project Description** – this must be 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 and need only include specific baseline data on those elements on which there will be a significant impact, as identified in the scoping opinion. You do not need to cover in detail factors that will not be significantly impacted by your proposals, however in order to ensure that these have been recognised at the project planning stage you should append your 'Issues Log'[1] to the EIA Report. Reasonable alternative proposals to the project must also be discussed and an indication of the main reasons for selecting the chosen project option should be provided;

iii. **Impact Identification and Prediction** – identify and predict the impacts. Present details of the with-project and without-project predictions, and include a comparison of the environmental effects against each of the alternatives considered in the assessment;

iv. **Determining significant impacts 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; and

v. **Conclusion** – this is a statement of the significance of impacts remaining, following mitigation, including details of the level of residual impact.

As the EIA process can at times be lengthy, Scottish Forestry promote the use of Woodland Creation Processing Agreements (WCPA) for dealing with all woodland creation proposals that require consent under EIA Regulations.

The WCPA sets out the key stages involved in determining a major woodland creation proposal, identifying what is required from those involved and setting realistic timescales for the delivery of the various stages of the process.

Further information on WCPA can be found at https://forestry.gov.scot/support-regulations/environmental-impact-assessment/applying-for-consent

1 It is recommended that for all projects an Issues Log is used to record any potential environmental impacts and the associated mitigation and avoidance measures. Further information on using an Issues Log can be found in our EIA for Forestry Projects Application guidance and in our Woodland Creation Application Guidance

1.2. Identifying significant effects

Environmental effects are the interactions between the forestry project and the surrounding environmental features. The significant effects of these interactions are likely to have been identified during the screening process, but it is during the scoping process that the importance of these impacts is assessed. The assessment of significant environmental effects is the cornerstone of EIA, but the concept has not been clearly defined and needs to be assessed with regards to a forestry project's specific circumstances.

In order to help identify the likely significant environmental effects of the project in greater detail, we have adapted the EC EIA scoping checklist to make it more specific to forestry projects. All effects, both positive and negative, from the project are important but it is those that are significant that the EIA Report must address.

The scoping checklist asks you to identify where there may be physical changes to the environment. If potential changes have been identified then it poses two further questions on the effect on the environment and if it will be significant. You can download a copy of the scoping checklist at https://forestry.gov.scot/support-regulations/environmental-impact-assessment/applying-for-consent

When providing or assessing information on a forestry project's likely significant impacts on the environment, you should consider:

- The factors – impacts on the population and human health, biodiversity, land, soil, water, air and climate, material assets, landscape and cultural heritage, and the interactions between them;
- Nature of the impacts – direct, indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative;
- Extent of the impact – geographical area, size of the affected population/habitat/species;
- Magnitude and complexity of the impact;
- Probability of the impact;
- Duration, timing, frequency and reversibility of the impact; and
- Mitigation incorporated into the project design to avoid, prevent, reduce or, if possible, offset significant adverse impacts.

2. Scoping

Scoping is the process of identifying the content and level of detail required to assess the factors identified in our screening opinion as likely to be significantly impacted by the EIA forestry project.

Once it has been decided that consent for the project under the EIA Regulations is required, we will ensure that the process is properly conducted and identify what information must be provided in the EIA Report, to allow us to make our determination on the application for EIA consent.

We must consult specific bodies[2] during the scoping process and so with our input, we recommend that you arrange a scoping meeting, either in person or online, and invite all of the necessary organisations and individuals identified as having an interest in your EIA forestry project. This should involve the relevant consultation bodies, neighbours, the local community council, other NGOs, and any other parties including the general public, who can contribute information or who may be affected by your proposals. If there is considerable local interest in the project, consideration should be given to presenting relevant information in a local newspaper, community noticeboard or website.

2.1. Scoping meeting

Holding a scoping meeting will help define the level of detail of information necessary and ensure that all of the likely significant impacts that must be covered in the EIA Report are identified as early as possible; and that consultees and stakeholders are given an opportunity to discuss and recommend the survey methodologies that will be used for the environmental assessment. We will also use this opportunity to ask them to make any useful information available to you.

It is vital that those invited to attend the scoping meeting or comment on the proposal are well prepared and able to clearly present the issues that they consider are significant to the project. For that reason you must ensure you send details of the proposal at least two weeks in advance of the meeting, so they have time to be considered.

You will need to provide the following information to stakeholders in advance of holding the scoping meeting:

- A map sufficient to identify location and extent of your forestry project;
- A description of the nature and purpose of your forestry project and its likely effects on the environment;
- Issues log; and
- Any other information that you wish to provide, for example, potential mitigation measures or possible alternatives.

If you do not hold a scoping meeting we will still require you to provide the information stated above and will consult independently before adopting our scoping opinion.

2 Consultation bodies are: Local authorities, Scottish Environment Protection Agency (SEPA), NatureScot, Historic Environment Scotland (HES) and any other body designated by any enactment (including an Act of the Scottish Parliament or an instrument made under any such Act) as having specific environmental responsibilities.

Participants at the scoping meeting will be expected to:

- Have already considered any outline proposals, sent in advance, in light of their knowledge and particular interest in the site;
- Ask the applicant to clarify any issues they are unclear about;
- Be in a position to make recommendations relating to the application on behalf of their organisation, for example, survey methodologies;
- Provide information about the site that may not be known by others;
- Highlight the nature and degree of any site sensitivities; and
- Be prepared to suggest ways in which potential site sensitivities or conflicts might be overcome.

Scoping meetings must focus on the likely significant effects that may occur as a result of the proposed EIA forestry project.

EIA is not an opportunity to obtain information that is desirable for other purposes. Information will only be requested when it is essential, not merely desirable, to the decision on the project or where it would influence conditions that may be imposed. Whenever stakeholders have identified an issue as potentially significant they must be able to clearly explain and justify how they have made that assessment.

Issues raised that are not likely to cause a significant effect on the environment can be addressed in the design of the forestry project in accordance with the UK Forestry Standard (UKFS). Record these in the Issues Log along with the reason they are not considered to be significant and include as an appendix to the EIA Report. This will provide a written record that these 'other' issues have been considered and mitigated during the project planning process.

Appendix 1 provides a suggested approach for conducting a scoping meeting.

2.2. Scoping report

It is essential you take someone with good administrative skills to capture the detail of the proceedings, as you will be required to prepare a scoping report following the scoping meeting. Since the scoping of the assessment should also be reported within the EIA Report the effort expended in producing the report will not be wasted.

There is no formal layout for the scoping report but it should cover:

- Description of the site
- Description of the proposals, consider:
  - Objectives and needs
  - Physical characteristics
- Identification of likely significant impacts and for each:
  - Currently known baseline
  - The likely effects on the receiving environment
  - Assessment/survey methodology to be used in the EIA Report
- Conclusions
  - An explanation should also be provided on how decisions have been reached as to why particular issues have been scoped 'in' or 'out' of the assessment. You could use the issues log for this purpose.

The scoping report must be circulated and agreed with all participants following the meeting, as we will refer to this when writing our scoping opinion.

2.3. Scoping opinion

Adopting a scoping opinion will not preclude Scottish Forestry from requiring the applicant to submit additional information in connection with the application for consent. Pursuant to Regulation 6 and in order to reduce the likelihood of later requests for additional information relating to the forestry project, we expect the EIA Report to cover in detail the items that have been identified in our scoping opinion as likely to cause a significant effect on the environment.

If further significant issues are identified during the assessment process, that were not raised during scoping, these must also be fully considered in the EIA Report.

3. EIA Report

A well-prepared EIA Report will demonstrate that the likely significant effects associated with a proposal have been considered in depth. Both the EIA process and the preparation of the EIA Report should improve communication between all of those with an interest in the proposal, including the consultation bodies, NGO's and special interest groups. The EIA Report must also be made available to the public to allow anyone with an interest a chance to read and make comments about the proposals before we reach our decision.

3.1. EIA Report format

As the EIA Report is intended for Scottish Forestry, consultees, organisations with an interest in the forestry project and the public, it must be written so as to communicate with all these audiences. It should therefore be written in plain English as a well-structured and impartial account of the site, project, and impacts.

Be objective when preparing your EIA Report, you should not understate adverse effects or over-emphasise beneficial ones. The EIA Report 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 clearly identified.

There is no set format in the EIA Regulations for an EIA Report, but in order for it to be easily understood we expect that it will:

- Be well organised with numbered pages and paragraphs;
- Have a table of contents identifying a clear structure with a logical sequence to address the various stages of the process;
- Read as a single document with appropriate cross-referencing, this includes between sections, appendices, addenda, or amendments;
- Make use of maps, diagrams and tables, where they will aid understanding;
- Avoid jargon as far as possible;
- Be concise, comprehensive and objective and be written in an impartial manner without bias;
- Clearly explain any complex issues;
- Use appendices for detailed technical information, so as to simplify the main document text;
- Use consistent terminology and include a glossary, where necessary; and
- Use scientifically established facts as far as possible. Acknowledge all external sources of information including references to books, papers, reports and opinions from experts, specialists or other stakeholders.

It is also considered good practice for an EIA Report to include a summary of each issue raised by consultees and identified in the scoping opinion, highlighting where it is dealt within the report, this could be presented in a table.

Specific aspects that must be included within the EIA Report are:

- A concise Non-Technical Summary (without jargon and easy to understand), this should be easily identifiable and accessible within the report and must include a description of the purpose, nature and scale of the project, a brief resume of the information presented within, detailing key issues relating to environmental elements and the final determination of impact significance and conclusions;
- A description of the consent procedure and how the EIA fits within it;
- Baseline conditions of the site;

- A full description and comparison of the alternatives studied;
- Predicted impacts (nature, extent and magnitude);
- Evidence of effective consultation as done through the scoping process but also through input and feedback from stakeholders;
- A clear explanation of the methods used to assess each environmental factor, proportionate to its importance. Include a note on the methods and techniques used in surveys, these can be in an appendix;
- Proposed mitigation or compensation measures; and
- The significance of unavoidable/residual impacts for each environmental factor.

It is vital to 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.

The Chartered Institute of Ecology and Environmental Management (CIEEM) *Guidelines for Ecological Report Writing* provides good general advice for report writing that can be applied to EIA. https://cieem.net/resource/guidelines-for-ecological-report-writing/

Appendix 2 recommends a layout for the EIA Report.

3.1.1. Competent expert

A good quality EIA Report must be prepared by competent experts who understand the principles of EIA and the technical aspects for carrying out an effective assessment and communicating the findings in a professional report.

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 addition to silviculture, assessments may require specialist knowledge in relevant areas, for example, landscape design, priority habitats and species, archaeology, soils, geology and hydrology.

Professional assistance is available from a 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. We would also recommend accessing professional assistance for compiling your EIA Report, as the presentation of the document is very important for ensuring that the analysis of the information is understood and that any amendments are appropriately dealt with.

As competent authority for EIA forestry projects we must also have experts in place to be able to evaluate the EIA Report, judge its quality, assess the analysis and recommendations and ask for appropriate revisions. To ensure we are consistent in our approach to assessing projects for EIA consent, we have established a complex case support team to provide support to our Conservancies. Specialist advice is also available to our staff from internal specialists on landscape and culture, environmental policy, land use and climate change; and from subject matter experts at Forest Research.

3.1.2. Scheduling field work

Carrying out the assessment can involve various elements that are time-critical, for example, if you need to assess the impact of the project on breeding birds you will only be able to do this at certain times of the year. Planning the timing at the outset is therefore important and the following elements should be considered:

- Bird surveys – different species will have varied seasonal and within day activity patterns. Surveys should be undertaken when birds are likely to be most active;
- Bat and mammal surveys – during periods of peak activity;

- Vegetation surveys – should be done in the relevant growing season;
- Water sampling – if a catchment-based assessment is required, sampling must be done in high flow conditions;
- Archaeological walkover surveys – should be undertaken when there are suitable ground visibility conditions; and
- Local consultation – time should be allowed for discussion and presentation to community councils or community groups.

3.2. Describing the site

The site description must provide a general picture of the site as it currently exists. This sets the 'baseline', against which the alternatives and the project itself can be assessed. The development of the baseline can take up a large portion of the time committed to the EIA. Although it is important to describe many aspects of the site, the provision of detailed data should be restricted to only those factors considered during the scoping process as likely to be significantly affected.

If you introduce data into an assessment, you should quantify this, where appropriate, so that analysis can take place. Use established methods for data collection to ensure that data can be statistically validated, for example, there are accepted methods for undertaking breeding bird surveys. 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, for example, expert testimony, respected opinion and analogous situations are acceptable in an EIA Report provided they are derived from competent attributed sources, for example, the British Trust for Ornithology.

Consider the site in relation to its surroundings, when creating maps ensure that they show 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 and where relevant in relation to other adjacent sites, for example, settings of features and sight lines associated with their function. Consider water issues that may impact features beyond the site boundary, for example, fish spawning grounds or downstream uses such as a distillery, public or private supply.

The baseline must also include a note about the stability of the existing state, so if the forestry project were not to go ahead the future environmental trends are identified – the 'do-nothing scenario'. Outlining the do-nothing scenario is necessary in order to realistically assess the impact of the proposal, for example, are trees likely to regenerate naturally on the site, or would grazing pressure prevent this?

Depending on your site and what factors have been identified in scoping, the types of information that should be considered for the baseline scenario must relate directly to the impacts identified:

- **Population and human health**: transport use, economic activities, recreational users, etc.
- **Biodiversity**: ecosystems, specific flora and fauna, habitats, protected areas, etc.
- **Land, soil, water, air and climate**: topography, geology, soil types and quality, agricultural land, surface and ground water quality, climate trends, etc.
- **Material assets, cultural heritage and landscape**: infrastructure facilities, archaeology, landscape, historical and religious sites, etc.

These factors were broadened in changes to the legislation in 2017 to include climate change, risks of major accidents and disasters, biodiversity and use of natural resources.

For forestry projects the following should be considered:

- Climate change adaptation of the project itself and its capacity to adapt to impacts. This is particularly relevant with regards to species selection and site suitability for woodland creation.

- The potential of the project to cause accidents or disaster (for human health, cultural heritage, and the environment), and the vulnerability of the project to potential disasters or accidents (for example flooding or landslide).
- Biodiversity is a much broader concept than just the flora and fauna referred to in previous legislation and so now refers to the interactions between species and ecosystems. Key issues to be addressed include ecosystem services, the loss or degradation of habitats, the loss of species and genetic diversity. Any benefits to these should also be considered.
- The use of natural resources is not as relevant to forestry as it would be to other developments. However consideration should be given to protecting natural resources and also maintaining their availability for human activity.

3.2.1. Population and human health

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, however people who may be affected by a proposal are more likely to react constructively, if they are contacted earlier. Local people are an invaluable source of information, which may not be officially recorded, for example, the location of private water supplies and associated infrastructure.

We recommend following the procedure for stakeholder engagement as set out in our EIA for Forestry Projects and Woodland Creation Application guidance. The Confederation of Forest Industries (Confor) has also produced a stakeholder engagement guidance note, which can be found at http://www.confor.org.uk/media/246576/stakeholder-engagement-guidance-note-dec-2015.pdf

Social and community factors are important elements in the decision-making process. In determining the importance of the project to local people, consider:

- The location of sensitive neighbouring properties and the numbers of occupants likely to be directly affected. You should also include other properties which although located elsewhere, may be the subject of secondary impacts, for example, through increased traffic flows from timber transport or recreational activity;
- Other potential receptors of impacts, noting in particular transient populations, such as tourists, walkers or cyclists and where relevant, indicate the time, duration or seasonality of any of those activities. Where relevant, describe the features in the existing environment which each group uses or values; and
- Any commercial activity which is likely to be significantly affected; will the project stimulate additional development or reduce economic activity?

3.2.2. Biodiversity

You must employ a specialist with an appropriate level of experience to identify, quantify and evaluate the potential significant effects of the forestry project on habitats, species and ecosystems. The local knowledge of land managers, local nature groups and environmental NGOs[3] can also be helpful in providing comprehensive detail.

It is expected that recognised and accepted survey methods are used to ensure that information collected is robust and results can be easily interpreted and compared with those from other investigations, for example, using the National Vegetation Classification (NVC) to describe vegetation. During scoping stakeholders can advise on specific sources of information and the survey methodologies to be used for each particular interest.

3 Scottish Environment LINK is the forum for Scotland's voluntary environment organisations, with over 35 member bodies representing a range of environmental interests. http://www.scotlink.org/

Where survey methods have been altered to meet the needs of an assessment or differ from accepted good practice this should be explained and justified and the reliability of results discussed.

The baseline for each ecological feature should be described clearly, objectively and succinctly. Use figures and plans where necessary and summarise information in tabular format. Where a great deal of information has been produced further details, such as survey reports and associated maps should be cross-referenced and placed within the appendix section of the EIA Report.

You should also record the status of each ecological feature by reference to any conservation designation[4], for example, The Conservation (Natural Habitats, &c.) (EU Exit) (Scotland) (Amendment) Regulations 2019, Birds of Conservation Concern (BoCC), UK Biodiversity Action Plans (UKBAP), Scottish Biodiversity List (SBL) etc. Having considered the national status, regional and local importance can then be described, check if there is a Local Biodiversity Action Plan that can be referred to.

In some situations there will be a requirement against revealing particularly sensitive information, for example, the breeding location of protected species. If this applies to your project we will advise on how best to handle this during the preparation of the EIA Report.

NatureScot provide advice on potential licensing requirements for surveys regarding legally protected species. https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/licensing/species-licensing-z-guide

To ensure the assessment provides the level of information needed to adequately consider projects in light of biodiversity legislation and policy, when preparing the ecological component of an EIA, Scottish Forestry recommends CIEEM *Guidelines for Ecological Impact Assessment in the UK and Ireland*. https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/

3.2.3. Land, soil, water, air and climate

Set the proposal in context by providing a description of the current land use. In some areas scoping may have identified the diversity of land use and potential cumulative impact as an issue. If so, describe the overall area and percentage of forestry, which can be set out in 5, 10 and 15 Km radii from the centre of the site in question. In areas with a high proportion of forest cover, break down the areas by woodland type, age and species. Recent site history is also useful, for example, land use change in the last five years.

Soil type(s) and phases should be identified from a site-based soil survey. EIA Reports should use the FC soil classification system, guidance on collecting soil data can be found in the FC field guide 'The Identification of Soils for Forest Management' and in FC Bulletin 124 'An Ecological Site Classification for Forestry in Great Britain'.

Information resources on Scotland's soils are available at https://soils.environment.gov.scot/

4 The Joint Nature Conservation Committee (JNCC) provides a collation of many different "designation" lists including country-specific lists, and lists produced by national and International conventions or directives. https://hub.jncc.gov.uk/assets/478f7160-967b-4366-acdf-8941fd33850b

Where significant effects on the water environment are likely to occur, specialist advice is essential. It is particularly important that considerations are not confined to the on-site, direct impacts of a proposal but applied equally to off-site, indirect effects, for example, the downstream effects of projects from changes in surface water run-off.

Information resources for Scotland's freshwater environment are available at https://www.environment.gov.scot/our-environment/water/scotland-s-freshwater/

Consideration must now be given to a project's ability to adapt to climate change. You should consider and describe any likely implications for your site in relation to the potential risk of major impacts such as fire, droughts, extreme rainfall, storm winds and pest and disease outbreaks. This will allow for the development of appropriate mitigation or adaptations to the project, for example, creating more diverse and resilient forests.

Tools for calculating the carbon implications of forestry projects and information resources on developing more resilient forests and climate change adaptation are available at https://www.woodlandcarboncode.org.uk/

https://forestry.gov.scot/forests-environment/resilient-forests https://www.forestresearch.gov.uk/research/delivering-resilient-forests/

https://www.forestresearch.gov.uk/research/climate-change-adaptation/

3.2.4. Material assets, cultural heritage and landscape

The location and ownership of any material assets that could be significantly affected by the project should be identified and described, for example, roads, neighbouring properties, public and private water supplies, gas mains, power lines, radio and telecommunication masts etc.

Any cultural heritage interests should be identified, 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 will need to consider 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, we recommend you seek specialist advice on presenting these aspects in the EIA Report.

Information resources on forests and the historic environment are available at https://forestry.gov.scot/forests-environment/historic-environment

Where a project is identified as having a significant impact on the landscape we would expect a Landscape and Visual Impact Assessment (LVIA) to be undertaken to assess the effects of change. A copy of the 'Guidelines for LVIA' can be obtained at https://www.landscapeinstitute.org/technical/glvia3-panel/

Information resources on forests and landscape are available at https://forestry.gov.scot/forests-environment/landscape

3.3. Describing the project

Remember that the EIA process is an iterative one and the final design of the project may change from the original idea. The EIA Report should describe the final design, which accounts for the analysis of impacts and proposed mitigation.

The project description should comprise:

1. Purpose: A statement of the objectives and outcomes of the project; such as productive, native or mixed use woodland creation, providing a sustainable supply of timber for local businesses, restoring habitat networks, helping mitigate climate change through carbon sequestration, improving access in existing woodland to enable sustainable timber production etc.

2. Site Plan and Design: Make effective use of maps and visualisations to identify the layout and all the physical characteristics of the project, both temporary and permanent, for example, roads or other access, borrow pits, culverts and water crossings, fencing, cultivation and drainage, species choice or woodland type include detail on what will happen to areas that will remain unplanted and any affected 'sensitive areas'. For projects with substantial detail consider using multiple maps to avoid confusion. Ensure maps have a title, are at an appropriate scale between 1:10,000 and 1:5,000 use 1:2,500 or 1:1,250 scale for smaller areas requiring clarity and use a legend which clearly identifies each characteristic.

3. Size/scale: Include a tabular statement of the areas involved such as planted area (allocated to each species and/or woodland type), open ground, length of fencing, cultivation, fertiliser/herbicide application etc. For roads and quarries include design specifications, quantify excavations and volume of material to be removed including any tree felling required. An estimate of any waste likely to be produced by the project should also be provided.

4. Alternatives: The assessment of alternatives should be targeted and focused on the comparison of impacts between the main options studied and should include an indication of the main reasons for choosing the selected option. Include the 'do-nothing' option i.e. no planting or road as well as any mixed option, for example 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, however alternative road lines or quarry sites should be presented for construction projects. A clear presentation of alternatives, and how they have been assessed lends transparency to the process and can improve public acceptance and support for projects. If no alternatives are described then a clear explanation of why they were not considered must be included in this section. Outlining how the scheme has evolved from the beginning will also help stakeholders understand the process that has been involved in reaching the current design, this can be captured in the appendices section, for example, successive versions of a planting design revised following feedback from stakeholders or survey results becoming available.

5. Methods: How will you implement the project? Include details of fencing, cultivation, drainage, pesticide and fertiliser application, harvesting, road construction, maintenance and use etc. You should include the proposed timescale for implementation and any proposed phasing of the work. You may be required to provide a detailed habitat management plan, construction method statement and/or diffuse pollution control plan either within the EIA Report, or later as a condition of consent.

3.4. Predicting the environmental effect

Scoping will have identified which factors may be significantly affected in relation to the proposal, now you must predict the changes that would result in these factors if the forestry project were to proceed.

Predicting environmental impacts involves anticipating, modelling or forecasting the changes that would be brought about by the project during the short, medium and long-term, when compared to the baseline. Some changes will be permanent but others will be temporary, for example, sediment run off from a planting site could be short-term and temporary, even then depending on the sensitivity of the surrounding environment it is possible that the effect could be long-term or permanent, while construction of a new forest road will result in a short-term and permanent change.

The Information required for impact prediction will generally include:

- The likelihood of the impact occurring at the magnitude anticipated;
- The likely duration of the impact and whether it would be continuous, intermittent, immediate or delayed;
- The extent to which the impact could be reversed; and
- The feasibility and effectiveness of any measures designed to mitigate the impact.

Give details of the methods used to predict the impact, these should be objective and quantifiable. Where the impacts are not definitive you can make a prediction, however it is vital you state any assumptions and reference analogous situations or research results to support the conclusions and make these transparent and verifiable to the reader.

When assessing the anticipated change from the current baseline, it is important to consider effects not in isolation, but together. Cumulative effects are changes to the environment that are caused by an action in combination with other actions. They can arise from:

- The interaction between the various impacts within a single forestry project;
- The interaction between different projects in the same area, these may be interdisciplinary, for example, afforestation and windfarm development; or
- Additive impacts resulting from incremental changes caused by the project together with other projects already being planned or recently consented.

3.5. Determining significant impacts and identifying mitigation

This section of the EIA Report should include a description of the nature, scale and significance of the effects. Against each issue you should record the concerns raised by each consultee and specify how these will be addressed through detailed mitigation measures, clearly describing the adverse impact each measure is intended to avoid, mitigate or compensate when implemented. You should also describe the effectiveness of such measures, their reliability and certainty and where required a programme for monitoring their success.

The concept of significance considers whether or not a forestry project's impact could be determined to be unacceptable in its environmental and social contexts. The assessment of significance should rely not only on informed, expert judgement about what is important, desirable or acceptable with regards to changes triggered by the project in question, but must also be defined in a way that reflects what is valued in the environment by regulators, consultees and other relevant stakeholders.

Assessing the significance of impacts should not be confined to adverse effects, consideration should also be given to beneficial effects, for example, the creation of new native woodland is likely to provide significant environmental benefits. For each issue you must clearly state whether the potential impact is significant or not, describe and quantify the significance of all the possible changes as accurately as possible.

You can summarise the potential and residual effects in a table, divide the effects of predicted changes into categories, i.e. Population and Human health; Biodiversity; Land, soil, water, air and climate; Material

assets, cultural heritage and landscape; and set out the basis on which the changes are predicted. For each issue, compare the existing (baseline) situation to the proposed, stating whether the effect will be beneficial or adverse, short, medium or long-term and temporary or permanent.

When determining significance you must include the methodology used to reach your conclusion. A common approach that we would endorse for forestry projects is the multi-criteria analysis which is qualitative and relies on expert opinion. Two common criteria that can be used in this method are sensitivity and magnitude.

Sensitivity is understood as the sensitivity of the environmental receptor to change, including its capacity to accommodate the changes the forestry project may bring about.

Magnitude considers the characteristics of the change (timing, scale, size, and duration of the impact) which would probably affect the target receptor as a result of the proposed forestry project.

The tables below can be used to assess sensitivity and magnitude and thereby significance of effect. Table 1 provides examples of scale for both criteria. Table 2 combines these into a simple matrix of significance.

It is particularly important to avoid bias in this section. The EIA Report must be forthright and honest in recognising any negative impacts, be clear about the importance and ability of the receptor to absorb change. When assessing the significance of impacts you should take into account any proposed mitigation; the assessment applies to the residual impacts of the forestry project, which can be defined as any effect which would remain following the implementation of committed mitigation measures.

Table 1: Examples of scale

Sensitivity	Definition
High	High importance and rarity, national or international scale. The receptor has low capacity to absorb change without fundamentally altering its present character.
Medium	Medium importance and rarity, regional scale. The receptor has some tolerance of the proposed change subject to design and mitigation.
Low	Low or medium importance and rarity, local scale. The receptor is tolerant of the proposed change subject to design and mitigation.
Magnitude	**Definition**
Major	Total loss of resource and/or quality and integrity of resource over a significant area; severe change/damage to key characteristics, features or elements for more than two years.
Moderate	Loss of resource, but not adversely affecting the integrity over a significant area; partial loss of/damage to key characteristics, features or elements, for more than six months but less than two years.
Minor	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements.

Table 2: Significance matrix

Magnitude	High Sensitivity	Medium Sensitivity	Low Sensitivity
Major	Major	Major	Moderate
Moderate	Major	Moderate	Minor
Minor	Moderate	Minor	Negligible

Effects predicted to be minor or negligible are considered to be manageable and are therefore 'Not Significant'. Effects assessed as moderate or major are considered to be 'Significant'. This creates a scale of significance that can be used in the EIA Report when summarising the impact on the receptor:

- Major Adverse
- Major Beneficial
- Moderate Adverse
- Moderate Beneficial
- Minor Adverse
- Minor Beneficial
- Negligible

It may not be possible to mitigate all significant effects but you must ensure that you identify any residual impacts (those remaining after mitigation) and their significance. Priority should be given to avoiding impacts (prevention measures), while remediation and compensatory measures should only be considered as a last resort.

Table 3: Types of mitigation

Type of measure	How it works
Measures to prevent	Impact avoidance by: ▪ Changing techniques, not undertaking certain projects or components that could result in adverse impacts. ▪ Changing the site, avoiding areas that are environmentally sensitive. ▪ Putting in place preventative measures to stop adverse effects from occurring.
Measures to reduce	Impact minimisation by: ▪ Scaling down or relocating the project. ▪ Redesign elements of the project. ▪ Using a different technique. ▪ Taking supplementary measures to reduce the impacts either at the source or at the receptor.
Measures to offset	Offset or compensate for residual adverse impacts that cannot be avoided or further reduced in one area with improvements elsewhere with: ▪ Site remediation/restoration.

When reviewing the proposed mitigation measures consider the following:

- Are they specific to the predicted effect?
- Is the action proposed feasible?
- How effective will it be?
- How will you verify that it has worked?

Applicants are strongly advised to give careful consideration to the wording of undertakings to mitigate. The commitment to all mitigation and monitoring measures needs to be made clear and specific in the EIA Report, terms such as *'is recommended'* or *'should be considered'* must be avoided, to ensure that they clearly result in actions that can be readily identified and acted upon by enforcement procedures. These commitments will be conditioned in the EIA consent.

For ease of reference and to provide more certainty as to the requirements with which you must comply, mitigation measures contained in an EIA Report can be included in a 'Schedule of Mitigation'. This may be a separate section or Appendix to the EIA Report. The schedule should comprise a list of relevant measures and a timescale for implementation, but should not elaborate on the reasoning or expected effectiveness of those measures, which should be explained within the main body of the EIA Report.

4. Consultation and decision

To ensure that all significant issues have been adequately covered; and that there is sufficient information on both the project and reasonable alternatives to assess the likely environmental effects of the work and any proposed mitigation - we will - prior to formal submission, publication and consultation, accept a draft copy of the EIA Report for review, as set out in our Woodland Creation Processing Agreement.

The EIA process ensures that the consultation bodies and the public are given an opportunity to express their opinion on the EIA forestry project. We must take into account all the environmental information, including the results of the consultation process, before any decision is made. The EIA Regulations therefore set out publicity and consultation procedure which must be followed when an EIA Report is submitted to accompany an application for EIA consent.

We cannot give our decision until the 30 day period specified in the newspaper advertisement, our letter seeking consultees comments, and the EIA register have expired. We must make the consent decision within six months (or such longer period as agreed with the applicant) of formally receiving the EIA Report or any supplementary information or evidence we have requested you to provide.

You will need to make at least two hard copies of the EIA Report available for public viewing during normal office hours. One will be made available at the local Conservancy office and the other at a venue in the locality of the EIA forestry project, where members of the public will have sufficient opportunity to review, for example, a local shop, service point or library. Sufficient copies must also be made available for consultees to view, and should be provided in either hard or digital copy, or by hosting the EIA Report in an online file sharing service.

It is vital those consulted concentrate on making representations about the project and clearly set out their opinion as to the effects on the environment and the significance of the effects. These representations should indicate whether the information and conclusions contained within the EIA Report are a sound basis for informing us as to the effects on the environment.

The fact that a project is subject to the EIA process does not preclude modifications or amendments to it during the consideration of the application. These may be made after the EIA Report has been submitted, the iterative process of EIA may lead us or consultees to seek changes to the proposals to avoid or further reduce environmental effects.

From a procedural point of view, whether the modifications can be accepted as an amendment, without a new application being made, is a decision for us. The key questions will be:

- Are the modifications so extensive as to amount to a different project proposal? If so, a new application should be made.
- Are the modifications significant but not extensive? If so, a new application is generally not required but we must consult on, and publicise the proposal again.
- Are the modifications not so significant as to merit consultation and publicising generally? If so it may be appropriate to approach selected consultees for comment.

As competent authority we must also carry out our own separate assessment of the significant effects of the EIA forestry project on the environment, which will be included in the consent decision. Our reasoned conclusion will take account of all the environmental information, including the content of the EIA Report, the views of consultees (including the public), and where appropriate, any additional information or evidence provided.

If consent is granted and the project proceeds, then the applicant is legally obliged to adhere to the specific mitigation measures and monitoring commitments contained in the EIA Report, as modified by any conditions attached to the consent. Monitoring requirements may include reporting to us.

Further information on consultation and decision stages of the EIA process can be found in the guidance booklet EIA for Forestry Projects

References

The Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017

Environmental Impact Assessment Handbook, Guidance for competent authorities, consultation bodies, and others involved in the Environmental Impact Assessment process in Scotland

Scottish Planning Series, PLANNING CIRCULAR THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 – Scottish Government

Planning Advice Note, 1/2013, Environmental Impact Assessment – Scottish Government

Environmental Impact Assessment of Projects, Guidance on Screening – European Commission

Environmental Impact Assessment of Projects, Guidance on Scoping – European Commission

Environmental Impact Assessment of Projects, Guidance on the preparation of the Environmental Impact Assessment Report – European Commission

Appendix 1 – Conducting a scoping meeting

The following approach is recommended when holding a scoping meeting:

Introduction, apologies, purpose and content of the meeting

- Ask for introductions from those present, who they are and which 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, which is not to solve problems immediately but to discuss and decide which issues need to be considered during the EIA process.
- Explain that once the scoping report has been accepted Scottish Forestry will adopt a scoping opinion and write to the applicant formally listing the issues that must be addressed and inform those attending where copies of that document will be made available for inspection.

Background and outline of proposals by the applicant

Applicant outlines their proposals, this is an opportunity to clarify any areas of uncertainty, for example, type and location of fencing, cultivation methods, species choice etc.

Raising of relevant issues and concerns by each participant

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 by the applicant. 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.

Summary and close

The 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 2 – Recommended layout for an EIA Report

High resolution PDFs should be provided. Applicants are advised not to prepare printed copies for consultation until advised by Scottish Forestry to do so.

1. Non-technical summary

This should be written in simple non-technical terms to describe the various options for the proposed forestry project and the mitigation measures against the potential adverse impacts which could result.

2. Introduction, scope and assessment methodology

A description of the consent procedure and how the EIA fits within it with, including an explanation of why the assessment was called. Conclusions of the scoping meeting and evidence of any other stakeholder engagement. A description of the survey and assessment methodology.

3. Site description

A description of the relevant aspects of the current state of the environment (the 'baseline scenario') and an outline of the likely evolution thereof without implementation of the forestry project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge. Include details as appropriate on:

- population and human health;
- biodiversity;
- land, soil, water, air and climate;
- material assets, cultural heritage and landscape; and
- any statutory designations.

4. Description of project

The description of the proposed development in the EIA Report should comprise:

- Information on the site location, design layout, and scale of the project.
- A description of the physical characteristics of the project.
- A description of the main characteristics of the operational phase of the project.
- An estimate of the type and quantity of expected residues and emissions.

5. Site selection and alternatives

A description of the reasonable alternatives (for example in terms of forestry project design, technology, location, size and scale) studied by the applicant, which are relevant to the proposed forestry project and its specific characteristics; and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

6. Prediction of impacts

A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.

7. Significant impacts and mitigation

A description of the expected significant adverse effects of the forestry project on the environment specifically:

- population, human health;
- biodiversity;
- land, soil, water, air and climate; and
- material assets, cultural heritage and landscape.

A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements, covering both the construction and operational phases.

8. Summary statement of the significant impacts

The significance of unavoidable/residual impacts for each environmental factor.

References

A reference list, detailing the sources of information used for the descriptions and assessments included in the EIA Report. It is considered good practice to set out within the qualifications and experience of all those involved in collating, assessing or presenting technical Information.

Appendices

Maps and Figures - location, soils, hydrology, protected areas, operations etc.

Surveys

Issues Log

Schedule of Mitigation

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