

NATIONAL ENVIRONMENTAL ASSESSMENT HANDBOOK

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**ENVIRONMENT
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SUMMARY

Environmental Assessment (EA) may be defined as a process designed to ensure that all potential environmental effects are satisfactorily assessed and taken into account in the planning, options selection, design, authorisation, construction, operation, maintenance, and where appropriate, decommissioning stages of a project. The need for environmental assessment to be integral to the work of the Environment Agency has been recognised at a national level by the Policy Group (see Appendix I).

The Handbook provides national guidance on the environmental assessment of the Agency's internal works and activities which result in a physical change to the existing environment. The Handbook is therefore relevant to all members of staff involved in such projects, as well as their consultants. Guidance is included for both staff who have had little experience of environmental assessment and those that are more familiar with the process.

The Handbook has been written largely in response to the findings and recommendations contained in the Head of Internal Audit report on 'Environmental Assessment of Internal Works and Projects' (NAT\512) of July 1997. The initial response to the Internal Audit's recommendations was the preparation and approval of a Policy Paper on the 'Environmental Assessment of Projects' in January 1998. One of the key deliverables highlighted in the Policy Paper is the production and maintenance of a 'National Handbook on EA of Internal Projects'.

All the Agency activities should be subject to some form of environmental appraisal before they go ahead, whether this involves a formalised environmental assessment process or not. This is necessary to fulfil the Agency's duties under the Environment Act 1995. Environmental assessment is formally required for certain types of projects and for others likely to have significant environment effects. Two sets of environmental assessment Regulations may be applicable for the Agency activities. These are Statutory Instrument 88/1217 (as amended), which applies to land drainage improvement works and Statutory Instrument 88/1199 (as amended), which applies to new works where planning permission is required. Where such projects are likely to have significant effects upon the environment, an Environmental Statement (ES) has to be produced.

In cases where an Environmental Statement is not required, the Agency produces other types of documentation to record any significant environmental impacts and ensure that all necessary mitigation and enhancements measures are incorporated for all projects. All documents are signed-off internally to ensure that they represent an Agency view, as part of a quality assurance system for environmental assessment.

Essentially, environmental assessment is a multi-functional activity. Early involvement of relevant internal specialists is crucial, both to identify appropriate options at the outset and to programme environmental assessment requirements into project timescales. It also provides the mechanism to involve and consult external organisations and individuals on the Agency's proposals. Environmental assessment should not be an 'add-on' after the project has been designed.

There is a need to ensure that environmental assessment is not merely a procedural

requirement and that designs and mitigations are implemented successfully. Checks should be made to ensure that measures specified within the environmental assessment documentation are incorporated accurately into the later stages of projects (eg. design specifications and contract documentation). All staff will be responsible for ensuring that projects are implemented in an environmentally sensitive manner throughout the process. On-site supervision of contractors may require specialised environmental staff in some cases where complex mitigation measures or sensitive sites are involved.

All Regions should ideally have dedicated Environmental Assessment staff who have been assigned responsibility for the coordination, quality assurance and auditing of the environmental assessment process in order to maintain and develop high standards. To ensure independence, these staff should have a separate reporting line to those promoting the activities that are being assessed. This arrangement is currently only in place in some Regions and in the Regions without dedicated environmental assessment staff, it is essential that procedures are implemented to ensure that independence is maintained throughout the EA process and particularly to fulfil the quality assurance requirements described in this Handbook.

Environmental assessment is an evolving process and the Agency's practices are constantly being improved and refined. It is therefore intended that this Handbook is periodically updated to reflect these changes (note that revisions should be entered in the record of amendments overleaf). In the future, for example, it is hoped that procedures to monitor anticipated impacts and the success of mitigation measures can be developed further. The Agency is also developing their approach towards Strategic Environmental Assessment to enable assessment to move up the decision making process from projects to programmes and on to plans and policies as well as updated guidance for external developers.

Note that a form to feedback comments on the Handbook to the National Centre for Risk Analysis and Options Appraisal is included (see page iv).

RECORD OF AMENDMENTS

NATIONAL ENVIRONMENTAL ASSESSMENT HANDBOOK Environment Agency Internal Works and Activities

- 。 Please ensure that when amendments are issued, the record below is maintained to keep the contents up to date.

Amendment No.	Date	Amendment	Made by

FORM TO FEEDBACK COMMENTS

NATIONAL ENVIRONMENTAL ASSESSMENT HANDBOOK Environment Agency Internal Works and Activities

To: Options Appraisal Manager, National Centre for Risk Analysis and Options Appraisal

From: Department: Region:

I have the following suggestions for improvement of the format of the text:-

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I would like to see the following information in a future version of the handbook:-

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I have the following additional comments to make:-

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Please append any additional information

Signed:

Position:

Date: / /

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PART 1. INTRODUCTION TO THE HANDBOOK

1.1 Purpose of the Handbook

This National Handbook has been produced for all Environment Agency's Regional and Area staff, and their consultants, to explain how the environmental implications of the Agency's direct works and activities that result in a physical change to the environment should be fully considered before they go ahead. The guidance included in the Handbook will ensure that environmental assessment is carried out in a consistent and proportionate way, that the Agency is meeting its statutory obligations for all the works and activities it promotes and that good practice is followed where appropriate. The Handbook promotes a multi-functional approach towards environmental assessment, with the implementation of appropriate procedures being a corporate responsibility.

The overall objective of the Handbook is to assist the Agency in delivering the statement on environmental assessment included in the Policy Paper on the 'Environmental Assessment of Projects' endorsed by the Environment Agency's Policy Group in January 1998 (see Appendix I), which states that:

'The Environment Agency will discharge its environmental assessment (EA) duties under the relevant legislation, including SI 88/1199 and SI 88/1217, in a consistent manner and to high standards. EA is seen as integral to the work of the Agency and good practice for EA's for both internal and external projects will be followed. The Agency will expect applicants and developers to adopt equally high standards in the assessment of any environmental impacts of proposed developments.'

The aims of the Handbook are:

- to provide an understanding of the environmental assessment process to all those involved;
- to clearly set out the minimum requirements that must be met by the Agency when assessing its own works and activities;
- to recommend good practice;
- to provide a national interpretation of the relevant legislation;
- to provide guidance on which Agency works and activities should be subject to environmental assessment;
- to establish a quality assurance system for environmental assessment;
- to provide guidance on integrating environmental assessment with other Agency guidance and procedures, especially project management.

1.2 Who Needs to Use the Handbook?

In the past, the Agency and its predecessor organisations have in general focused on carrying out environmental assessment of projects included in a capital programme and in particular flood defence works. However, environmental assessment should be undertaken for all direct actions undertaken by the Agency which entail physical works, including activities promoted

as individual projects as well as those included in programmes of work. There should be no distinction in principle between the environmental assessment of capital and revenue activities, or between different Agency functions.

This Handbook is therefore relevant to all Agency staff, and their consultants, involved in managing and undertaking direct works and activities that will effect the environment, such as project managers and engineers, and the various environmental specialists and functional representatives who should be consulted on any proposal to ensure all the implications are fully understood and the Agency's duties are being met. For those not familiar with environmental assessment should refer to Part 2 of this Handbook, the more detailed procedures are included in Parts 3, 4, 5 and 6.

There is a Regional Environmental Assessment Contact in every Region (see Appendix II) and these officers will either be able to assist those that need to follow the Handbook, or provide information on where to find further advice.

1.3 Background and Scope

The National Handbook will sets the framework for procedures in the Regions. However, Regions may decide that they also need more detailed guidance for staff to accommodate variations in local circumstances. This approach is consistent with the structure of the National Handbook and it is suggested that under these circumstances that the Regions include additional Regional guidance as separate parts within the Handbook. The elements that could be covered in additional Regional guidelines include:

- details of local contacts and environmental specialists;
- the roles and responsibilities of specific Area and Regional staff;
- details of local designations and issues to consider in judging the significance of environmental effects;
- detailed 'work instructions' for carrying out environmental assessment;
- additional quality control milestones above the minimum included in the National Handbook;
- guidance on specific types of works or activities that are particularly relevant in a Region.

The procedures set out in existing Regional environmental assessment guidelines, that have already been produced in some Regions (see Appendix III), are largely compatible with the procedures included in this National Handbook and as a result it is not anticipated that these Regional Guidelines will become redundant. In fact, this National Handbook has been derived from experience in the Regions.

This Handbook is mainly concerned with the project level environmental assessment of the Agency's works and activities. However, the application of environmental assessment to strategies and programmes of works and activities planned by the Agency is also important and therefore strategic level environmental assessment must also be considered. Agency programmes, such as maintenance programmes, can include a series of individual activities which in themselves are relatively minor but added together may be significant and therefore their implications must also be assessed. Environmental assessment at the project level should be seen as only one tool within the overall 'environmental management' framework.

1.4 Structure of the Handbook

For ease of reference, the National Handbook is divided into six main parts:

Part 1

Part 1 describes the purpose and the background to the Handbook.

Part 2

Part 2 provides an introduction to environmental assessment and briefly explains why and how it is carried out in the Environment Agency.

This Part of the Handbook is aimed at those staff who have had little involvement with environmental assessment.

Part 3

Part 3 describes how the environmental assessment process should be managed, including the roles and responsibilities for different stages in the process, how environmental assessment should be integrated with the Agency's other procedures and responsibilities and the quality assurance system that should be adopted, including key environmental assessment milestones.

This Part of the Handbook is aimed at those staff who are involvement in activities or works which should be subject to environmental assessment, including those promoting or carrying out such activities or works and those assessing there environmental implications.

Part 4, 5 and 6

These Parts of the Handbook explain the procedures for carrying out the environmental assessment process that should be followed for Agency works and activities. The three Parts describe the main stages of the EA process:

- *the Scoping Stage;*
- *Evaluation Stage;*
- *Implementation and Post-Project Stage.*

The aim of these procedures are to ensure that environmental assessment is carried out consistently throughout the Agency and that statutory obligations are met.

This Part of the Handbook is aimed at those staff who are involvement in activities or works which should be subject to environmental assessment, including those promoting or carrying out such activities or works and those assessing there environmental implications.

The main parts of the Handbook are supported by a number of Appendices.

KEY POINTS FROM PART 1 OF THE HANDBOOK

- the procedures set out in this National Handbook must be followed in all the Agency's Regions;
- the National Handbook focuses on the Agency's direct actions which involve physical works and should be followed by all those involved in these activities;
- The National Handbook mainly relates to project level environmental assessment, but it also considers the environmental assessment of Agency programmes.

PART 2. INTRODUCTION TO ENVIRONMENTAL ASSESSMENT

2.1 Introduction

Part 2 of the Handbook provides a brief introduction to the environmental assessment process for those who have not been involved in the process in the past. This includes sections on:

- what is environmental assessment?
- when is environmental assessment required?
- what is an Environmental Statement?
- what are the benefits of environmental assessment?
- the key stages in the environmental assessment process;
- the need for good practice.

The environmental assessment procedures to be followed by the Environment Agency for the works and activities it promotes are described in more detail in **Part 4, 5 and 6 of the Handbook**. More information on the environmental assessment process can be found in the references listed in Appendix III.

For further advice and information on environmental assessment contact:

- *your Regional Environmental Assessment Contact; or*
- *the Environmental Developments Officer at the National Centre for Risk Analysis and Options Appraisal.*

(see Appendix II)

2.2 What is Environmental Assessment?

Environmental assessment is a process by which the likely impacts of a project upon the environment are collated, assessed and taken into account before the project stages are allowed to go ahead. The analysis of the predicted environmental effects of the project enables different options to be considered and the scope for optimising positive effects and modifying or mitigating negative effects during the project design to be made.

The process is iterative, which means that it takes place throughout the life of the project, from initiation, through initial feasibility studies, design, contracts, implementation and beyond. Environmental assessment should not be an 'add-on', carried out once the scheme has been designed and many of the crucial decisions have already been made. The environmental assessment process also provides important information to decision makers also determine whether to authorise a particular proposal.

Environmental assessment can be seen as a tool for dealing with direct actions on the ground

within the overall environmental management framework. In this way environmental assessment has an important role to play in the Agency's contribution to achieving sustainable development.

Throughout this Handbook, environmental assessment (EA) is used to describe the process. The term 'environmental impact assessment' (EIA) and 'environmental appraisal' are also in common use and for practical purposes are synonymous with EA.

The application of environmental assessment to the earlier, more strategic, tiers of decision-making policies, plans and programmes, is known as 'strategic environmental assessment' (SEA). The practical application of SEA is still in its infancy in the UK and to date environmental assessment has primarily been carried out for individual projects. However, SEA is becoming increasingly used and is the subject of a draft EC Directive which, when it is implemented, will require environmental assessment to be carried out for certain plans and programmes. The Agency is developing tools and methodologies to undertake SEA and is already using the approach for multi-project EA of flood defence schemes.

General advice on the environmental assessment process is also available in other guidance produced by the Agency, and its predecessor organisations, including:

- '*Environmental Assessment: Scoping Handbook for Projects*' (Environment Agency, HMSO, April 1996);
- '*Scoping Guidance for the Environmental Assessment of Projects*' (NRA, December 1995);
- '*Further Guidance for the Environmental Assessment of Projects*' (NRA, December 1995).

These documents focus on the scoping of projects (see Part 4 of this Handbook) and are principally intended for use in relation to external developers proposals, however they also include some useful information for internal works and activities. Note that these documents are in the process of being updated and revised versions will be available by the end of 1998.

2.3 When is Environmental Assessment Required?

The requirement for environmental assessment derives from European Community Directive on '*the assessment of the effects of certain public and private projects on the environment*' (85/337/EC), implemented in the UK by means of a number of Statutory Instruments. The principle Statutory Instruments which relate to the Agency's work are the *Land Drainage Improvement Works (Assessment of Environmental Effects) Regulations SI 1217 (1988) (as amended)* and the *Town and Country Planning (Assessment of Environmental Effects) Regulations (1998) (as amended)*. These, and the other legislation relevant to environmental assessment, are discussed in more detail in Appendix IV.

Environmental assessment, as formally required by the environmental assessment Regulations, is only mandatory for certain types of projects and for others projects which are likely to have a significant impact on the environment by virtue of their nature, size or location (DoE 1989). The relevant legislation sets out the framework for deciding whether environmental assessment is formally required for a particular project (see Appendix IV). Additional

guidance on whether works and activities undertaken by the Agency should be formally subjected to environmental assessment is given in Part 4 and Appendix VII. When a project formally requires environmental assessment and the project is likely to give rise to significant environmental impacts, an Environmental Statement has to be produced (see below).

However, there are many benefits in following the environmental assessment process for most projects, regardless of the likely significance of their effects and whether environmental assessment is formally required or not by the EA Regulations. Environmental assessment should therefore be seen as an aid to good project management and design and not an added burden.

In many cases, Environment Agency projects will not require an environmental assessment under the EA Regulations. However, to comply with the Agency's environmental duties under the Environment Act 1995 (which requires that the environmental effects of all proposals are taken into account and that conservation and enhancement of the water environment is furthered) and the 'good practice' approach endorsed by the Agency's Policy Group, environmental assessment should be carried out for the whole range of projects, beyond those which fall under the various EA Regulations. All Agency direct works and activities that may result in a physical change to the environment should be subject to some form of environmental assessment at an appropriate level of detail and proportional to the size and potential impact of the project.

The Agency has used the term 'Formal Environmental Assessment' when EA is legally required under the EA Regulations and to distinguish it from 'Informal Environmental Assessment' which may be undertaken to comply with internal procedures, rather than formal legal requirements. However, the process of formal and informal EA is essentially the same, the only differences being the level of detail that may be appropriate, the advertising and consultation procedures required and the names used for the documents produced and their statutory standing. This distinction is not considered to be particularly useful, as it can be argued that under the Agency duties and responsibilities environmental assessment should be undertaken for activities falling under this 'informal' category - it is not a voluntary process.

2.4 What is an Environmental Statement?

An important stage in the EA process is the documentation and recording of the process and the likely environmental effects of the project. An Environmental Statement (ES) is mandatory under the EA Regulations for certain types of projects and may be required for others which give rise to significant environmental effects. It is described in the various EA Regulations as follows:

"An environmental statement comprises a document or series of documents providing for the purposes of assessing the likely impact upon the environment of the development proposed to be carried out."

It is the developer's own assessment of a project's likely impacts, which is prepared and submitted in conjunction with an application for consent. There are formal requirements as to the information to be included in an Environmental Statement specified in the Regulations, as well as a list further information that may be included by way of explanation or

amplification (see Appendix II).

The ES provides the public, their representatives and decision-making bodies, usually the Ministry of Agriculture, Fisheries and Food (MAFF) and/or the local planning authority (LPA), with an opportunity to see how environmental concerns have been addressed by the proposals. It is a public document, which clearly describes the project, states how the EA was carried out, what mitigation measures will be employed and what environmental impacts are likely to remain after mitigation. It is essential that this is an unbiased account and not a promotional document for the project.

In addition to Environmental Statements, the Agency also produces other reports during the EA process. These may be produced at different stages during the life of a project or at the same stage as an ES, but for a project that does not require such a detailed level of environmental assessment. The different types of reports are discussed in more detail in Section 5.3

2.5 The Need for Good Practice

When the Agency is acting as a developer or carrying out other activities that have the potential to effect the environment, it is important that Agency acts responsibly and equally, if not more, competently than it would expect from the external developers and operators that the it regulates. Fundamental elements of the Agency's 'good' practice approach should be that:

- (i) all works and activities promoted by the Agency should reflect its multidisciplinary responsibilities;
- (ii) all works and activities promoted by the Agency should be considered to represent to the outside world the whole of the Agency and not just a single function;
- (iii) each project should achieve a net positive environmental effect.

The Environment Agency has a statutory duty to further and generally to promote the conservation of the environment. It also has a duty to assess the environmental implications of all its activities. EA is fundamental to achieving these aims and the spirit of the Agency's vision of '*a better environment in England and Wales for present and future generations*'.

It has been widely demonstrated that early and effective involvement of all interested parties in EA leads to better projects, with savings in terms of time and cost as last-minute redesigns of projects and the consideration of alternative options, due to objections are more likely to be averted. As environmental constraints and opportunities for enhancement are identified in advance of the selection of the preferred options and survey information is collected in an appropriate manner, internal review of the environmental assessment documentation is speeded up.

Considerable advances have been made over the last five years to improve the environmental assessment of the Agency's internal works and activities. This has been achieved through: EA training; guidelines on scoping; Regional EA guidance in some Regions; EA Contacts in

every Region; and the setting up of the National Centre for Risk Analysis and Options Appraisal which takes the technical lead in EA nationally. However, one of the main aims of this Handbook is to ensure procedures are consistency applied throughout the Agency.

2.6 Key Stages in the Environmental Assessment Process

The Environmental assessment process describes the environmental activities which are carried out in parallel with technical and economic appraisals and evaluation. The process can be divided into a number of stages, where specific activities are undertaken. These are shown in Figure 1 below. It should be emphasised, however, that in practice the EA process is iterative and can be difficult to divide into such distinct stages.

Figure 1: Key Stages in the Environmental Assessment Process

Stage	Key Questions	Key Tasks
Scoping	<ul style="list-style-type: none"> What are the main issues of concern? What level of EA is Required? What type of report? 	<p>The decision as to what level of environmental assessment is required is made. This will be based upon whether the works fall within the ambit of the EA Regulations and upon the likely significance of effects.</p> <p>Key issues are identified in the scoping phase as a focus for the baseline data collection and mitigation measures. In addition to negative impacts, opportunities for environmental enhancement and existing baseline information are also identified.</p> <p>Wide and early consultations are most frequently used as a basis for scoping. Checklists are a useful tool to structure scoping activities.</p>
Baseline Surveys and Data Collection	<ul style="list-style-type: none"> What information is required? What desk or field studies are necessary? 	<p>Baseline data is collected as a basis from which to predict the impact of options and to compare future monitoring. Additional surveys of the site and surroundings may need to be commissioned.</p>
Impact Prediction and Assessment	<ul style="list-style-type: none"> What are the key environmental effects? 	<p>The likely impacts of the project upon the environment are predicted. The magnitude and significance of these needs to be ascertained. Impacts may result from both construction activities and the operational or "end-state" phase of the project.</p>
Evaluation of Options	<ul style="list-style-type: none"> What is the best practical environmental option? 	<p>At this stage in the process the environmental impacts of alternative options are evaluated prior to selection of a preferred option.</p>
Design of Mitigation and Enhancement Measures	<ul style="list-style-type: none"> How can effects be avoided or minimised? What opportunities exist for enhancement? 	<p>Ways of minimising or eliminating adverse impacts need to be identified. These can relate to the design of the project or methods of working.</p> <p>The magnitude and significance of the residual impacts after mitigation should be assessed.</p>
Report Preparation	<ul style="list-style-type: none"> What type of report is needed? 	<p>The results of the EA are written up in a report, which may be an Environmental Statement or other type of report (eg. an Environmental Report). The documentation provides information for the decision-maker, internal specialists, external consultees and the public.</p>

Review	<ul style="list-style-type: none"> • Is the ES or report of satisfactory quality? 	<p>The report is reviewed internally to ensure technical adequacy and to see that all relevant issues have been addressed. It is important that all interested internal functions endorse the contents of the report.</p> <p>Reports can be reviewed using standard criteria (see Appendix IX)</p>
Submission and Decision	<ul style="list-style-type: none"> • What procedures must be followed? 	<p>The report is submitted with an application for approval by the appropriate regulator, depending on which consenting regime applies. Copies will be supplied to statutory bodies and made available for public inspection. The detailed procedures will depend on the requirements in the EA Regulations, if they apply.</p>
Detailed Design and Implementation	<ul style="list-style-type: none"> • Are all the approved environmental constraints and mitigation measures covered in the contract documents? • Do the contractors know what is required? 	<p>The agreed designs and mitigation measures must be translated into detailed design and contract documents and then implemented. The contract documentation will need to be signed-off by appropriate environmental specialists to ensure all the agreed measures are included (unless it has been agreed in advance that this will not be required). Supervision of the contract by environmental specialists may be required during construction.</p>
Monitoring and Audit	<ul style="list-style-type: none"> • What happened in practice? 	<p>The development and surroundings need to be monitored to ensure that mitigation measures have been successful and to remedy any unanticipated impacts. This provides a continuous record of change in the environment as a result of the project. The impacts predicted in the EA documentation should be compared with the actual changes. This will improve future practice.</p>

KEY POINTS FROM PART 2 OF THE HANDBOOK

- environmental assessment is a process carried out throughout the life of a project, from conception to decommissioning, and involves a series of key steps;
- the Environment Agency carries out environmental assessment both to comply with the EA Regulations and to meet its statutory duties and responsibilities;
- Environmental Statements (ESs) are mandatory under the EA Regulations for certain types of projects and may be required for others which give rise to significant environmental effects. The Agency produces other types of reports if an ES is not required or volunteered and at different stages in the EA process;
- all Agency direct works and activities that cause physical changes to the environment should be subject to environmental assessment at an appropriate level of detail and proportional to the size and potential impact of the project;
- Regional EA Contacts can provide guidance on how to apply the EA process.

PART 3. ENVIRONMENTAL ASSESSMENT PROCEDURES: MANAGING THE EA PROCESS

3.1 Introduction

Parts 3, 4, 5 and 6 of the Handbook explain in detail the internal procedures that should be adopted in undertaking environmental assessment of Agency works and activities that result in physical change to the environment. These Parts of the National Handbook should be read alongside more detailed guidance in the Regions where these have been produced. Part 3 summarises some of the key aspects of how the environmental assessment process should be managed and includes guidance on:

- roles and responsibilities;
- programming environmental assessment;
- integrating environmental assessment into the Agency's other procedures and policies;
- a quality assurance system for environmental assessment.

This Part of the Handbook should be read alongside Parts 4, 5 and 6 which set out the procedures for undertaking environmental assessment of Agency works and activities in more detail.

For further advice and information on the contents of this Part of the Handbook contact:

- *your Regional Environmental Assessment Contact; or*
- *the Environmental Developments Officer at the National Centre for Risk Analysis and Options Appraisal.*

(see Appendix II)

See Section 4.2 to determine which works and activities should be subject to environmental assessment.

3.2 Roles and Responsibilities

The purpose of this section is to outline the roles and responsibilities of in-house staff and external bodies involved with the environmental assessment process.

3.2.1 In-house Staff

The Agency staff who are involved in environmental assessment will depend on a number of factors, including:

- the type of activity or works that are proposed (see Section 4.2);
- the potential impacts of the activity or works (see Section 4.7);
- the level of environmental assessment that is required for the particular works or activities (see Section 4.4); and
- the way environmental assessment is resourced and structured within a particular Region.

However, the roles and responsibilities that will generally apply for most projects where environmental assessment is conducted in house are summarised below (note that in some cases parts or all of the responsibilities may be contracted out to consultants, rather than being undertaken by a specialist in-house team).

- (i) the EA process is co-ordinated by the **Environmental Assessment Officer** who manages the production of environmental assessment documentation and co-ordinates the environmental assessment process, through consultation with the Project Manager and the Environmental Specialists. Note that some Regions do not currently have dedicated environmental assessment staff, therefore the EA co-ordination role is likely to be the responsibility of the Project Manager or a Conservation Officer. Whether the EA is coordinated by dedicated staff or not, independence is important particularly in fulfilling the quality assurance requirements (see Section 3.5).
- (ii) the **Project Manager** is ultimately responsible ensuring the EA process is carried out along with the overall delivery of the project. Timescales will have to be agreed with all interested parties, appropriate consultation carried out and relevant information provided to the Environmental Assessment Officer (where appropriate) and the Environmental Specialists.
- (iii) the **Environmental Specialists** may be both Regional and/or Area staff and have responsibility for conservation, landscape, geomorphology, fisheries, biology, environmental protection, waste, groundwater protection, flood defence, land drainage, water resources, navigation, recreation and planning. Environmental Specialists are involved at specific stages of the environmental assessment process, which includes the initial scoping of issues, assessment of impacts, the design of mitigation measures, supervision of construction, post project appraisal and the signing-off of documentation.

It should be noted that there are usually no archaeology specialist within the Agency and it may therefore be necessary to consult externally (County Archaeologist) for archaeological information. This responsibility is generally undertaken by the Project Manager in consultation with the EA Officer (where appropriate).

- (iv) the **Regional Environmental Assessment Contact** can provide guidance and advice on Regional policy and interpretation of the National EA Handbook. For Regions where there are no dedicated EA staff, they can also advise on the appropriate level of EA for different types of activities and works.

The organisation of the design and contracts staff in the Agency will also vary between Regions and between projects, but generally are divided on the basis of a 'client'/provider'

split. Project Managers, on the 'client' side, are responsible for specifying work to be done either by the in-house 'provider' or external consultants and represent all client departments (eg. flood defence; water resources; navigation etc). They are responsible for monitoring the implementation of work and co-ordinating any input to it from other Agency departments. The 'provider' or external consultants undertake the work. The EA Officer's role is a 'client' EA management role, which should normally be undertaken by internal staff. Those Regions with no dedicated EA staff as yet, may use Environmental Specialists to undertake some of the functions of the EA Officer as approved by the Regional EA contact. Other Agency staff concerned with environmental assessment may have a Service Level Agreement (SLA) with the 'client' and are responsible for upholding quality control of the environmental work. In some instances the specialist environmental design work is undertaken in-house by Agency staff.

It is suggested that each Region produces and maintains a contacts list of the EA Officers and Environmental Specialists involved in the environmental assessment process and that this is included in any Regional guidelines to supplement the 'National Environmental Assessment Handbook'.

Maintaining Independence and Quality

Those responsible for co-ordinating the EA process, and especially the signing-off of documentation/key milestones and arbitrating disagreements (both internally between functions and between the Agency and external organisations), should ideally be independent of the promotion of the project, as well as being competent in EA. This is a particular issue for those Regions that do not have dedicated environmental assessment staff, or if the environmental assessment staff are in the same function as those that are promoting the project (eg. in some Regions environmental assessment staff are within FRCN, which also promotes projects). It is for each Region to ensure that appropriate mechanisms are in place to maintain the independence of the environmental assessment process.

Where there is a split of the 'client' and 'provider' it means that the relationship has become more formal and less flexible than previously. It is therefore even more vital to anticipate and to cost EA requirements in advance of the contract to ensure that adequate and specific provisions are built in.

Quality assurance and the environmental assessment process are discussed in more detail in Section 3.5.

3.2.2 External Bodies

This section outlines the roles and responsibilities of the external bodies involved in the environmental assessment process. In relation to land drainage improvement works, SI 95/2195 defines that 'consultation bodies' shall always include English Nature and the Countryside Commission in England and the Countryside Council for Wales in Wales, as well as *'any other public authority, statutory body or organisation which in the opinion of the drainage body them, has an interest in any proposed improvement works'*. These other consultees could include:

- Ministry of Agriculture Fisheries and Food (MAFF);
- Local Planning Authorities (LPA);
- English Heritage (EH);
- Cadw;
- Council for the Protection of Rural England (CPRE);
- Wildlife Trusts;
- Royal Society for the Protection of Birds (RSPB);
- National Trust;
- Ramblers Association;
- other local interest/pressure groups;
- riparian owners, landowners and local residents;

Ministry of Agriculture Fisheries and Food/Welsh Office

The Ministry of Agriculture Fisheries and Food (MAFF)/Welsh Office (WO) award grant aid for land drainage improvement works. They are also the decision-making and arbitration body for land drainage improvement works where an ES is prepared under SI 88/1217. A copy of the ES should be submitted to MAFF/WO with the application for grant aid. As good practice, the Environmental Report (ER) (see Section 5.3) is submitted where an ES is not required. MAFF/WO grant aid the cost of the preparation of ESs produced by external consultants.

In the event of an external objection to the decision not to produce an ES or an objection to the contents of an ES, the matter is referred to MAFF/WO for ultimate arbitration. It must be stressed, however, that it is always preferable to resolve such matters with the objectors, if possible, rather than risk the delay that referral will incur. For all grant aided schemes, MAFF require a letter from English Nature stating that they have no objections. This is also a requirement for Approval in Principle (AIP) (see Section 4.5.3).

MAFF have agreed with the Agency that non-grant aided works must satisfy the same technical, economic and environmental criteria as grant-aided works. This means that ESs are required for non-grant aided improvement works with significant effects.

Under the revised '*Conservation Guidelines for Drainage Authorities*' (MAFF/DOE/WO, 1991) heavy maintenance works should be regarded as improvement works and, as such, may require EA. MAFF have produced guidelines on environmental procedures for both inland and coastal defence works (MAFF/WO 1992, 1993 and 1996) (See Appendix III).

English Nature/Countryside Council for Wales

English Nature (EN) is the statutory adviser to the government on nature conservation in England, responsible for the conservation of England's wildlife and natural features. Its works include the selection, establishment and management of National Nature Reserves and Marine Nature Reserves, the identification and notification of Sites of Special Scientific Interest, the provision of advice about nature conservation, and the support and conduct of research relevant to these functions.

The Countryside Council for Wales (CCW) perform this function in Wales.

English Nature and the Countryside Council for Wales are a statutory consultee for all schemes where an EA is required under SI 88/1217 or SI 88/1199. They must be supplied with a copy of all ESs and MAFF/WO request that a letter of approval is received from EN/CCW prior to scheme approval. The Project Manager contacts the appropriate district officer for the approval letter. EN/CCW should also be sent a copy of any Environmental Report (ER) produced for an Agency project.

Liaison with EN/CCW is encouraged prior to the production of documentation to identify and address concerns. EN/CCW will be particularly concerned if an Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) or Special Area of Conservation (SAC) is likely to be affected by any works (see Section 4.5.1). Relevant EN/CCW publications are included in the reference list (see Appendix III).

Countryside Commission/Countryside Council for Wales

The Countryside Commission works to conserve and enhance the beauty of the English Countryside and to help people to enjoy it. It is also concerned with the underlying environmental quality of the countryside, and with the economic and social well-being of those that live and work there. The Commission is the government's official adviser on countryside issues, and provides grants and advice for projects that enhance the landscape and make the countryside more accessible for public enjoyment. The Countryside Commission is a statutory consultee for all schemes where an EA is required under SI 88/1217 or SI 88/1199.

The Countryside Council for Wales perform this function in Wales.

English Heritage/Cadw

The functions of English Heritage (the Historic Buildings and Monuments Commission for England) involve giving advice in relation to ancient monuments, historic buildings and conservation areas in England and on other matters generally affecting the historic environment. This includes advice to the Secretary of State on the inclusion of buildings in the statutory list of buildings of special architectural or historic interest and the scheduling of monuments. English Heritage hold data on all Scheduled Monuments in England, a register of Historic Parks and Gardens and the Scheduled Monuments Record (SMR) in London. English Heritage is a statutory consultee for all schemes where an EA is required under SI 88/1217 or SI 88/1199 which may affect the site of a Scheduled Monument.

Cadw perform this function in Wales.

Local Planning Authorities

The local planning authority (LPA) should be consulted on Agency projects at an early stage. LPAs, as the competent authority, may request an ES under SI 88/1199 for certain projects where planning permission is required (see Section 4.5.1). This covers new works, such as flood storage reservoirs and new flood channels. ESs produced under the SI 88/1199 Regulations must be submitted to the LPA with the planning application. The DoE have produced guidance on the preparation of ESs for planning projects (DoE, 1995). LPAs may

also request further information, if they think that the ES is inadequate. All such additional information will have to be published for a 21 day public consultation period before being submitted to the LPA as required by the EA Regulations. As with EN/CCW, early consultations are important to identify any particular requirements. As good practice, the Agency should submit an Environmental Report when an ES is not required to accompany a planning application.

Other Consultees

Local residents, riparian owners and interest groups, amongst others, have an important role to play in the EA process. Neglecting their concerns can lead to missed opportunities and at worst confrontation. Members of the public have the right to object to the decision not to produce an ES within a 28 day period of advertising under SI 88/1217. In addition, land ownership problems may arise and in extreme cases it may be necessary to serve notice upon landowners or to go through compulsory purchase procedures in order to undertake the works.

ESs must be advertised in the local press and the Agency must provide an opportunity for the public to inspect the documents. Copies of other reports should also be made available to interested parties.

For larger projects, where concern is anticipated, it is advisable to consult with the public at an early stage to identify and to allay any concerns. Exhibitions, pamphlets and questionnaires may prove to be a more effective means of communication than advertisements. Consultation exercises with the public need to be carefully managed in order not to generate unnecessary concerns and it is often more productive to liaise with recognised groups such as parish councils, town councils and resident associations in the early stages of assessment.

Designations

A proposed scheme may effect a designated site or protected feature and it is important to liaise with the appropriate organisation responsible. Appendix V lists the main types of designations and protected features and the main organisations responsible for them. Early consultation with the organisation concerned should occur in any case where these may be effected.

3.3 Programming Environmental Assessment

3.3.1 When Does Environmental Assessment Begin?

Environmental assessment should begin as soon as a 'problem' or potential enhancement has been identified. This should be before the Scheme of Delegation (SoD) authorisation. Early discussions with Environmental Specialists will help to ensure that the EA team is aware of all project work which is being proposed, clarify lines of communication at the outset of the project, and allow scoping to be carried out more efficiently.

Early and thorough internal consultations will also ensure that the Environmental Specialists have an influential role in the selection of scheme options and the design of mitigation and

enhancement measures. Abortive work can result if the EA does not start at the earliest possible stage.

It has been suggested that consideration be given to formalising the requirement for EA early in the project lifecycle (ie. at initiation and formal approval to commit resources). The potential of this approach will be explored in the future and may be included in future revisions of the National EA Handbook.

3.3.2 Programming Environmental Assessment

It is vital that those responsible for identifying and programming tasks involved with scheme design and assessment are aware of the time implications of environmental assessment and the production of documentation, so that these can be built into the project programme from the outset.

In the initial stages sufficient time should be allotted for site visits and liaison with Environmental Specialists. This will be minimal in terms of the total project lead time, but is crucial to avoid objections and delay at the signing-off stage. Time should also be allowed for writing the draft report, signing off, amendments and advertising.

Programming is also important to allow baseline surveys that are seasonal dependant to be undertaken and to avoid construction during sensitive seasons, such as the bird breeding and fish spawning seasons, and the tourist season.

3.4 Integrating Environmental Assessment into the Agency's Other Procedures and Policies

3.4.1 Introduction

It is essential that environmental assessment is fully integrated into the Agency's other procedures and policies. This approach is endorsed by the National Policy Statement on environmental assessment (see Appendix I) which states that '*EA is seen as integral to the work of the Agency*'.

The following sections outline the Agency's key procedures for managing engineering activities and how they relate to the environmental assessment process. Reference is also made to other policies and procedures which are relevant to environmental assessment.

3.4.2 Agency Projects

The Environment Agency undertakes a range of engineering activities in carrying out its duties, primarily relating to water management (flood defence, water resources, navigation, conservation and fisheries etc). These physical works vary in terms of type and scale but all have at least the potential to have some effect on the environment.

Many of the Agency's works are developed and managed as discrete projects. *Project Management in the Agency* (PIN Volume 14) which covers both engineering and non-engineering projects, provides guidance on defining what constitutes a project (in section 1.3).

Title:	<i>Project Management in the Agency</i>
Status:	<i>PIN Volume 14; Version 2 (April 1997)</i>
Summary:	<i>This Manual sets out the roles and responsibilities of those involved, the requirements for obtaining approval, the management of the running of the project and its closure. The Project Manager for any project for which environmental assessment is required will be working to this Manual and therefore it is useful for staff involved in EA to be familiar with it. Note should be taken of Appendix F, which provides guidance on preparing a Business Case (economic appraisal). This refers to the Treasury 'Green Book' entitled 'Economic Appraisal in Central Government'. This must be followed for non-Grant Aided schemes but MAFF Project Appraisal Guidance Notes (PAGN) must be followed for Grant Aided Schemes.</i>

Agency projects vary in their financial organisation - funded via Capital or Revenue budgets; and their management - by dedicated project management teams or less formally functionally managed, at either Area or Region level. Whereas large and complex engineering schemes are conventionally undertaken as capital projects, similar smaller-scale works may be carried out as either small capital or revenue works. However, in terms of the environmental assessment process the important criteria relate to the type, scale and location of the works on the ground. A distinction between similar projects should therefore not be made on the basis of a project's funding or organisational route.

In addition to following the procedures outlined in *Project Management in the Agency*, all engineering projects are carried out in accordance with the *Engineering Project Management Manual* (PIN Volume 19). As a comprehensive control document for all aspects of a project, the EPMM includes milestones for the environmental assessment process and is a key tool for ensuring integration between the project management and environmental assessment processes.

Title:	<i>Engineering Project Management Manual (Volume 019)</i>
Status:	<i>PIN Volume 19; Version 1 (April 1998)</i>
Summary:	<i>The manual provides an umbrella document for engineering project management, linking together all relevant manuals to a single reference point and is therefore of particular relevance to project environmental assessment. It includes a set of control documents to be used for all projects and integrates key EA milestones along with all the others milestones for an engineering project and therefore ensures that EA is carried out at the appropriate stage and throughout the life of a project.</i>

3.4.3 Non-project Activities

The *Flood Defence Management Manual* (PIN Volume 29) describes in chapter 6 the various types of works carried out under the Agency's revenue budget. Some of these works will develop as discrete projects and will be treated as such in terms of their management (see above). The remaining works are likely to be routine, periodic maintenance activities, such as dredging or weed clearance. Potentially these routine activities may have considerable

environmental impacts and therefore warrant some form of environmental assessment. Guidance from MAFF states that the consideration of flood defence maintenance works should adopt the same approach as for projects, at an appropriate level of detail (*Code of Practice on Environmental Procedures for Flood Defence Operating Authorities*). For such non-project activities, a programme level appraisal is likely to be most appropriate, such as a review of an annual maintenance programme. Defining an appropriate level of environmental assessment for non-project activities is further discussed in Sections 4.2 and 4.4.

Title:	<i>Flood Defence Management Manual (FDMM)</i>
Status:	<i>Volume 29; Version 2 (October 1997)</i>
Summary:	<i>The Manual is an aid for the identification, justification and prioritisation of flood defence works and thus provides a framework for managing flood defence investment. The manual covers all flood defence activities, but is primarily aimed at maintenance works and small capital schemes. This Manual is particularly relevant to the environmental assessment of the Agency's smaller schemes and of revenue projects.</i>

3.4.4 Risk Assessment of Projects

The Agency considers Risk Management as an integral of its activities and Risk Assessment is a requirement of *Project Management in the Agency*. Guidance has been issued to assist project teams to assess and manage risks throughout the life of a project (see below).

In addition to effects on a project's cost, time or quality, the guidance indicates that consequences to the environment should also be embraced by the risk assessment process. Clearly, information gathered via the environmental assessment should feed into the process of identifying and assessing environmental risks. The parallel processes should be coordinated to make best use of mutually relevant information and provide a consistent appraisal of the project.

Title:	<i>Risk Assessment and Management</i>
Status:	<i>Guidance Note; Version 2 (October 1997)</i>
Summary:	<i>The guidance note puts forward a practical and pragmatic approach to risk management for Agency Projects. It covers the assessment of risks, including generic risks, practical management of risk, identification of residual risks and evaluation of appropriate contingencies for a project. The use of a risk register is recommended as a tool for managing a project's risks.</i>

3.4.5 Other Agency Procedures

Other Agency documents that must be complied with and referred to in carrying out environmental assessment include:

Title: *Environmental Policy for the Agency's own Activities*
Summary: *This document summarises the Agency's environmental policy and commitment to implementing and demonstrating best environmental practice. The policy should underpin all internal Agency activities. The application of environmental assessment is a key tool for ensuring that the environmental policy is adhered to in undertaking engineering activities.*

Title: *Technical Directorate (PIN Volume 5) - Part 2 Flood Defence*
Summary: *This Manual includes guidance on a number of topics, of particular relevance to EA are:*

- *climate change - allowances for sea level rise;*
- *Post Project Appraisal for flood defence;*
- *site investigations - best practice, extent and guidance on appropriate levels of expenditure.*

Title: *Procurement Manual (PIN Volume 9)*
Summary: *This Manual sets out the procedures for the procurement of goods and services, of particular relevance to EA is the Agency's 'Environmental Procurement Policy'. For engineering projects, the other requirements of this Manual are included in the Manuals Volume 21 and 22 (see below).*

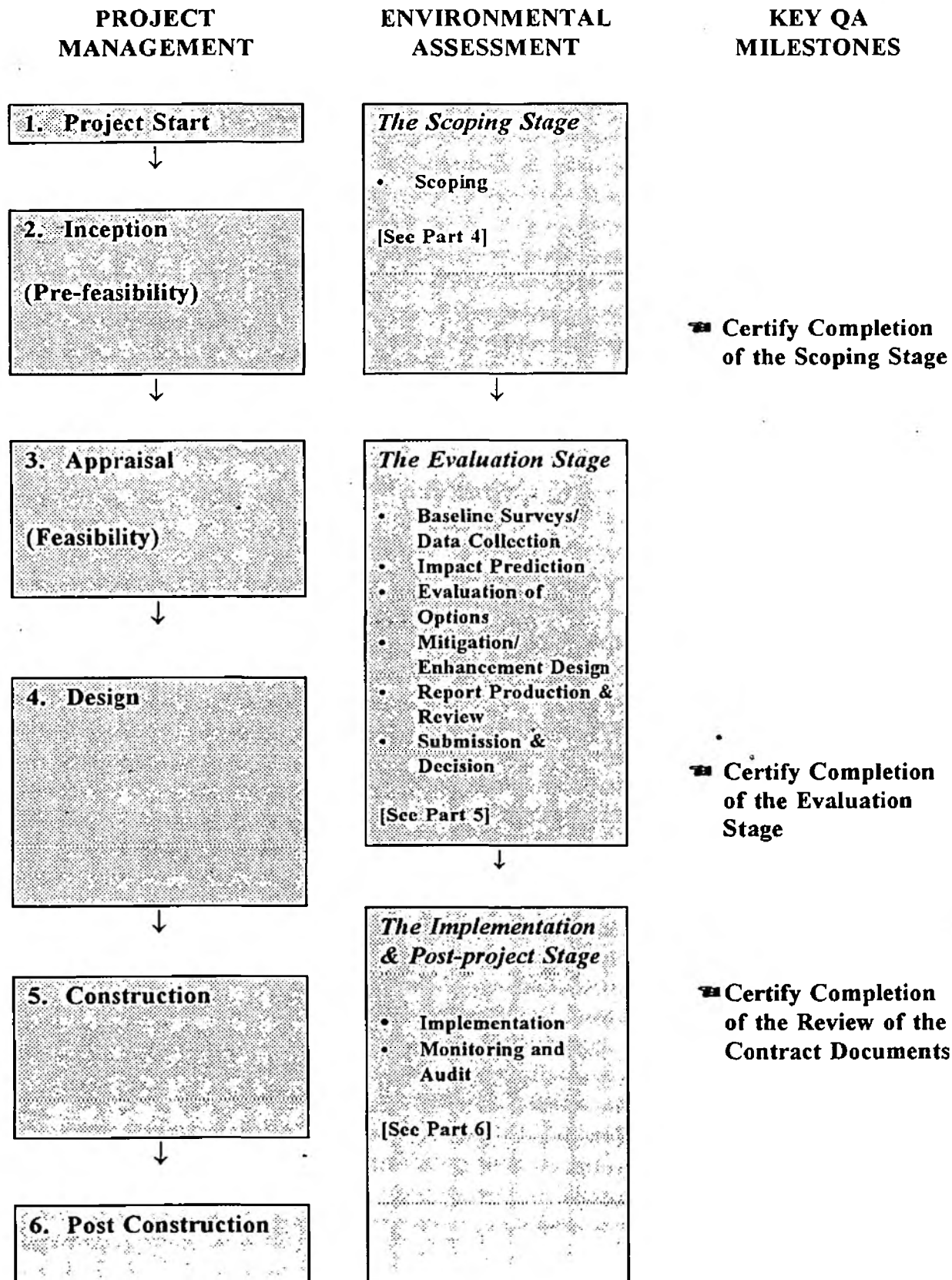
Title: *Civil Engineering Contract Administration Manual (PIN Volume 21) and Consultants Manual (PIN Volume 22)*
Summary: *These Manuals provide guidance on the preparation and administration of Civil Engineering Contracts and the appointment and management of Consulting Engineers respectively.*

3.4.6 Project Management and Key Quality Assurance Milestones

Section 3.5 describes a Quality Assurance System for environmental assessment, which includes three key quality assurance milestones during the process. Figure 2 illustrates how the stages in project management and environmental assessment relate to these milestones. The stages in the EA process are described in more detail in Parts 4, 5 and 6 of the Handbook. Note that the key project management stages are taken from the Engineering Project Management Manual (see Section 3.4.2).

It should be emphasised that EA should begin as soon after the inception of the project as possible. Early and thorough consultation with the environmental specialists will highlight potential problems and opportunities at the beginning of the process and allow the selection of scheme options and the design of mitigation and enhancement measures to be influenced at the appropriate stage. This will avoid potentially costly and time consuming delays later in the life of the project.

Figure 2: The Relationship Between Project Management, Environmental Assessment and the Key Quality Assurance Milestones for Environmental Assessment



3.5 Quality Assurance System for Environmental Assessment

3.5.1 Introduction

Quality assurance has an important role in the delivery of consistent and effective environmental assessment for the Agency's internal works and activities. This section defines the key dimensions of a Quality Assurance System, embracing aspects that need be integrated into the procedural framework for EA, as well as project specific measures.

The responsibility for implementing a Quality Assurance System will mostly fall on the Regions. However, the National Centre for Risk Analysis and Options Appraisal, who take the technical lead nationally on environmental assessment, will be responsible for implementing some of the measures. It is essential for each Region to ensure that appropriate mechanisms are in place to implement the Quality Assurance System. The system will undergo appraisal and further refinement in the light of experience.

It should be noted that the implementation of a Quality Assurance System for environmental assessment of internal works, and some of the key elements of it, is a requirement of the Policy Paper on the 'Environmental Assessment of Projects' implemented by the Policy Group in January 1998 (see Appendix I).

This section should be read alongside the environmental assessment procedures set out in Parts 4, 5 and 6 of this Handbook.

3.5.2 Establishing and Managing a Quality Assurance Framework

The following issues relate to aspects of the overall Quality Assurance framework, rather than actions that must be taken on each individual projects. As indicated in brackets, the National Centre is responsible for implementing some of these measures, although most are the responsibility of each Region in establishing and delivering a QA system.

A. Continual Review and Improvement of EA Guidance

- (i) *Undertake an annual review of national EA practice and update the National Handbook accordingly [National Centre].*
- (ii) *Undertake an annual review of regional EA practice to feed into the national review (above) and update any Regional guidelines, where applicable [Region].*
- (iii) *Ensure copies of the EA guidance (National Handbook and Regional Guidelines) are kept up to date with revisions as they are issued [Region].*

B. Roles and Responsibilities for EA

- (i) *Nominate a Regional Management Team member to champion the cause of environmental assessment [Region].*
- (ii) *Nominate an EA Contact in each Region to provide the focus for the dissemination of guidance and expertise and feeding back issues to the National Centre [Region].*
- (iii) *Clearly define the roles and responsibilities of those involved in delivering environmental assessment at both a Regional and Area level [Region].*

C. Staff Training

- (i) *Carry out training on the National Handbook for all staff involved in the EA process [National Centre/Region].*
- (ii) *Identify ongoing training needs for all staff involved in the EA process and deliver training as necessary [National Centre/Region].*
- (iii) *Maintain complete records of all staff training [National Centre/Region].*

D. Register of Environmental Assessment Projects

- (i) *Maintain a register of all the projects that have been subject to EA, the level of assessment, approval route that was followed, the documentation that was produced and the review grade of published ESs (see Appendix VI) [Region].*
- (ii) *Maintain a national database of the above information (the possibility of placing this information on a public register will be considered in the future) [National Centre].*
- (iii) *Review the information on the types of projects, route followed and documents produced to ensure consistency [National Centre/Region].*

E. *Quality of Environmental Assessment Reports and Auditing the Performance of Consultants*

- (i) *Carry out an independent review of a minimum of 5% of environmental assessment reports every year covering a range of report and project types (the Regional EA Contacts could fulfil this role) [Region].*
- (ii) *Establish a document control system to clearly define the responsibilities for signing off reports and implementing corrective actions if a report does not meet the required standard [Region].*
- (iii) *Introduce an accreditation system for consultants involved in the EA process and regularly reappraise performance against agreed criteria (it is hoped that a national accreditation scheme can be developed by the end of 1998) [National Centre/Region].*

F. *Post Project Monitoring*

- (i) *Develop a post project monitoring programme which includes a minimum of 5% of projects subject to some form of EA across a range of project types [Region].*
- (ii) *Feedback from the projects that have been subject to monitoring (see F(i) above) will be included in the register of EA projects (see D above).*

3.5.3 Quality Assurance for Individual Projects and Activities

The following steps must be applied to each project or activity subject to EA.

G. *Compliance with Environmental Assessment Guidance*

- (i) *The procedures and guidance outlined in Parts 3, 4, 5 and 6 of the National EA Handbook should be followed [Region].*
- (ii) *More detailed procedures/work instructions provided by Regional EA Guidelines (where available) should be followed [Region].*
- (iii) *All other relevant Environment Agency procedures and guidance, such as procurement procedures (see Section 3.4), should be adhered to [Region].*

H. Quality Assurance Project Milestones

- (i) *Ensure that there are at least three key milestones set for each project subject to EA level 1, 2 or 3 or one key milestone for projects subject to EA level 4 (see Figure 2 and Section 4.4):*
- 1) *at the end of the scoping stage certify that a Scoping Report has been produced and that the results and decisions from this stage are recorded;*
 - 2) *once the evaluation stage is complete, certify that appropriate documents have been produced and signed-off as necessary (and for ESs that they have reached a review grade of 'good');*
 - 3) *prior to implementation, certify that the contract documents have been adequately reviewed and where applicable that the Environmental Action Plan has been finalised and incorporated into the contract documents.*

I. Register of Environmental Assessment Projects

- (i) *Enter details of each scheme into the register of all the projects that have been subject to EA (see D (i) above and Appendix VI) [Region].*

J. Quality of Environmental Assessment Reports and Auditing the Performance of Consultants

- (i) *Carry out a review of all published ESs and grade using the Review Criteria in Appendix IX. All ESs should achieve a review grade of 'good' or above.*
- (ii) *Carry out a review of the performance of consultants and contractors involved in the EA process on each project in parallel with the processes outlined in the Agency's Project Management Manuals (see Section 3.4.5) [Region].*

KEY POINTS FROM PART 3 OF THE HANDBOOK

- the early involvement of internal and external consultees will avoid conflicts and delays later in the EA process;
- mechanisms should be in place to maintain the independence of the EA process;
- EA should be fully integrated with other Agency procedures and policies;
- the Quality Assurance System should be implemented in all Regions.

PART 4. ENVIRONMENTAL ASSESSMENT PROCEDURES: *THE SCOPING STAGE*

4.1 Introduction

For the purposes of the Handbook, the environmental assessment process (see Section 2.6) has been divided into three main stages:

- the Scoping Stage;
- the Evaluation Stage;
- the Implementation and Post-project Stage.

These stages are described in Parts 4, 5 and 6 of the Handbook respectively.

Each of these three stages also has a key Quality Assurance milestone for environmental assessment associated with it (see Section 3.4 and 3.5).

Part 4 of the Handbook describes the Scoping Stage in detail. Figure 3 presents the key questions that need to be answered during the scoping stage.

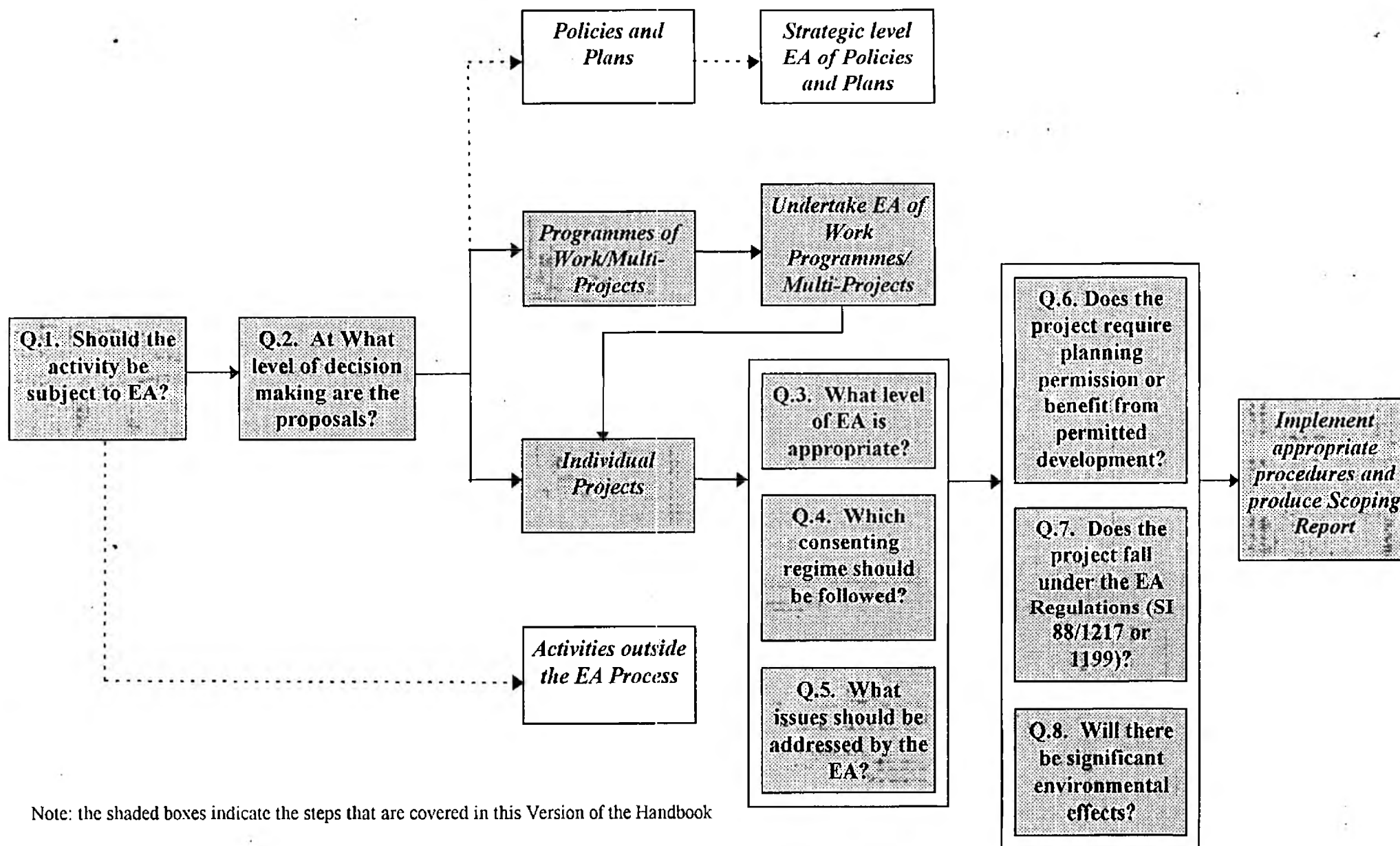
4.2 Should the Activity be Subject to Environmental Assessment?

All the Agency's activities should be subject to some form of environmental assessment before they go ahead, whether this is a formalised environmental assessment process or not. This is necessary to fulfil the Agency's duties under the Environment Act 1995 which requires the Agency to take into account environmental considerations in carrying out all its functions (see Appendix IV). However, this Handbook concentrates on the environmental assessment of those activities which are 'direct actions', ie. those that result in a physical change to the existing environment. It does not cover 'indirect actions', including where the Agency is:

- acting in a regulatory capacity, for example determining an authorisation or consent;
- providing advice, for example reviewing a planning application;
- procuring equipment/material;
- carrying out surveys and monitoring that do not result in physical change.

Direct actions may include activities which are not defined as a 'project' in the Agency's Project Management system, including maintenance work, and includes both capital and revenue expenditure. Where the Agency is acting in partnership with other organisations, to deliver a project which will entail physical change, these projects should be subject to the appropriate level of environmental assessment reflecting the guidance in this Handbook.

Figure 3: Key Questions to be Addressed During the Scoping Stage



Indirect actions may be subject to review and appraisal under other Agency tools within a broader Environmental Management framework, including the Agency's 'Environmental Procurement Policy' (within the 'Procurement Manual') and the 'Environmental Policy for the Agency's own Activities' (see Section 3.4.5).

General advice on scoping of projects for consent applications and external developments are provided in:

- 'Environmental Assessment: Scoping Handbook for Projects' (Environment Agency, HMSO, April 1996);
- 'Scoping Guidance for the Environmental Assessment of Projects' (NRA, December 1995);
- 'Further Guidance for the Environmental Assessment of Projects' (NRA, December 1995).

In the past environmental assessment procedures have mainly been applied to capital projects. However, other projects such as those undertaken for the maintenance, can also involve direct works and may have significant environmental effects of concern to some of the Agency's functions or to the public. Some of these works, such as heavy dredging as part of a maintenance programme, will fall under the definition of land drainage improvement works in SI 88/1217 (see Section 4.5.2). MAFF/WO have confirmed that maintenance works should adopt the same approach at an appropriate level of detail as for new and improvement works (MAFF/WO, 1996) (see Section 4.3.2).

Emergency works and land drainage enforcement actions are both likely to involve direct works, but need to be considered as special cases in terms of environmental assessment. Emergency works should aim to alleviate an immediate crisis only and should be carried out with as little effect upon the environment as possible and should not prejudice longer term solutions. Appropriate statutory organisations should be informed as soon as practicable after commencement of works, particularly where a designated site is affected (eg. SSSI, SPA and SAC). The EA procedures set out in Parts 4, 5 and 6 still hold for emergency works, although the time-scale is much reduced and it may be necessary to undertake some tasks retrospectively. Land drainage enforcement actions do not constitute 'development' or 'improvement' (see Section 4.5) as the aim is to reinstate a site following unconsented works by a third party. Environmental assessment will therefore not be required under the EA Regulations (see Section 4.5.2), but an appropriate level of EA should nevertheless be carried out (see Section 4.4).

The Agency is likely to be involved in the remediation of contaminated land when the relevant regulations are implemented and the roles and responsibilities are clarified. These types of projects will require appropriate environmental assessment and specific procedures will be developed in the future.

4.3 At What Level of Decision Making Are the Proposals?

Proposed works can be organised into three levels of decision making:

- policies and plans;

- programmes of work/multi-projects;
- individual projects.

The Handbook concentrates on individual projects, however the environmental impact of non-project activities also need to be considered. The programme level of assessment is likely to be the most appropriate for such non-project activities, including maintenance works.

4.3.2 Environmental Assessment of Policies and Plans

The Handbook does not cover the strategic environmental assessment of policies and plans, such as LEAPs and functional strategies. However, this level of environmental assessment has been recognised as being an important tool to develop within the Agency and it is anticipated that appropriate methodologies will be available in the future.

4.3.2 Environmental Assessment of Programmes and Multi-projects

Programmes of works should be reviewed on a periodic basis, usually annually. The elements that should be included in an assessment of a programme are listed below:

Stages in the Environmental Assessment of a Programme of Works:

- (i) *consultation with all relevant Environmental Specialists;*
- (ii) *scoping and evaluating the potential impacts including the cumulative impacts of the whole programme;*
- (iii) *consideration of options, in terms of working practices, timing etc;*
- (iv) *incorporation of appropriate mitigation measures and working practices to address the Environmental Specialists concerns;*
- (v) *consideration to determine if any works included in the programme are of such significance that they should be considered as an individual project;*
- (vi) *signing-off the programme(usually annually) by each of the Environmental Specialists once they agree for the programme to proceed;*
- (vii) *recording the results of the assessment and the details of the agreed programme of works in a file note.*

It is likely that the majority of these stages in an environmental assessment of a programme of works could be achieved by convening an annual meeting involving all the interested parties.

It is for the Regions to establish procedures to ensure that all programmes involving direct works are identified and subject to programme level EA.

Note point (v) above, which states that any works included in a programme of works that are of particular significance should be considered as an individual project. In these cases the procedures outlined below for individual projects should be followed. This is in accordance with guidance from MAFF (*Code of Practice on Environmental Procedures for Flood Defence Operating Authorities*, MAFF, 1996). Note that the 'Flood Defence Management

Manual' is also of particular relevant to the environmental assessment of small projects and revenue projects (see Section 3.4.3).

Where multiple projects are proposed which are within a single catchment/subcatchment or are hydrologically linked, for example, it is recommended that these projects are initially considered at a strategic level to ensure the cumulative impacts are fully considered. Several Regions have already undertaken Strategic Environmental Assessments of flood alleviation schemes (Anglian and Thames Region, for example) and these Regions EA Contacts will be able to provide advice on the approaches used. It is intended that future revisions of the National EA Handbook will include guidance on the SEA of multi-projects.

4.3.3 *Environmental Assessment of Individual Projects*

The rest of this Part of the Handbook, along with Parts 5 and 6, relate to the environmental assessment of individual projects. In order to determine the appropriate procedures that should be implemented, a number of interrelated questions need to be answered (see Figure 3).

4.4 What Level of Environmental Assessment is Appropriate?

Individual projects, including maintenance works not part of a programme of works, involving direct works which result in physical changes should all be subject to some form of environmental assessment. However, the environmental assessment should be at an appropriate level, proportionate to the type and scale of the project and the potential environmental impacts and consistent with any statutory requirements.

The decision as to the appropriate level of environmental assessment is based upon three fundamental criteria, namely:

- (i) Does the project require planning permission or does the Agency benefit from permitted development rights? (see Section 4.5.1)
- (ii) Does the project fall under the Environmental Assessment Regulations (SI 88/1217 or SI 88/1199)? (see Section 4.5.2)
- (iii) Will the project be likely to give rise to 'significant' environmental effects? (see Section 4.6)

It is vital that careful consideration is given to these issues, as many decisions will be discretionary. The Agency must be in a position to defend its decisions, for example not to produce an Environmental Statement, to any objector. The legal aspects behind these issues are dealt with in more detail in Appendix II.

Different 'levels' of environmental assessment are proposed to meet all the Agency's responsibilities and ensure that environmental assessment is undertaken proportionately throughout the Agency. The levels of EA for projects have been classified from 1 to 4, as described below. All projects requiring environmental assessment (see Section 4.2 and 4.3) should be subject to at least 'level 4' EA. The criteria described above will determine if a more rigorous level of assessment is appropriate. The different levels of assessment require different levels of detail, the production of different types of reports/documentation and in the

case of 'level 4', less Quality Assurance Milestones.

The four 'Levels' of Environmental Assessment are described below:

Level 1 *Environmental Assessment of projects 'formally' required by the EA Regulations.*

- 'Level 1' EA covers activities that fall under the EA Regulations (SI 88/1217 or 88/1199) and have 'significant environmental effects'.
- Environmental Statements are required for these projects (see Section 5.3).
- Environmental Statements can also be produced voluntary for projects that do not formally require it or where there is uncertainty.
- Full internal and external consultation should be carried out throughout the EA process.
- Appropriate advertising procedures should be followed if SI 88/1217 applies (see Section 5.4.1).
- Projects subject to 'Level 1' assessment should have a minimum of three Quality Assurance Milestones (see Section 3.5.3).

Level 2 *Environmental Assessment of projects not 'formally' requiring the production of an ES by the EA Regulations, but which warrant a similar level of assessment due to their nature, scale or location.*

- 'Level 2' EA covers activities that fall under the EA Regulations (SI 88/1217 or 88/1199), but do not require 'level 1' EA, and other Agency projects that warrant a full appraisal of a range of options.
- Projects requiring planning permission should all be subject to at least 'level 2' environmental assessment.
- Environmental Reports are produced for these projects as an explanation as to why no ES is produced, rather than an Environmental Statement (see Section 5.3).
- The Environmental Report should clearly describe the appraisal of options that was undertaken and record the implications at an adequate level of detail to allow the option selection to be transparent.
- Full internal and external consultation should be carried out throughout the EA process.
- Appropriate advertising procedures should be followed if SI 88/1217 applies (see Section 5.4.1).
- Projects subject to 'level 2' assessment should have a minimum of three Quality Assurance Milestones (see Section 3.5.3).

Level 3 *Environmental Assessment of projects not 'formally' requiring the production of an ES by the EA Regulations and not requiring EA in such detail as 'Levels 1 and 2' due to their nature, scale or location, but which warrant EA covering all three main stages .*

- 'Level 3' EA covers activities that require EA, but not to the level of detail as 'levels 1 and 2'.
- Less formalised documentation is required for 'level 3' EA and at the second and third Quality Assurance Milestones file notes and records of consultation will be adequate rather than reports. A Scoping Report is still required for the first QA milestone, but this may be less detailed than for levels 1 and 2.
- More selective internal and external consultation should be appropriate throughout the EA process.
- Projects subject to 'level 3' EA should have a minimum of three Quality Assurance Milestones (see Section 3.5.3).

Level 4 *The minimum level of Environmental Assessment for projects not requiring EA in such detail as 'Levels 1, 2 and 3' due to their nature, scale or location, that do not need to proceed beyond the Scoping stage.*

- 'Level 4' EA covers activities that require EA, but not to the level of detail as 'levels 1, 2 and 3'.
- These activities are considered to have very minor or negligible environmental effects, either by their nature or as a result of consultation, and can therefore be signed-off at the end of the Scoping stage and need not proceed any further.
- Projects subject to 'level 4' assessment will only require one Quality Assurance Milestones at the end of the Scoping stage (see Section 3.5.3) to verify that no further assessment is required. However, it is important to note that if the environmental effects of the project are considered to warrant further investigation, the project should be subject to more detailed level of assessment.

Guidance on the minimum level of environmental assessment that is likely to be required for a particular type of project is included in Appendix VII. A more detailed level of assessment may be required than this minimum depending on a number of factors, including: the scale of the proposals; and the sensitivity of the receiving environment, for example. In this way, projects may 'move up' the hierarchy of levels of assessment.

Appendix VIII includes a wide range of works and activities, but is unlikely to be totally comprehensive. If works or activities are proposed which are not included, guidance on the appropriate level of assessment should be sought from the Regional EA Contact (see Appendix II).

Other factors which may also result in the need for a more detailed level of environmental assessment than the minimum for a particular project, include:

- for the purpose of public display (eg. river restoration projects);
- where an individual, or organisation, objects to a project and requires comprehensive information on how the Agency reached its decision;
- where major criteria of significance are clearly exceeded (eg. damage to a SSSI);
- where the project is known to be controversial and there is a known objection.

4.5 Which Consenting Regime Should be Followed?

Appendix VII also includes guidance on which consenting regime should be followed for particular types of works and activities. The legal aspects behind these issues are dealt with in more detail in Appendix IV. Figure 4 presents the key questions that need answered to determine which consenting regime should be followed and also relates this to the appropriate level of environmental assessment.

4.5.1 Does the Project Require Planning Permission or Benefit from Permitted Development Rights?

Certain types of works and activities promoted by the Agency constitute 'development' under the *Town and Country Planning Act (1990)* (referred to as the TCPA '90) and therefore require planning permission from the local planning authority. 'Development' is defined under the TCPA '90 as:

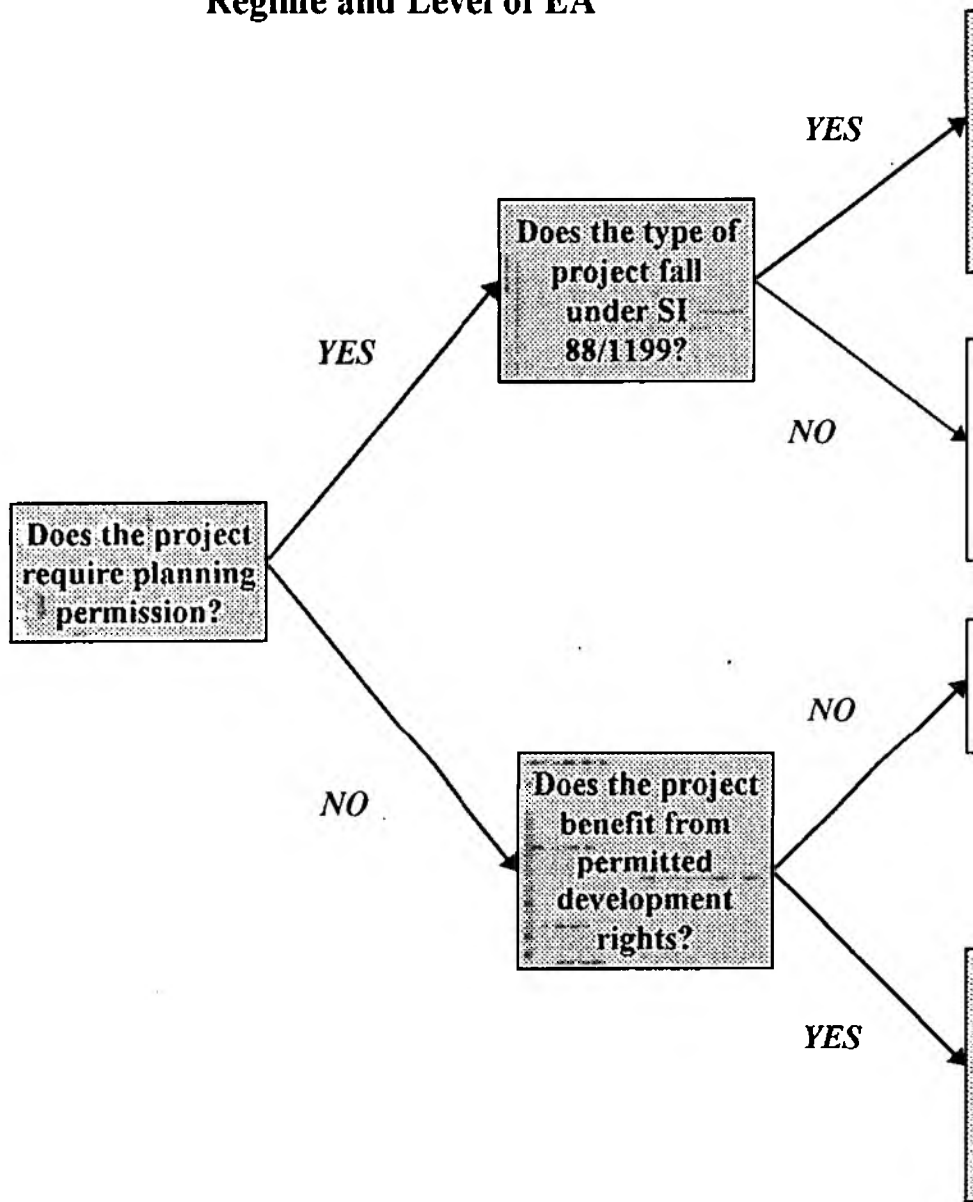
"the carrying out of any building, engineering, mining or other operations in, on, over or under land or the making of any material change in the use of buildings or other land". (s.55 TCPA '90).

However, certain types of 'development' undertaken by the Agency benefit from 'permitted development rights', as defined in the *Town and Country Planning (General Permitted Development) Order (1995) SI 95/418* (referred to as the GPDO), and are therefore exempt from the need for explicit planning permission. Appendix IV provides more details on the Agency's 'permitted development rights'. Appendix VII indicates if planning permission is required or if permitted development applies to particular types of project.

The decision of whether a proposal requires planning permission will rest in the first instance with the local planning authority and their interpretation of the Agency's permitted development rights. The local planning authority should therefore be consulted at an early stage to obtain an opinion. It is, however, the Agency's experience that local authorities are not always consistent and one authority may require planning permission for a scheme that does not require planning permission in another authority's area.

Note that for projects which comprise of some elements which require planning permission and others which benefit from permitted development rights (and are 'land drainage improvements' - see below) it will be necessary to follow different consenting routes for the different elements of the project. However it will usually be sufficient to produce a single ER/ES treating the environmental impacts holistically, providing it is made clear which elements of the scheme are following which regime.

Figure 4: Determining the Appropriate Consenting Regime and Level of EA



Is the project likely to give rise to significant environmental effects (or fall under Sch. 1)?

YES

Undertake Level 1 EA and produce an Environmental Statement

NO

Undertake Level 2 EA and produce an Environmental Report

Undertake Level 2 EA and produce an Environmental Report

Undertake Level 4, 3 or 2 EA as appropriate

Does the project constitute land drainage improvement under SI 88/1217?

YES

Is the project likely to give rise to significant environmental effects?

YES

Undertake Level 1 EA and produce an Environmental Statement

NO

Undertake Level 4, 3 or 2 EA as appropriate

NO

Undertake Level 4, 3 or 2 EA as appropriate and check if SI 95/417 applies

Note that under the Conservation (Natural Habitats &c.) Regulations 1994, where a project is likely to have significant environmental effects upon a proposed or designated Special Protection Area (SPA) or Special Area for Conservation (SAC), the Agency's permitted developments are extinguished. In these circumstances, the local planning authority is designated the responsibility for ensuring that all development in or near these sites are undertaken in a manner which will not adversely effect the integrity of such sites of international importance.

For proposed works affecting such sites, the Agency must therefore undertake appropriate environmental assessment to determine whether the works are likely to have significant environmental effects. The environmental assessment must be conducted in collaboration with the appropriate statutory body (English Nature or Countryside Council for Wales) and their formal decision ascertained. The works can then only be carried out under the Agency's permitted development rights if it is agreed that the scheme is not likely to have significant environmental effects. The issue of determining significance is explored in section 4.6.

4.5.2 Does the Project Fall Under the Environmental Assessment Regulations?

If the project requires planning permission it may fall under the *Town and Country Planning (Assessment of Environmental Effects) Regulations (1988) SI 88/1199* (as amended). If the project benefits from the Agency's permitted development rights it may fall under the *Land Drainage Improvement Works (Assessment of Environmental Effects) Regulations (1988) SI 88/1217* (as amended). Appendix IV provides more details on which projects fall under the EA Regulations. Appendix VII indicates which particular types of works and activities fall under the EA Regulations.

Land Drainage Improvement Works (Assessment of Environmental Effects) Regulations (1988) SI 88/1217

SI 88/1217 applies to improvements to existing land drainage infrastructure. The Regulations require that improvements that are likely to have significant environmental effects should be the subject of an environmental assessment and have an Environmental Statement produced. The definition of 'improvement works' given in the Regulations is works which:

"widen; deepen, straighten or otherwise improve any existing watercourse or remove or alter mills, dams, weirs or other obstructions to a watercourse, or raise, widen or otherwise improve any existing drainage work".

Some works which benefit from permitted development rights fall outside the definition of land drainage improvement works and therefore the Agency can legally carry them out without the need for either planning permission or environmental assessment under the EA Regulations. However, the *Town and Country Planning (Environmental Assessment and Permitted Development) Regulations (1995) SI 95/417* introduced the requirement for environmental assessment if a project benefitting from permitted development rights falls under either Schedule 1 or Schedule 2 (if the project is likely to have significant environmental effects) of SI 88/1199, save for certain exceptions including land drainage improvement works under SI 88/1217. Projects in this category now have to be the subject

of a planning application, accompanied by an Environmental Statement.

Town and Country Planning (Assessment of Environmental Effects) Regulations (1988) SI 88/1199

Projects which fall under SI 88/1199 and are likely to be promoted by the Agency are included under 'infrastructure projects' in Schedule 2 of these Regulations (DoE, 1989). These apply to new works which require planning permission, rather than to improvement works. Relevant categories in the Schedule are:

- canalisation or flood-relief works;
- a dam or other installation designed to hold water or store it on a long-term basis;
- a long distance aqueduct;
- coast protection works.

The Agency may also occasionally be involved in other types of projects included in the Regulations, such as extracting minerals.

Under SI 88/1199, environmental assessment is only mandatory for projects included in Schedule 1 of the Regulations. Local Planning Authorities (LPAs) are empowered to request an Environmental Statement for projects included in Schedule 2 of the Regulations, if it is likely to have significant effects. This is submitted with the planning application.

Early consultation, as recommended in government guidance (DoE, 1989), should take place with the LPA over Schedule 2 projects to establish whether an ES will be required and to discuss the scope of the assessment.

In circumstances where the LPA consider that an ES is not required, the Agency may still produce a voluntary ES even though not obliged to do so by the EA Regulations. Project requiring planning permission for which an Environmental Statement is not produced, should be accompanied by an Environmental Report ('Level 2 EA' - see Section 4.5).

4.5.3 Projects Subject to an Application for MAFF/VO Grant Aid

Projects for which MAFF/VO Grant Aid is to be sought can either seek formal approval alone or Approval in Principle (AIP) first. MAFF in their *'Review of Land Drainage Grant Arrangements Introduction of Revised Memoranda Relating to Grants'* (1976) (to Water Authorities in England and Wales, Welsh National Water Development Authority) state that an Authority may wish to obtain AIP to a scheme before embarking on the detailed design. Agreement in principle means that the objectives and outline solutions are acceptable technically and administratively. The Memorandum goes on to state that AIP has an advantage for single schemes of an unusual nature or comprehensive schemes consisting of a series of interrelated single schemes, the implementation of which would be spread over a number of years. An AIP lapses if an application for formal approval of a scheme or the first stage of a comprehensive scheme is not submitted within two years. If the AIP lapses then a new submission will be required.

It is therefore recommended that MAFF/WO AIP is only sought for these 'unusual or comprehensive schemes' and that the majority of schemes should only be submitted to MAFF for formal approval after detailed design. MAFF/WO requires that formal EA procedures should be applied at the AIP stage and also requires written confirmation that English Nature/CCW is content with a proposed scheme. Liaison should also take place with other environmental bodies, such as English Heritage and the Countryside Commission (CCW and Cadw in Wales), should be undertaken at the earliest possible stage. English Nature's involvement in scheme consideration is described in guidance produced by MAFF in June 1993.

4.6 Will There be Significant Environmental Effects?

A great deal of uncertainty surrounds the criteria for significance. However, it is recognised that almost all projects will alter the environment in some way. The DoE Circular 15/88 on 'Environmental Assessment', which explains the provisions of SI 88/1199, includes general guidance on how to assess significance of a project and suggests that there are three main criteria of significance:

- whether the project is of more than local importance, principally in terms of physical scale;
- whether the project is intended for a particularly sensitive or vulnerable location, for example, a national park, SSSI, SPA or SAC and for that reason may have significant effects on the area's environment even though the project is not on a major scale; and the project location;
- whether the project by its nature is thought likely to give rise to particularly complex or potentially adverse effects, for example, in terms of discharges of pollutants.

There is only very limited criteria and guidance on significance included in the legislation, mainly because of the project and site specific nature of impacts. The decision as to whether a project is likely to give rise to significant environmental impacts should be taken in consultation with appropriate internal and external specialists. Some additional guidance on significance based on the criteria listed above is given in the table below.

Factors Influencing the Environmental Significance of a Development Project:

Nature and Complexity	<ul style="list-style-type: none"> • operation of new or complex process • uncertainty about the nature of the site's environmental conditions, or the potential effect of pollutants • elements of risk to public health or safety • major demands for energy or finite resources • duration of potentially damaging operations
Size and Extent	<ul style="list-style-type: none"> • the physical scale of the proposal in relation to comparable types of development • the capacity of the site and its surroundings to absorb the development

Location	<ul style="list-style-type: none"> • the proximity of the development to sensitive areas • potential threats to protected habitats and species
Policy Context	<ul style="list-style-type: none"> • possible conflicts with existing planning and other environmental policies • possible damage to the environment through the cumulative effects of individually insignificant impacts

It is recognised that at the scoping stage the limited level of information available will often mean that a decision on the relative significance of an impact will be based primarily on professional opinion and experience of similar projects. However, a standard method for determining significance based on a measurement of the scale of the impact and the value of the area affected is considered useful and will ensure that consistent and objective decisions are made for all development proposals. It is acknowledged that further work on developing such a nationally consistent approach is required.

In line with the '*Good Practice Guide on the Preparation of Environmental Statements for Planning Projects that Require Environmental Assessment*' (DoE, 1995) it is recommended that environmental specialists adopt, as far as possible, a standard approach to defining what is meant by a 'significant' impact with respect to their specialism.

The DoE (now the DETR) have provided some indicative criteria and thresholds for determining whether environmental assessment is likely to be required for Schedule 2 projects under SI 88/1199 in *DoE Circular 15/88 (Environmental Assessment)*, *DoE Circular 7/94 (Environmental Assessment: Amendment of Regulations)* and *DoE Circular 3/95 (Permitted Development and Environmental Assessment)*. However, this advice is qualified because the DoE consider that given the range of project types and the importance of locational factors, "*it is not possible to formulate criteria or thresholds which will provide a simple test in all cases of whether environmental assessment is or is not required*" (DoE Circular 15/88). The projects types of particular relevance to the Agency where some guidance is given, includes:

- coastal protection works - see *DoE Circular 7/94 (Environmental Assessment: Amendment of Regulations)*; and
- long-distance aqueducts - see *DoE Circular 3/95 (Permitted Development and Environmental Assessment)*.

It should be noted that the revised European Directive on environmental assessment (11/97/EC) will require the introduction of inclusive and exclusive thresholds.

4.7 What Issues Should be Addressed By the Environmental Assessment Process?

The DoE '*Good Practice Guide on the Preparation of Environmental Statements for Planning Projects that Require Environmental Assessment*' (DoE, 1995) recommends that scoping of impacts should become a standard practice when carrying out an EA. This recommendation reflects the draft amendments to EC Directive (337/85/EEC).

Scoping usually refers to the identification of key issues which should be addressed in the

EA. To a large extent, this will be project and site-specific. At the scoping stage it may also be beneficial to identify potential areas for enhancement. The Environment Agency published '*Environmental Assessment: Scoping Handbook for Projects*' in April 1996 to promote consultation and liaison at an early stage in the EA process and this provides useful information on the importance of scoping. In addition, the NRA published two volumes of guidance notes on EA scoping:

- '*Scoping Guidance on the Environmental Assessment of Projects*' (NRA, 1995);
- '*Further Guidance on the Environmental Assessment of Projects*' (NRA, 1995).

These should be referred to for generic information on the potential impacts associated with particular development activities. These volumes include scoping checklists for 63 different projects types and information on the legal requirements, mitigation measures, baseline surveys and monitoring and audit requirements that are likely to be applicable for each project type, several of which the Agency may promote themselves. Note that these guidance notes are due to be updated by the end of 1998.

Impacts upon ecology, geomorphology, landscape, fisheries and aquatic biology are most often identified as being key issues in environmental assessments of Agency projects. However, impacts on groundwater protection, contaminated land, water quality, air quality, noise and archaeology, may be equally, or more significant in a particular case, and should not be neglected. In addition, under the Environment Act 1995, the Agency must have a regard to the effect of its actions on the economic and social well-being of local communities in rural areas.

It is a common misconception that EA is about conservation and wildlife issues only. EA is multi-functional and should reflect a range of issues relevant to the project. As an example, for urban projects effects upon the local residents, such as noise, land-take and loss of riverside paths may be more significant than conservation interests.

Where the scoping process has identified that a project is only likely to have a significant impact upon one or two disciplines, then the EA should focus upon these. In such a case, the resulting documentation should indicate the scope of the assessment and therefore need not be too lengthy. It should be noted that it is always preferable to design out and mitigate significant impacts wherever possible during the EA process.

4.8 Summary of the Scoping Stage

The following tasks should be undertaken during the Scoping Stage:

- (i) all the relevant Environmental Specialists should be consulted to assess the sensitivity of the proposed site. Regions may wish to produce a standard Scoping Form to facilitate this consultation exercise. Some Environmental Specialists may wish to recommend that they should not be consulted on certain types of project.
- (ii) Environmental Specialists will search known data sources and visit the site (if necessary) to determine the potential impacts which may result from the project and provide any relevant information. Impacts resulting from both the construction phase

and its end-state impacts should be considered. The Environmental Specialist should also identify the need for any additional survey work.

- (iii) the production of a Scoping Report can be used for two purposes, to consult external interested parties on the proposals or to record the responses from consultation and the key results and decisions from the Scoping Stage.

- description of proposed works;
- consultations carried out;

- (iv) certify that a Scoping Report has been produced and record the results and decisions from this stage of the EA process in the report or a file note. This should summarise:

- key environmental considerations;
- recommendations on the level of assessment which should be undertaken;
- recommendations on the consenting regime that should be followed;
- the type of document(s) which should be prepared.

This is the key Quality Assurance Milestone for the Scoping stage.

- (v) the Project Manager will then instigate the subsequent stages of the EA process.

Note that for 'level 4' EA, the environmental process can be stopped at the end of the Scoping stage because all the consultees agree that the proposed works or activities are considered to have very minor or negligible effects.

KEY POINTS FROM PART 4 OF THE HANDBOOK

- the procedures outlined in this Part of the Handbook must be followed for certain projects and programmes;
- it is important to ensure that projects are subject to the appropriate level of EA and follow the correct consenting regime;
- early consultation is the key to ensure that the environmental impacts are minimised and delays and conflicts later in the process are avoided.

PART 5: ENVIRONMENTAL ASSESSMENT PROCEDURES: THE EVALUATION STAGE

5.1 Introduction

Part 5 of the Handbook describes the evaluation of the environmental implications of the project, leading to the preparation of documentation and submission under the appropriate consenting regime. The following are covered in this Part of the Handbook:

- baseline surveys;
- appointment and liaison with environmental consultants;
- alternatives;
- impact and effect prediction and assessment;
- enhancement opportunities and mitigation measures;
- types of documents produced;
- signing-off;
- disputes procedure;
- advertising.

5.2 Evaluation

5.2.1 Baseline Surveys

It is anticipated that the majority of baseline information will be available in-house or from external consultees. However, it may be necessary to commission more detailed surveys to augment this. The availability of baseline information will be identified through consultation carried out as part of the scoping process.

It should be noted that certain surveys have to be undertaken at particular times of the year and this factor may have to be considered during project planning.

5.2.2 Appointment and Liaison with Environmental Consultants

Environmental consultants are frequently appointed to undertake aspects of the Agency's environmental assessment. Where such consultants are to be used, it is important that relevant in-house Environmental Specialist(s) recommend appropriate consultants and draw up suitable briefs on behalf of the Project Manager. These in-house specialists should also have the responsibility of quality assuring work to ensure consistency. The EA Officer (where applicable) has a quality assurance role over the documentation where this is contracted out. In future it is proposed that only nationally accredited EA consultants shall be appointed to undertake EA work.

Regions may wish to produce standard briefs for environmental work and lists of 'accredited' consultants by the Environmental Specialists should speed up this process (it is intended that standard briefs are produced for a future revision of this Handbook). Note that under the

proposed Quality Assurance Framework (see Section 3.5), an accreditation system for consultants is proposed. It should normally be the responsibility of each Environmental Specialist to prepare Briefs and select consultants and for the Project Manager to commission the work.

There should be regular progress meetings with the Project Manager, external consultants and in-house Environmental Specialists.

5.2.3 Alternatives

Consideration of realistic alternatives is a vital part of the EA process. There may be alternative locations, designs or methods of construction. Many impacts can be avoided altogether by selection of a sensitive solution in the first instance, rather than building in costly mitigation at the detailed design stage or being forced to reconsider options previously rejected as a result of late objections. For this reason, the 'do-nothing' option, 'softer' engineering methods, and a catchment solution (flood storage, source control etc) should be given fair consideration.

The reasons for the selection of the preferred option need to be clearly documented as they will form part of the environmental Statement or Environmental Report and will justify the choice of option to any objectors at a later stage.

5.2.4 Impact and Effect Prediction and Assessment

A number of techniques are used to predict the likely magnitude and significance of the effects of a project, or option, on the environment, for example, mathematical or computer modelling, matrices and consultation. Where possible, impacts should be quantified and any assumptions made clearly identified. However, in practice, much prediction relies on qualitative data and the considered opinions of experts. Where this is the case, any uncertainties should be stated (see Section 4.6).

Once the enhancement opportunities and mitigation measure (see Section 5.2.5 below) have been identified and incorporated into the proposals, the residual effects of the project will have to be identified and assessed. Ultimately, the overall benefits of the project will have to be justified against these residual effects. As stated in Section 2.5 'The Need for Good Practice', every project should aim to have a net positive environmental effect.

In order to improve the EA process, and the prediction of effects in particular, it is important to incorporate monitoring and auditing into the process to compare predicted and actual impacts of projects (see Section 6.3).

5.2.5 Enhancement Opportunities and Mitigation Measures

A fundamental aim of using EA procedures in the design process is to ensure that potentially damaging effects are minimised and that beneficial aspects of the project are enhanced wherever possible. This process will usually be iterative as the proposals for the development are refined. An important part of the EA process is to ensure that the mitigation measures

specified in the EA documentation are implemented on the ground and to ensure that the effectiveness of the mitigation measure is monitored in the future (see Section 6.3).

Mitigation measures are a way of avoiding, reducing or repairing adverse environmental effects. The most satisfactory form of mitigation is to avoid environmental damage at source, reduction involves lessening the severity of an impact which cannot be avoided entirely. This may involve redesigning parts of the project, specifying that certain materials are used or laying down criteria for working practices.

The process of compensation of the loss of environmental features should involve either the compensation of the loss by another form of natural capital of equal or higher environmental value or agreed compensation in some other form. The concept of mitigation banking can be used on larger projects or a number of projects.

Enhancement measures include the improvement on the status quo or existing natural capital. The Environment Act requires the Agency to enhance the environment in all its operations and regulatory activities. The main purpose of some Agency schemes is to achieve environmental enhancements, for example ALF (Alleviation of Low Flow) schemes and river restoration projects. MAFF/WO encourage enhancements and environmental improvements to be incorporated in schemes, stating that "*environmental opportunities should be considered in all flood and sea defence options*" (MAFF/WO, 1996).

Compensation, however, is usually a more direct attempt to offset an impact of a development by, for example, providing elsewhere an alternative facility/site to replace what has been lost or attempting to translocate the feature to a new site. MAFF have commented on compensation with reference to habitat loss that "*environmental damage is seldom compensated for by the creation of new habitats: existing habitats have, in most cases taken very many years to develop and will inevitably be intrinsically different from newly created habitats*" (MAFF/WO, 1996).

It is anticipated that collection of additional baseline information, evaluation of further impacts, refinements to mitigation measures and identification of potential enhancements will all occur in parallel with project design. The amount of work and time required will vary with each project and may also be affected by external matters beyond control of in-house staff.

5.3 Documentation

5.3.1 Types of Document Produced

The different levels of environmental assessment require different types of reports (see Section 4.4), although all the reports are similar in format and content they will vary in level of detail. During the scoping stage a **Scoping Report** should be produced (see Section 4.8) and at the end of the Scoping Stage the level of EA that is required, and therefore the relevant types of documentation that should be produced, needs to be determined. The contents of these reports are discussed in more detail in Appendix VIII.

- (i) When a 'level 1' EA is carried for projects under SI 88/1217 or SI 88/1199, for

projects with significant effects, an **Environmental Statement (ES)** is produced. Guidance on the information to be included in an ES is set out in a schedule in both sets of the Regulations in the form of a list of 'specified information' that should be included and 'further information' that may be included.

- (ii) Where planning permission is required and the effects are not significant and therefore an ES is not required, an **Environment Report (ER)** is produced to accompany the planning application. An ER is also produced, and advertised externally, for land drainage improvements under SI 88/1217 where the impacts are not deemed to be significant. This equates to 'level 2' EA.
- (iii) More minor or less sensitive works subject to 'level 3' EA do not require a formal report and a file note including a summary of consultation can be produced at the same time as an ES or ER. For these projects, the project documentation (eg. drawing etc.) should still be circulated internally for signing-off.

The contents of these reports must be agreed and signed-off internally (as appropriate) before being submitted to the decision-making body (LPA, DETR or MAFF/WO) with the application for either planning permission, grant aid or consent. Sufficient time must be allowed for the preparation of the draft report.

Prior to the production of the documentation internal agreement of proposals or designs should have been obtained, so that signing-off should be a formality, and sufficient information made available to those producing the report. This should include all feasibility appraisal reports, a full list of in-house and external consultees, location maps, minutes of meetings, internal memos and any landscape drawings or plans.

During both the Scoping and Evaluation stages, consideration will need to be given to the constraints and working practices required for each project that should be described in the **Environmental Action Plan** (see Section 6.1).

Sufficient time must be programmed to allow for the preparation of a report, signing-off and advertising.

Note that the Agency should make every effort to ensure that its documentation is accessible to all members of society. Consideration must be given to producing documents in different formats and languages and interpreters may need to be provided. This is particularly important for the Non-Technical Summary of Environmental Statements.

5.3.2 Who Writes the Documentation?

In Regions with EA Officers, they will be responsible for co-ordinating production of the EA documentation. External consultants may be used under the supervision of the EA Officer. In this event, the EA Officer should act as a quality control agent on behalf of the client. They will have an input into the content of the report and will review it in order to maintain a consistency in style and quality. In Regions without EA Officers, this role is likely to be fulfilled by the Project Manager or a nominated Environmental Specialist.

5.3.3 *Signing-off*

It is vital that the documentation is agreed internally before being advertised. The project design as outlined in the report should be acceptable for all staff as it presents the Agency's views for the public, decision-makers and for external consultees. For this reason, Regions may wish to adopt a formal signing-off procedure using a standard form for certain projects. The draft report and the Signing-off Form should be circulated by the EA Officer/Project Manager to the Environmental Specialists involved in the EA.

If minor amendments are necessary, then these can be easily undertaken by the EA Officer/Project Manager without the need to recirculate the revised report. However, if an objection is made to the report this is likely to necessitate substantial changes and the report will have to be re-circulated to all consultees for approval. This may result in a considerable time delay. It is for this reason that project designs should be agreed by all relevant specialists before signing-off.

The Environmental Specialists may decide that the person responsible for coordinating the EA should have delegated powers to amend EA documentation as they consider necessary. This can reduce the amount of time involved in gaining approval for a report, but must be a conscious decision endorsed by all those involved.

Regions should establish a disputes procedure for the unlikely cases when there are disagreements over a fundamental aspect of a project design or its impacts.

5.4 **Submission**

Once the documentation is complete and signed-off, the procedures for the consenting regime that applies to the particular project should be followed. This is most likely to be either the planning permission or land drainage improvement route.

5.4.1 *Advertising*

There are legal requirements to advertise the Agency's proposals which fall under the land drainage improvement Regulations (SI 88/1217), these are summarised below.

- (i) Where an ES is to be produced, an initial advert should be placed in two local newspapers stating the intention to carry out the improvement works, describing briefly the nature, size and location of the proposed works and the intention to prepare an ES. Comments at this stage may be requested if desired. A copy of the notice should be sent to the consultation bodies (including English Nature, English Heritage and the Countryside Commission/Countryside Council for Wales and Cadw).
- (ii) Once the ES has been prepared, a second notice should be placed in two local newspapers announcing the preparation of the ES, details of the time and place where copies may be inspected by members of the public (this is usually at a library) and that any representations should be made in writing to the address specified in the notice within 28 days of the date of the notice. A copy of the notice and ES should be sent to the consultation bodies. On request, copies of the ES should be provided

to members of the public.

- (iii) Where an ES will not be produced, an advert should be placed in two local newspapers stating the intention to carry out the improvement works, describing briefly the nature, size and location of the proposed works and that there is no intention to prepare an Environmental Statement, but information is available (usually in the form of an Environmental Report). The notice should also state that any representations should be made in writing to the address specified in the notice within 28 days of the date of the notice. A copy of the notice shall be sent to the consultation bodies. The Regulations (SI 88/1217 as amended by SI 95/2195) includes details of the procedures to be adopted in cases where there is a dispute regarding the need for an ES.
- (iv) A project should not be advertised until the report (ES or ER) has been agreed internally.

There is no legal requirement for the Agency to advertise a proposal which requires planning permission *per se*, the planning application will be advertised by the local planning authority in the normal way. However, if an Environmental Statement is required under the EA Regulations (SI 88/1199), the applicant must publish an advert in a local paper.

Copies of the key Standard adverts for SI 88/1217 and 88/1199 are included in Appendix X.

In the past, some confusion has arisen as to who is responsible for advertising when part of a project requires planning permission and the other is a land drainage improvement; or when a project benefitting from permitted development rights does not fall under SI 88/1217.

- (i) In some cases certain aspects of a land drainage improvement scheme, such as construction of bridges, will require planning permission. Legally, land drainage improvement works should be dealt with under SI 88/1217 and in such cases the Agency should advertise under SI 88/1217 describing which parts of the project constitutes land drainage improvements and which aspects will be the subject of a planning application. Copies of the adverts issued under SI 88/1217 should be supplied to the local planning authority for information. In such cases, it would be good practice to produce a single document covering both elements, but stating which parts relate to which consenting regime.
- (ii) Documents produced to outline the environmental effects of works which fall outside the definition of land drainage works and SI 88/1217, does not legally have to be advertised.

5.4.1 Register of Environmental Assessment Projects

This is the appropriate point in the EA process to implement the part of the proposed Quality Assurance system relating to the register of environmental assessment projects (see Section 5.4.3). The relevant details of each project reaching this stage in the process should be entered into the Region database (see Appendix VI).

The relevant Environmental Specialists, Project Manager and EA Officer (where applicable) should agree the contents of the documentation from the evaluation stage, as appropriate. The certification of the satisfactory completion of the relevant documentation is the key Quality Assurance Milestone for the evaluation stage.

KEY POINTS FROM PART 5 OF THE HANDBOOK

- the procedures outlined in this Part of the Handbook must be followed for certain projects;
- the EA process should be iterative, involving the assessment of potential impacts, selection of preferred options, redesign and introduction of mitigation measures and evaluation of residual impacts;
- all the relevant Environmental Specialists should agree the contents of documentation for the project before the design and documents are finalised and submitted.

PART 6: ENVIRONMENTAL ASSESSMENT PROCEDURES: IMPLEMENTATION, MONITORING AND AUDIT

6.1 Implementation

Environmental assessment is not merely a procedural requirement which ends with the production of the report, its contents should be translated successfully into action. Implementation is not addressed under the EA Regulations, but is an area where communication problems can occur as a project is passed from the design stage to the implementation stage and then forwarded to contractors.

To ensure that the recommendations from an environmental assessment are translated into action, the Project Manager, in liaison with the EA Officer (where applicable), should check whether measures specified in the Environmental Statement or Environmental Report are accurately translated into the contract documents. On site supervision of contractors and post-project appraisal are all important parts of the EA process.

In order to facilitate the implementation of the recommendations from the environmental assessment process, it is recommended that an 'Environmental Action Plan' (EAP) is included in the EA documentation. This would be particularly useful for projects which require an ES, but also for other projects for which an ER or other documentation would be produced.

The Environmental Action Plan should form a chapter in the EA documentation, with the potential to be used as a stand alone document. This would enable it to be passed onto the contractors and potentially those involved in managing a site in the future. The Plan should include:

- a clear summary of the mitigation and enhancement measures included in the EA document and any outstanding issues;
- the environmental constraints of the site (mapped on a plan if necessary);
- the objectives and targets to ensure delivery of the project within the required environmental constraints (these could be linked to the success criteria identified during the feasibility stage of a project);
- details of the environmental monitoring, auditing and quality assurance that is appropriate for the project;
- details of any environmental specifications that are required in the contract document.

A possible vehicle for ensuring an Environmental Action Plan is implemented is the '*Maintenance and Operational Manual*' which is produced for each scheme as part of the '*Health and Safety File*'. The requirement for this manual is included in the standard consultants brief, which states that 'environmental issues such as post construction monitoring

and maintenance should be covered.'

6.2 Construction

The published environmental commitments in the ES/ER have to be delivered as specified, unless there are extenuating reasons for a change in design. Other agencies may decide to take enforcement action against the Agency for failure to deliver the approved design, environmental constraints and mitigation measures. Any design changes which result in new significant effects on the environment may require the ES to be re-published or new planning permission gained. At the very least all changes in design or construction impacts which have not been covered by the ES/ER will have to be assessed by the relevant Environmental Specialists.

The Project Manager should check that the measures specified in the report are accurately translated into the contract documents. The engineer's representative should receive a copy of the EA documentation.

The Project Manager should notify the Environmental Specialists and the EA Officer (where applicable) of the start date, location and duration of construction. The EA Officer and or Project Manager may attend the site start up meetings to 'handover' the EAP.

The need for on-site Environmental Specialists for certain projects should be identified and specified in the Environmental Action Plan. External consultants should be commissioned where in-house staff are unavailable to undertake this task. This should be agreed before the contract commences and any specialist must work through the engineer's representative.

The certification that the contract documents have been adequately reviewed and where applicable that the Environmental Action Plan has been finalised and incorporated into the contract documents is the third key Quality Assurance Milestone (see Section 5.3.2).

6.3 Monitoring, Post-Project Appraisal and Audit

It is intended that more work will be undertaken over the next year on developing the Agency's approaches to monitoring - see Quality Assurance system (section 3.5.2). However, Regions should start developing a monitoring programme which should include at least 5% of projects to which some level of EA has been applied. Project-specific monitoring should be included in the Environmental Action Plan and draw on the impacts, mitigation measures and enhancements and any uncertainties and risks (eg. use of new technology/techniques). Regional monitoring exercises should be reported nationally (as part of the review of the EA process and the National Handbook). There may have to be a more formal mechanism established for monitoring, unless all the needs can be identified early on or within the one year after the project has been completed, or else each Region may need to bid for monitoring budgets independently from the project budget.

In Regions with EA Officers they should be responsible for managing the audit of the EA process, production of the documentation and monitoring the 'audit trail', this role will have to be fulfilled by Project Managers in other Regions. Remedial measures will need to be carried out where mitigation has been unsuccessful. Comparison of the actual impacts, with

those predicted should improve future EA practice. This should improve future project design and assessment.

KEY POINTS FROM PART 6 OF THE HANDBOOK

- The EA process should not end at the production of reports and submission for approval, but follow through into implementation and post-construction;
- Environmental Action Plans are the proposed mechanism to ensure recommendations from the evaluation are implemented;
- monitoring impacts and predictions against success criteria is an area where EA needs to focus in the future.

Appendices

Appendix I:	Environment Agency Environmental Assessment Policy Paper
Appendix II:	Key Environmental Assessment Contacts
Appendix III:	References and Sources of Information
Appendix IV:	Legislation and Departmental Guidance
Appendix V:	Designations and the Organisations Responsible
Appendix VI:	Quality Assurance Environmental Assessment Record Sheet
Appendix VII:	The Appropriate Level of Environmental Assessment and Consenting Regime for Agency Projects
Appendix VIII:	Example Contents of Environmental Assessment Documentation
Appendix IX:	Environmental Statement Review Criteria
Appendix X:	Standard Adverts
Appendix XI:	Glossary and Abbreviations

**Appendix I: Environment Agency Environmental Assessment Policy
Paper**

ENVIRONMENT AGENCY POLICY GROUP

Report of the Head of Integrated Environmental Policy

Subject: **ENVIRONMENTAL ASSESSMENT OF PROJECTS (EA)**

RECOMMENDATION

The policy, products, roles and responsibilities for an improved consistent and progressive approach to environmental assessment of projects be **APPROVED** as set out in this report

Background

EA is a process intended to ensure that the environmental impacts of strategies, plans policies and projects are identified prior to implementation so that proposals can be modified or managed in such a way that adverse impacts are avoided or minimised.

The Agency needs to develop EA processes as key tools to drive a holistic approach for all of its environmental work.

The Agency has statutory commitments to EA processes for some **internal** projects largely related to flood defence, water resources, fisheries and navigation.

The Agency also has statutory commitments to consider EAs for some **external** projects:-

(i) as a consultee of Local Planning Authorities in respect of EAs submitted with planning applications.

and (ii) as a Regulator, the Agency has EA responsibilities linked to IPC and Waste, and will have new responsibilities for EA in relation to major applications for the transfer and abstraction of water, for licences under the new IPPC regime and for Emergency Plans in relation to COMAH.

The Head of Internal Audit has criticised the Agency's current performance with regard to the EA of internal projects and to the consideration of EAs submitted with planning applications. Seven current major areas of risk to the Agency have been identified. These are:-

weak national framework and policy

regional divergence

uneven provision of EA handbooks and training

unclear roles and responsibilities for EA

uneven application of EA to internal projects and plans

EA may be neglected for urgent internal works

undue reliance on staff experience and awareness.

The Head of Internal Audit concluded that unless internal environmental assessment is conducted in a coordinated and consistent manner the Agency may not be fulfilling its statutory obligations and risks being challenged by external parties regarding environmental assessment matters.

The Way Forward

The following priorities seem self evident so that the Agency can demonstrate a highly competent consistent and proportionate approach to the EA of all projects whether internal or external.

1. remedy the risks identified by the Head of Internal Audit.
2. improve the consideration of Town and Country Planning EAs
3. develop EA guidance and implementation framework for new regulatory duties expected in 1999.

Priority 1- Key Deliverables

Establish National Policy Guideline for Environmental Assessment.

The following general Statement is proposed

'The Environment Agency will discharge its environmental assessment (EA) duties under the relevant legislation uncluding SI 88/1199 and SI/88/1217 in a consistent manner and to high standards. EA is seen as integral to the work of the Agency and good practice for EA's for both internal and external projects will be followed. The Agency will expect applicants and developers to equally high standards in the assessment of any environmental impacts of proposed developments.'

Establish Clear Roles and Responsibilities

Areas - Prepare EA, consult and obtain approval for all internal projects in accordance with non financial SoD.

Regions - QA and coordinate Area EA work. Ensure appropriate training and expertise at Area level. Approve any internal project with regional implications in accordance with SoD. It is specifically recommended that each RGM nominate an RMT member to champion best practice for internal EA within the region to whom each Regional EA coordinator should report.

Head Office- Head of Local Govt Liaison to Chair national customer group representing relevant national functions and regional coordinators - role of group is to agree and promulgate policy, procedures and best practice in EA. National Centre for Risk Analysis and Options Appraisal to meet customer group needs by producing national handbooks, other guidance, training packages etc and generally to act as a national centre of expertise. Director of Operations to arrange to the consistent uptake of EA policy, guidance and best practice.

Produce a National Handbook on EA of Internal Projects

The Handbook should include:-

clear description of the minimum requirements to be met

recommendations on best practice

nationally agreed interpretation of relevant legislation

guidance on which projects should be subject to EA

procedures for maintenance and emergency works

quality control and assurance system

guidance for integration with other tools and procedures, especially project management.

The National Centre is drafting the Handbook which should be available before the end of March this year.

Provide Updated Training and Awareness in EA and the use of the new Handbook.

Once the new handbook is produced, Regional coordinators will need to assess any need for training of Area staff, and have funds available for any such training. Subject to the approval of the Customer Group, the National Centre will cooperate with the National Training Service to provide training as required by each Region.

Review Existing EA Project Guidance.

The Agency has published three volumes of general guidance on the EA of projects. The Stationery Office has reported very favourable sales to developers and local planning authorities.

The volumes cover the impact of projects on the water environment and should be updated to include Waste, Air Quality and Land Quality impacts so that the volumes become the definitive detailed 'Bible' for all EA project work, of use to Agency staff, customers, and developers

The National Centre is about to let a Research and Development contract for this work which should be completed by the end of this year.

Stationery Office is likely to publish Guidance as an interactive CD ROM.

Priority 2 - key deliverables

Establish general Policy Statement as set out above

Establish clear roles and responsibilities.

Regional Technical Planning Managers will be the normal regional focus for EA work in connection with planning liaison, and will need to be represented on the national customer group chaired by the Head of Local Govt Liaison. RGMs should ensure close coordination between the planning liaison and internal EA work.

Produce brief guidance for Planning liaison staff

Guidance is intended to assist them in responding to local planning authority EA consultations in a relevant proportionate and consistent manner. The National Centre has been commissioned to produce such guidance

based on a simple checklist approach, based upon the more detailed guidance referred to above. This guidance should be available by the end of this year.

Provide updated training and awareness

This will be prepared and provided by the National Centre as required by Regions and the national customer group.

Priority 3 - key Deliverables

Current DETR consultations on IPPC indicate that the Agency will exercise a joint responsibility for EA with local planning authorities. Both parties will need to be very clear about each others roles and responsibilities, and the Agency will need to ensure that its planning liaison response to an EA is entirely consistent with its response as a regulator to the same or similar EA.

National Regional and Area roles and responsibilities can only be mapped out once OMT and national function groups have had the opportunity to consider the full implications of the new regulations.

The Environmental Protection functions will need to contribute now to the development of the three volumes of guidance for EA of Projects, so the guidance is in place for use both by the Agency and applicants in time for the implementation of the Regulations. The EP functions therefore should be represented on the EA customer group steering the work of the national centre in producing the guidance.

Development Costs

Priority	Item	completion date	Cost £K
1a	handbook for internal EA	31/3/98	10
1b	awareness training for handbook	98/99	60
1c	Update 3 vol 'Bible' - CD ROM	end 98	35
2a	Checklist Guidance for Planning liaison	end 98	10
2b	Awareness training for Planning liaison	99	25
3a	Awareness training in use of 'Bible'	99/2000	75
	Monitor and Audit of all above	2001	50
	TOTAL		265

Conclusion

The adoption of a national policy on environmental assessment and supporting recommendations set out in this paper is essential ensure a consistent Agency - wide approach to these issues and acheiving the recommendations of the Internal Audit Report.

Appendix II: Key Environmental Assessment Contacts

Regional Environmental Assessment Contacts

Region	Contact	Telephone No.
Anglian	Gerard Stewart	7 50 4303
Midlands	David Hickie	7 22 5825
North East	Andrea Shaftoe	7 28 2084
North West	Paul Green	7 21 2451
Southern	Robin Crawshaw	7 23 2129
South West	Peter Nicholson	7 24 2357
Thames	Sue Reed	7 25 5714
Welsh	Gill Mackley	7 26 2109

National Centre for Risk Analysis and Options Appraisal

Position	Contact	Telephone No.
Options Appraisal Manager	Andrew Brookes	7 10 6818
Environmental Developments Officer	Steve Robberts	7 10 6896

Appendix III: References and Sources of Information

Agency Documents

Existing Regional Environmental Assessment Guidelines

Environment Agency (1998) *Regional Environmental Assessment Procedures and Guidelines (Edition 11)*. Agency - Midlands, Solihull.

Environment Agency (1997) *Thames Region Environmental Assessment Guidelines (Draft)*. Agency - TR, Reading.

Environment Agency (Nov. 1997) *South West Region Environmental Assessment Handbook (Second Draft)*. Agency - SW, Exeter.

Environment Agency (April 1996) *Environment Agency Guidelines for Agency Projects in the Anglian Region*. Agency - Anglian, Peterborough.

NRA (1994) *Thames Region Environmental Assessment Guidelines*. NRA-TR, Reading.

Environmental Assessment Scoping Guidance

Environment Agency (1996) *Environmental Assessment: Scoping Handbook for Projects*. HMSO, London.

NRA (1995) *Scoping Guidance on the Environmental Assessment of Projects*. NRA, Reading.

NRA (1995) *Further Guidance on the Environmental Assessment of Projects*. NRA, Reading.

Other Agency Documents

Agency Policy Paper (January 1998) *Environmental Assessment of Projects*

Report by Head of Internal Audit (July 1997) *Environmental Assessment of Internal Works and Projects* (NATS12)

Environment Agency (1996) *The Appraisal and Management of Projects in the Environment Agency*. Environment Agency, Bristol.

Environment Agency (1997) *Project Management in the Agency PIN Vol. 14; Version 2*. Environment Agency, Bristol.

Environment Agency (1998) *Engineering Project Management Manual PIN Vol. 19; Version 1*. Environment Agency, Bristol.

Environment Agency (1997) *Flood Defence Management Manual PIN Vol. 29; Version 2*. Environment Agency, Bristol

Environment Agency (1997) *Risk Assessment and Management Guidance Note Version 2*. Environment Agency, Bristol

Environment Agency *Environmental Policy for the Agency's own Activities*. Environment Agency, Bristol

Environment Agency *Technical Directorate Part 2 Flood Defence PIN Vol. 5*. Environment Agency, Bristol

Environment Agency *Procurement Manual PIN Vol. 9*. Environment Agency, Bristol

Environment Agency *Civil Engineering Contract Administration Manual* PIN Vol. 21. Environment Agency, Bristol

Environment Agency *Consultants Manual* PIN Vol. 22. Environment Agency, Bristol

Guidance from Government Departments and Statutory Bodies

Department of the Environment and Welsh Office advisory booklet (1989) *Environmental Assessment: A Guide to the Procedures*. HMSO, London.

Department of the Environment (1995) *A Good Practice Guide on the Preparing Environmental Statements for Planning Projects That Require Environmental Assessment*. HMSO, London.

Department of the Environment and Welsh Office advisory booklet (1995) *Your Development Rights and Environmental Assessment*. DoE and Welsh Office.

Department of the Environment (1994) *Good Practice Guide on the Evaluation of Environmental Information for Planning Projects - A Research Report*. HMSO, London.

MAFF/VO (1995) *The Habitat Directive - Implications for Flood Defence and Coastal Defence*.

MAFF/VO (1992) *Environmental Procedures For Inland Defence Works - A Guide for Managers and Decision-Makers In The National Rivers Authority Internal Drainage Boards and Local Authorities*. MAFF, London.

MAFF/VO (1996) *Draft Code of Good Practice for Flood Defence Operating Authorities*.

MAFF/DoE/VO (1991) *Conservation Guidelines for Drainage Authorities*. PB 0743. MAFF, London.

MAFF/VO (1992) *Environmental Procedures for Inland Flood Defence Works*. MAFF, London.

MAFF/VO (1993) *Coastal Defence and the Environment*. MAFF, London.

MAFF/VO (1993) *Coastal Defence and the Environment - a strategic guide for managers and decision makers in the National Rivers Authority, Local Authorities and other bodies with coastal responsibilities*. MAFF, London.

MAFF/VO (1993) *Strategy for Flood Defence in England and Wales*. MAFF, London.

MAFF/VO (1993) *Flood and Coastal Defence Project Appraisal Guidance Notes*. MAFF, London.

MAFF/VO (1993) *Flood and Coastal Defence Project Appraisal Guidance Notes*. MAFF, London.

MAFF/VO (1994) *Water Level Management Plans - a procedural guide for operating authorities*. MAFF, London.

MAFF/VO (1995) *Shoreline Management Plans - a guide for coastal defence authorities*. MAFF, London.

MAFF/VO (1996) *Code of Good Practice for Flood Defence Operating Authorities*. MAFF, London.

English Nature (1994) *Nature Conservation in Environmental Assessment*. English Nature, Peterborough.

English Nature (1995) *Environmental Assessment - English Nature's Role and a guide to Good Practice*. English Nature, Peterborough.

Legal Requirements

European Directives

EC Directive on 'the assessment of the effects of certain public and private projects on the environment' (85/337/EEC).

EC amending Directive on 'the assessment of the effects of certain public and private projects on the environment' (97/11/EC).

EC Proposed Directive on 'the assessment of the effects of certain plans and programmes on the environment' (March 1997).

Statutory Instruments

Electricity and Pipe-line Works (Assessment of Environmental Effects) Regulations 1990 (Statutory Instrument No. 442).

Environmental Assessment (Salmon Farming in Marine Waters) Regulations 1988 (Statutory Instrument No. 1218).

Environmental Assessment (Afforestation) Regulations 1988 (Statutory Instrument No. 1207).

Harbour Works (Assessment of Environmental Effects) Regulations 1988 (Statutory Instrument No. 1336).

Harbour Works (Assessment of Environmental Effects) (No 2) Regulations 1989 (Statutory Instrument No. 424).

Highways (Assessment of Environmental Effects) Regulations 1988 (Statutory Instrument No. 1241).

The Land Drainage Improvement Works (Assessment of Environmental Effects) Regulations 1988 (Statutory Instrument No. 1217).

The Land Drainage Improvement Works (Assessment of Environmental Effects) (Amendment) Regulations 1995 (Statutory Instrument No. 2195).

The Town and Country Planning (Assessment of Environmental Effects) Regulations 1988 (Statutory Instrument No. 1199).

The Town and Country Planning (Assessment of Environmental Effects) (Amendment) Regulations 1994 (Statutory Instrument No. 677).

The Town and Country Planning (Environmental Assessment and Permitted Development) Regulations 1995 (Statutory Instrument No. 417).

The Town and Country Planning (General Permitted Development) Order 1995 (Statutory Instrument No. 418).

The Town and Country Planning (General Development Procedures) Order 1995 (Statutory Instrument No. 419).

The Conservation (Natural Habitats &c.) Regulations 1994 (Statutory Instrument No. 2716).

Circulars

Department of the Environment Circular 15/88 *Environmental Assessment*.

Department of the Environment Circular 3/95 *Permitted Development and Environmental Assessment*.

Acts of Parliament

The Environment Act, 1995.

The Environmental Protection Act, 1995.

The Food and Environment Protection Act, 1985.

The Water Resources Act, 1991.

Further Reading on EA

Wathern, P. (1988) *Environmental Assessment: Theory and Practice*. Unwin Hyman, London.

Construction Industry Research and Information Association (1994). *Environmental Assessment*. Special Publication 96. CIRIA, London.

Therivel, R et al (1992) *Strategic Environmental Assessment*. Earthscan Publications, London.

Therival, R. Glasson, J. and Chadwick, A. (1995). *Introduction to Environmental Impact Assessment*. UCL Press, London.

Newbold, C., Honnor, J., and Buckley, K. (1989) *Nature Conservation and the Management of Drainage Channels*. Nature Conservancy Council and Association of Drainage Authorities. NCC, Peterborough.

Newbold, C., Purseglove, J. and Holmes, N., (1983) *Nature Conservation and River Engineering*. NCC, Peterborough.

Stiles, Wood and Groome (1991) *Environmental Assessment: The Treatment of Landscape and Countryside Recreation Issues*. Technical Report CCP 326. Countryside Commission Publications, Manchester.

Appendix IV: Legislation and Departmental Guidance

In addition to the many benefits of environmental assessment (EA) outlined in *Part 2 of the Handbook* there are legal reasons for carrying it out. The law requires EA to be a significant part of the Agency's work. The following key legislation is summarised below:

- *The Environment Act, 1995;*
- EC Directive on 'the assessment of the effects of certain public and private projects on the environment' (85/337/EEC) adopted in 1985;
- Statutory Instrument No. 1217 - *The Land Drainage Improvement Works (Assessment of Environmental Effects) Regulations 1988*, as amended by Statutory Instrument No. 2195 (1995);
- Statutory Instrument No. 1199 - *The Town and Country Planning (Assessment of Environmental Effects) Regulations 1988*, as amended by Statutory Instrument No. 677 (1994);
- Statutory Instrument No. 418 - *The Town and Country Planning (General Permitted Development) Order 1995;*
- Statutory Instrument No. 417 - *The Town and Country Planning (Environmental Assessment and Permitted Development) Regulations 1995;*
- Statutory Instrument No. 2716 - *The Conservation (Natural Habitats &c.) Regulations 1994;*
- The Food and Environment Protection Act 1985 Part II: *The Licensing of Deposits in the Sea;*

For any given project a combination of the above legislation may apply.

Legislation Relating to the Roles and Responsibilities of the Environment Agency

The Environmental Act, 1995

The Environment Agency's general environmental duties are set out in Section 7 and Section 6 (1) of the *Environment Act, 1995*. Section 7 obliges the Agency in formulation or considering:

- "i. any proposal relating to any function of the Agency other than its pollution control functions, so far as may be consistent -

with the purposes of any Act relating to the function of the Agency and in accordance with guidance issued by Ministers towards the:

- *objectives of sustainable development*

so as to exercise its powers:

- *to further the conservation and enhancement of natural beauty and the conservation of flora, fauna and geological or physiographical features of special interest.*

- ii. any proposals relating to any functions of the Agency:

- *to have regard to the desirability of conserving and enhancing natural beauty and the conservation of flora, fauna and geological or physiographical features of special interest.*

- iii. *any proposal relating to any function of the Agency:*
- *to have regard to the desirability of protecting and conserving buildings, sites, objects of archaeological, architectural, engineering or historic interest.*
 - *to take into account any effect which the proposal would have on the beauty or amenity of any rural or urban area or on any such flora, fauna, features, buildings, sites or objects.*
 - *to have regard to any effect which the proposal would have on the economic or social well-being of local communities in rural areas."*

Section 6 (1) imposes more general conservation duty, to such an extent as to consider desirable, generally to promote:

- "i. *the conservation and enhancement of the natural beauty and amenity of inland and coastal waters and of land associated with such waters.*
- ii. *the conservation of flora and fauna which are dependant on the aquatic environment."*

In summary, with regard to projects, the *Environment Act 1995*, requires that the environmental effects of all projects are taken into account and the conservation and enhancement of the environment is furthered in so far as is consistent with statutory purposes. This is why environmental assessments are required and that the process is fully documented for projects not deemed likely to have a significant impact to ensure that these duties are complied with.

European Community Directives

EC Directive 85/337/EEC

The basis for EA in the UK is the EC Directive (85/337/EEC) on '*the assessment of the effects of certain public and private projects on the environment*'. It was agreed and notified to member states in July 1985 and formal compliance was due on 3rd July 1988.

The Directive is a procedural one, which seeks to ensure that before a decision is made about whether consent should be given to go ahead with development, information about the likely significant effects on the environment has been provided to the 'competent authority' for example, the local planning authority, the Ministry of Agriculture, Fisheries and Food (MAFF) or the Department of the Environment (DoE).

Projects likely to have significant effects on the environment by virtue *inter alia* of their nature, size or location must be made subject to an assessment of their effects before consent is given.

The EA Directive has been implemented in the UK through secondary legislation in the form of a series of regulations. The requirements of the various regulations are summarised in a booklet published by the Department of the Environment (DoE, 1989). The regulations which generally impinge on projects promoted by the Agency are discussed below.

EC Directive 9/11/EC

The European Commission have agreed an amending Directive (97/11/EC) to the original EA Directive 85/337/EEC. The amending Directive must be implemented by member states by 14 March 1999. The amending Directive extends the list of projects subject to assessment, as well as introducing new rules for determining when environmental assessments are required and their content.

The DETR have issued two Consultation Papers to date related to the implementation of the Directive: Implementing of EC Directive on Environmental Assessment (July 1997) and Determining the need for

Environmental Assessment (December 1997).

Draft SEA Directive

In addition to the proposed amendment of the Directive on project EA, the Commission adopted proposals for a Council Directive on the '*assessment of the effects of certain plans and programmes on the environment*' in December 1996. This Directive is often referred to as the Strategic Environmental Assessment (SEA) Directive. The proposal requires:

- that environmental impact assessments be carried out for certain plans and programmes, and;
- that the results of the assessment are taken into account during the preparation and adoption of such plans and programmes.

It will apply to land use plans and programmes which:

- are subject to preparation and adoption by a competent authority or which are prepared by a competent authority for adoption by an act of legislation and;
- are part of the land use decision making-process for the purpose of setting the framework for subsequent development consent decisions and;
- which contain provisions on the nature, size, location or operation conditions of projects.

The definition includes plans and programmes in sectors such as transport (including transport corridors, port facilities and airports), energy, waste management, water resource management, industry (including extraction of mineral resources), telecommunications and tourism. The explanatory memorandum to the proposal notes that in the UK the proposals are likely to apply to "Structure Plans and Unitary Development Plans - Part One" and "Local Plans and Unitary Development Plans (UDP) - Part Two".

Environmental Assessment Regulations

The regulations which implement the EC Directive 85/337/EEC that are most relevant to the Agency are Statutory Instrument No. 88/1217 - *The Land Drainage Improvement Works (Assessment of Environmental Effects) Regulations 1988 (as amended)* and Statutory Instrument No. 88/1199 - *The Town and Country Planning (Assessment of Environmental Effects) Regulations 1988 (as amended)*. These Statutory Instruments apply to certain types of project:

- Statutory Instrument No. 88/1217 applies to land drainage improvement works carried out by Drainage Authorities, such as the Environment Agency. For simplicity, these Regulations are referred to as SI 88/1217;
- Statutory Instrument No. 88/1199 applies to certain projects where planning permission is required. These are similarly referred to as SI 88/1199.

Statutory Instrument No. 88/1217 - The Land Drainage Improvement Works (Assessment of Environmental Effects) Regulations 1988 (as amended)

SI 88/1217 applies to works which:

"widen, deepen, straighten or otherwise improve any existing watercourse or remove or alter mills, dams, weirs or other obstructions to a watercourse, or raise, widen or otherwise improve any existing drainage work."

For these works, the following procedures currently apply:

- (i) decide whether or not the project will have significant effects upon the environment and, hence, whether an ES will be produced;
- (ii) place an advert in two local newspapers describing the works and either stating that an ES has been produced or that an ES has not been produced but that statement justifying why an ES is not required or an Environmental Report is available.
- (iii) anyone wishing to object or make representations is given 28 days to do so;
- (iv) during this 28 day period the documentation is made available for inspection, usually in a local library. Copies are also provided to English Nature and any other public body with an interest in that particular project;
- (v) the ES is then submitted to MAFF with the application for grant aid. MAFF is the decision-maker and arbitrator in the event of any dispute.

Guidance on the content of an ES is given in a Schedule in the Regulations. This schedule is divided into the 'specified information' which should be included in an ES and the 'further information' which may be included. A similar schedule (Schedule 3) is also included in SI 88/1199. There are no provisions for monitoring or audit within the Regulations.

Statutory Instrument No. 88/1199 - The Town and Country Planning (Assessment of Environmental Effects) Regulations 1988 (as amended)

The SI 1 88/199 Regulations are similar in content to SI 88/1217. The principal differences are as follows:

- (i) it is the local planning authority (LPA) who initially decide whether or not an ES is required. They are only likely to do this for very large projects. Early consultations with the LPA are recommended in these cases, as stated in government guidance (DoE, 1989). In cases where an ES is not legally required the Agency may still produce a voluntary ES if it feels that impacts of a scheme are significant;
- (ii) once the ES is produced it is submitted to the LPA. Sufficient copies must be provided for statutory consultees (including English Nature) or the Agency may send copies direct;
- (iii) *The Town and Country Planning (General Permitted Development) Order 1995* (SI 95/418) and the *Town and Country Planning (Environmental Assessment and Permitted Development) Regulations 1995* (SI 95/417) requires that an EA is carried out for all developments falling under Schedules 1 and 2 of SI 88/1199 if significant environmental effects are likely, even if that development has permitted development rights. However, land drainage improvement works falling under SI 88/1217 are excluded from these new arrangements (see below).

The Schedules 1 and 2 in the Regulations referred to above include a list of project types for which an ES is required (Schedule 1) and a list for which an EA may be required (Schedule 2) if the LPA consider it will have significant environmental effects. Projects which are likely to be promoted by the Agency and are included in SI 88/1199, are categorised under 'infrastructure projects' in Schedule 2-10 of the Regulations (DoE, 1989). These apply to new works which require planning permission, rather than to improvement works. Relevant categories are:

- 2-10 (e) - canalisation or flood-relief works;
- 2-10 (f) - a dam or other installation designed to hold water or store it on a long-term basis;
- 2 - 10 (i) - a long distance aqueduct;
- 2 - 10 (l) - coast protection works.

The Agency may occasionally be involved in other types of projects included in the Regulations, such as extracting minerals.

Other Environmental Assessment Regulations

In addition to the Land Drainage Improvement Works Regulations, there are a number of other EA Regulations in England and Wales which apply to projects outside the Town and Country Planning system including:

- Harbour Works (SI No. 88/1336 and SI No. 89/424);
- Salmon Farming (SI No. 88/1218);
- Highways (SI No. 88/1241);
- Electricity and Pipe-line Works (SI No. 90/442);
- Afforestation (SI No. 88/1207).

These Regulations are unlikely to apply to works carried out by the Agency and their relevance to the Agency is generally limited to external EAs and ESs that they may be consulted upon.

Permitted Development and Environmental Assessment

Statutory Instrument No. 95418 - The Town and Country Planning (General Permitted Development) Order 1995

The *Town and Country Planning (General Permitted Development) Order 1995* together with Statutory Instrument No. 95/419 the *Town and Country Planning (General Development Procedures) Order 1995*, replaces the *General Development Order (GDO) 1988*. For simplicity the General Permitted Development Order is referred to in this document as the GPDO. The GPDO defines the developments which requires planning approval and those which are considered to be permitted development. Schedule 2 Part 15 explains the permitted development rights of the National Rivers Authority (now the Environment Agency), this includes:

"Development by the National Rivers Authority, for the purpose of their functions, consisting of -

- (a) development not above ground level required in connection with conserving, redistributing or augmenting water resources,*
- (b) development in, on or under any watercourse or land drainage works and required in connection with the improvement, maintenance or repair of that watercourse or those works,*
- (c) the provision of a building, plant, machinery or apparatus in, on, over or under land for the purpose of survey or investigation,*
- (d) the maintenance, improvement or repair of works for measuring the flow in any watercourse or channel,*
- (e) any works authorised by or required in connection with an order made under section 73 of the Water Resources Act 1991 (power to make ordinary and emergency drought orders),*
- (f) any other development in, on, over or under their operational land, other than the provision of a building but including the extension or alteration of a building."*

Under the 1988 GDO there was no general provisions for EA to be undertaken for development benefitting from permitted development rights (PDRs). However, under the new arrangements development benefitting from PDRs has to be subject to a planning application if it is likely to have significant effects on the environment, as discussed below.

Statutory Instrument No. 95/417 - The Town and Country Planning (Environmental Assessment and Permitted Development) Regulations 1995

These Regulations apply to development which previously benefitted from PDRs and falls under Schedule 1 of SI 88/1199 or Schedule 2 of SI 88/1199 and is likely to have significant environmental effects by virtue of their nature, size or location. These developments now have to be the subject of a planning application accompanied by an Environmental Statement. SI 95/417 details the procedures to be followed to obtain an opinion on whether a project requires an Environmental Statement, these are also summarised in the DoE/Welsh

Office leaflet *'Your Development Rights and Environmental Assessment'* and explained in the DoE Circular 3/95 *Permitted Development and Environmental Assessment*.

Development is excluded from SI 95/ 417 if it consists of the carrying out by a drainage body, such as the Agency, of land drainage improvement works as defined by SI 88/1217, as these regulations provide alternative arrangements for EA of these types of works. As a consequence, it is considered unlikely that many Agency projects will need to be the subject of a planning application accompanied by an ES as a consequence of these regulations.

In summary, in order for an Agency project to fall under SI 95/417 and be subject to a planning application accompanied by an ES as a result, the project would have to meet the following criteria:

- (i) benefit from PDRs under Schedule 2 Part 15 of the GPDO 1995;
- (ii) not constitute 'land drainage improvements' as defined by SI 88/1217;
- (iii) fall under one of the project types listed in Schedule 1 or 2 of SI 88/1199;
- (iv) be likely to have significant effects on the environment.

Environmental Assessment and the Habitats Directive

Statutory Instrument No. 94/2716 - The Conservation (Natural Habitats &c.) Regulations 1994

These regulations implement the EC Habitats Directive and following their implementation, the Agency ceases to have permitted development rights in relation to works or operations in or adjacent to a designated or proposed Special Protection Area (SPA) or Special Area for Conservation (SAC) if the works are considered to have significant environmental effects. The Agency should determine the significance of the works in collaboration with English Nature/Countryside Council for Wales. In these circumstances, the local planning authority is designated the responsibility for ensuring that all development in or near these sites are undertaken in a manner which will not adversely effect the integrity of such sites of international importance. The requirements of the Habitats Directive with regard to Agency Projects needs to be fully taken into account by the EA process. MAFF have produced guidelines on the Directive, *'The Habitats Directive - Implications for Flood Defence and Coastal Defence'* (MAFF, 1995).

Environmental Assessment and FEPA

The Food and Environment Protection Act 1985 Part II: The Licensing of Deposits in the Sea

MAFF has a statutory duty to control the making of certain deposits of articles or materials in the sea/tidal waters. The primary objectives are to protect the marine ecosystem and human health and minimise interference and nuisance to others.

This duty is exercised under powers conferred under the Food and Environment Protection Act 1985 Part II (FEPA) which requires that a licence be obtained from MAFF (the licensing authority) to deposit any article or substances in the sea or under the seabed. FEPA licence applications require external consultation which can be implemented through the EA process.

MAFF/VO Guidance

MAFF/VO have produced a series of guidance notes and memoranda as guides to the Environment Agency, Internal Drainage Boards and local authorities when considering and carrying out flood defence works. These should be read alongside this Handbook. A list has been included in the references (Appendix III). Of particular importance is the *Code of Practice on Environmental Procedures for Flood Defence Operating Authorities* (MAFF/VO, 1996).

Appendix V: Designations and the Organisations Responsible

Designation/Protection	Organisation Responsible	Comments
Nature Conservation Sites - International Importance		
Biosphere Reserves	UNESCO/DETR	- designated under UNESCO 'Man and the Biosphere Programme' - all also NNRs
Biogenetic Reserves	DETR/English Nature WO/CCW	- Council of Europe designation - all also NNRs or SSSIs
Ramsar Sites	DETR/English Nature WO/CCW	- designated under the Ramsar Convention on the Conservation of Wetlands of International Importance - W&C Act - all also SSSIs
Special Protection Areas (SPAs)	DETR/English Nature WO/CCW	- designated under EC Directive 79/409/EEC on the Conservation of Wild Birds - all also SSSIs
Special Areas of Conservation (SACs)	DETR/English Nature WO/CCW	- created under EC Habitat Directive 92/43/EEC
The Berne Convention*	DETR/WO	- Council of Europe Convention on Conservation of European Wildlife and Natural Habitats
The Bonn Convention*	DETR/WO	- Convention on the Conservation of Migratory Species of Wild Animals
Nature Conservation Sites - National Importance		
National Nature Reserves (NNRs)	English Nature/CCW	- W&C Act & NP&AC Act - all also SSSIs
Marine Nature Reserve	DETR/English Nature/CCW	- W&C Act
Sites of Special Scientific Interest (SSSIs)	English Nature/CCW	- W&C Act - valued for their flora, fauna, geological and physiological features
Areas of Special Protection for Birds (AOSPs)	DETR/WO	- W&C Act - designated by Sec. of State
Ancient Woodland*	English Nature/CCW	- semi-natural and replanted

Designation/Protection	Organisation Responsible	Comments
Nature Conservation Sites - Regional or Local Importance		
Local Nature Reserves (LNRs)	Local Authorities	- NP&AC Act - owned and admin. by LAs
Non-Statutory Sites of Importance for Nature Conservation*	Local Authorities	- precise titles may vary inc. SNCI, SSI, SBI, SINC, ASI, ALCI
Non-Statutory Nature Reserves*	Local Authorities/ RSPB/ County Wildlife Trust	
Forest Nature Reserves*	Forest Enterprise	
Protected Species		
various plants and animals under the Wildlife & Countryside Act 1981	English Nature/CCW	- includes great crested newts, bats, otters, etc
badgers under the Badger Act 1992	English Nature/CCW	- affords protection to badgers and their setts
EC Directive 79/409/EEC on the Conservation of Wild Birds	English Nature/CCW	- protects various species of rare or vulnerable of birds
Landscape Designations - National Importance		
National Parks	Countryside Commission/CCW/ National Park Authorities	- NP&AC Act - protection of wild and beautiful landscapes
The Norfolk and Suffolk Broads	Countryside Commission/ The Broads Authority	- similar status to National Park - Broads Act 1988
The New Forest	Countryside Commission	- similar status to National Park
Areas of Outstanding National Beauty (AONB)	Countryside Commission/CCW	- NP&AC Act
Heritage Coast*	Countryside Commission/CCW	- undeveloped coasts for informal recreation
Limestone Pavement Orders	Local Authorities	- W&C Act
Landscape - Other Designations		
Green Belt*	DETR/Local Authorities	- boundaries in local plans/UDPs

Designation/Protection	Organisation Responsible	Comments
Areas of Great Landscape Value (AGLV)*	Local Authorities	- included in Structure Plans
Country Parks	Local Authorities	
Tree Preservation Orders (TPOs)	Local Authorities	
Other designations *	Local Authorities	- included in local plans/UDPs eg. landscape protection area, landscape enhancement area
Heritage Designations - International Importance		
World Heritage Sites*	UNESCO/DETR/ WO	- designated under UNESCO Convention for Protection of the World Cultural and Natural Heritage
Heritage Designations - National Importance		
Scheduled Monuments (SMs)	English Heritage/Cadw	- AM&AA Act - protection of archaeological sites and buildings
Areas of Archaeological Importance	Local Authority	- AM&AA Act - Centres of Canterbury, Exeter, Hereford and York
Listed Buildings	English Heritage/Cadw	- P(LB&CA) Act - Grade I, II* and II
Parks and Gardens of Special Historic Interest*	English Heritage/Cadw	- grades I, II* or II
National Trust Property	National Trust	- inalienable land enjoys statutory protection
Heritage Designations - Local Importance		
Conservation Areas	Local Authority	- P(LB&CA) Act
Non-designated buildings and sites*	English Heritage/Cadw	- eg. Historic Landscapes and Battlefield Sites
Other Designations/Protection		
Regionally Important Geological/ Geomorphological Sites (RIGs)*	various non-statutory bodies	- similar status to LNRs
Environmentally Sensitive Areas (ESAs)	MAFF/WO	- areas of special landscape, wildlife or historic interest which can be protected or enhanced by specific agricultural practices - Agri. Act
Common Land/Town and Village Greens	Local Authority/DETR/ WO	- CR Act - consent from Sec. of State required to carry out works

Designation/Protection	Organisation Responsible	Comments
Allotments	Charity Commissioners	- public or semi-public open space under Enclosures Acts
Public Rights of Way		- Counties hold definitive maps

- * non-statutory designations

The following abbreviations are used for Acts enforcing certain designations/protections:

NP&AC Act - National Parks and Access to the Countryside Act 1949
W&C Act - Wildlife and Countryside Act 1981
AM&AA Act - Ancient Monuments and Archaeological Areas Act 1979
P(LB&CA) Act - Planning (Listed Buildings and Conservation Areas) Act 1990
CR Act - Commons Registration Act 1965
Agri. Act - Agriculture Act 1986

Appendix VI: Quality Assurance Environmental Assessment Record Sheet

The following information is the minimum information required for the Quality Assurance Record Sheet (see Section 3.5.2 and 3.5.3) that should be completed for every project. Some Regions have already developed databases for this purpose (eg. Thames Region) and it is therefore suggested that this is used as a template for other Regions.

Project Details

- Project ID
- Project Name
- Project Type
- Grid Reference (10 digit)
- River
- Planning Authority
- Project Manager
- Environmental Assessment Officer (where applicable)
- Consultant Engineers
- Environmental Consultants

Project Route and Milestones

- Approval Route (internal/permitted development, planning permission, emergency works or enforcement action)
- Statutory Environmental Assessment Route (SI 88/1217 or SI 88/1199)
- Minimum Level of EA Required (Level 1, 2, 3 or 4) (from Handbook Appendix VIII)
- Actual Level of EA undertaken (Level 1, 2, 3 or 4)
- QA Milestone 1: Scoping Report/sign-off file note (date)
- QA Milestone 2: ES/ER/end of evaluation sign-off file note (date)
- QA Milestone 3: EAP implementation/sign-off file note (date)

Audit and Monitoring

- Review of EA documents undertaken (date)
- Results of review of EA documents (grade A-E)
- Post-Project Appraisal undertaken (date)

Appendix VII: The Appropriate Level of Environmental Assessment and Consenting Regime for Agency Projects

This Appendix should be read alongside Sections 4.4 and 4.5 of the Handbook. It shows for different types of project: the level of environmental assessment that is appropriate; whether the project requires planning permission or benefits from permitted development; and if either of the EA Regulations apply.

The list of project types in this Appendix is unlikely to cover every type of project possible. The Regional EA Contact will be able to provide advice on the appropriate level of EA for other project types (see Appendix II).

Key:

1. Minimum Level of Environmental Assessment

This column shows the minimum level of environmental assessment that must be applied to each type of project, with the level of environmental assessment shown in brackets that may be necessary depending on the nature and scale of the project and the sensitivity of the receiving environment. The main test to determine if level 2 or level 1 EA is appropriate, will be if it is likely to give rise to 'significant environmental effects' (see Section 4.6)

The level of environmental assessment has been classified from 1 to 4 (see Section 4.4).

2. Type of Schedule 2 Project (SI 88/1199 as amended)

Yes ¹	10 (c) canalisation or flood-relief works;
Yes ²	10 (f) a dam or other installation designed to hold water or store it on a long-term basis;
Yes ³	10 (i) a long distance aqueduct;
Yes ⁴	10 (l) coast protection works.
Yes ⁵	11 (c) installation for the disposal of controlled waste

3. Class of Permitted Development under SI 95/418

Yes ¹	Part 15 Class A (a)
Yes ²	Part 15 Class A (b)
Yes ³	Part 15 Class A (c)
Yes ⁴	Part 15 Class A (d)
Yes ⁵	Part 15 Class A (e)
Yes ⁶	Part 15 Class A (f)

Note: the shaded cells highlight if planning permission is required or if the works benefit from permitted development rights and if the works fall under either of the EA Regulations.

Appendix VII: The Appropriate Level of Environmental Assessment and Consenting Regime for Agency Projects

Type of Works/ Activity	Type of Structure/Solution	Minimum Level of Environ- mental Assessment	Requires Planning Permission	Schedule 2 Project (SI 88/ 1199 as amended)	Permitted Develop- ment	Land Drainage Improve- ment (SI 88/1217)	Comment
Navigation Works	- new locks	2	Yes	No	No	No	
	- modification or renewal of existing locks	3 (2/1)	No	No	Yes ^{2/6}	Yes	- may constitute land drainage improvements as structure is part of existing watercourse
	- maintenance of locks	4	No	No	Yes ^{2/6}	No	
	- new in channel lay-bys and moorings	2	Yes	No	No	No	
	- new lock cuts	2 (1)	Yes	Yes ¹	No	No	
	- new facilities at lock sites (eg. sanitary stations)	4 (3)	No	No	Yes ⁶	No	- assuming it is not a building and it is on operational land
	- alterations and extensions to existing buildings at lock sites	4 (3/2)	No	No	Yes ⁶	No	- alterations and extensions are permitted development if within certain limits defined in the GPDO (assumes it is on operational land). The site will be more sensitive if the building is listed or in a Conservation Area .
	- new buildings at lock sites	2	Yes	No	No	No	- planning permission required even if on operational land
Watercourse Dredging	- dredging operations involving bed reprofiling or physical modification of the channel	3 (2/1)	No	Yes ¹	Yes ²	Yes	
	- minor dredging operations involving desilting, deshoaling etc	3 (2/1)	No	Yes ¹	Yes ²	Yes	
Channel Works	- realignment of channel	2 (1)	Yes	Yes ¹	No	No	
	- minor widening of channel	3 (2/1)	No	Yes ¹	Yes ²	Yes	
	- new hard channel protection eg. piling, walls etc.	3 (2/1)	No	Yes ¹	Yes ²	Yes	

Type of Works/ Activity	Type of Structure/Solution	Minimum Level of Environ- mental Assessment	Requires Planning Permission	Schedule 2 Project (SI 88/ 1199 as amended)	Permitted Develop- ment	Land Drainage Improve- ment (SI 88/1217)	Comment
Channel Works (cont.)	- new soft bank protection works eg. stoning of banks, willow spiling etc.	3 (2/1)	No	Yes ¹	Yes ²	Yes	
	- new culverts	3 (2/1)	No	Yes ¹	Yes ²	Yes	
	- renewal or replacement of bank protection, bed protection and culverts	3 (2/1)	No	Yes ¹	Yes ²	Yes	
	- maintenance of bank protection, bed protection and culverts	4 (3/2)	No	No	Yes ²	No	
Fluvial Flood Defence Schemes	- new diversion channels	2 (1)	Yes	Yes ¹	No	No	- unless it is on operational land in which case it would benefit from permitted development
	- new flood walls and embankments	2 (1)	Yes	Yes ¹	No	No	
	- improvements to and replacements/removal of existing flood defences	2 (1)	No	Yes ¹	Yes ²	Yes	
	- maintenance of existing flood defences	4 (3/2)	No	No	Yes ²	No	
	- new flood defence pumping station	2 (1)	Yes	Yes ¹	No	No	- assuming that it involves the construction of a new building
	- new/alterations to pumping regimes (inc. new pumps)	2 (1)	No	No	Yes ^{2/6}	Yes	
Flood Storage Areas	- new flood storage reservoirs/lakes/storage areas	2 (1)	Yes	Yes ^{1/2}	No	No	- unless it is on operational land in which case it would benefit from permitted development
	- improvements to existing flood storage areas	2 (1)	No	Yes ^{1/2}	Yes ^{2/6}	Yes	- on-line flood storage areas will not require planning permission if work required is within the watercourse or on operational land
	- maintenance and repair of existing flood storage areas	4 (3/2)	No	No	Yes ^{2/6}	No	- assumes the storage area is on-line (ie. part of the watercourse) or on operational land

Type of Works/ Activity	Type of Structure/Solution	Minimum Level of Environ- mental Assessment	Requires Planning Permission	Schedule 2 Project (SI 88/ 1199 as amended)	Permitted Develop- ment	Land Drainage Improve- ment (SI 88/1217)	Comment
Tidal Defences	- new tidal defences	2 (1)	Yes	Yes ¹	No	No	- assumes works involve land outside the watercourse
	- improvement/replacement of existing tidal defences	2 (1)	No	Yes ¹	Yes ²	Yes	
	- maintenance of existing tidal defences	4 (3/2)	No	No	Yes ²	No	
Flow Control Structures	- new weirs, sluices or other flow control structure (as part of flood defence works)	2 (1)	No	Yes ¹	Yes ²	Yes	
	- replacement, alteration or removal of weirs, sluices or other flow control structure	3 (2/1)	No	Yes ¹	Yes ²	Yes	
	- maintenance of weirs, sluices or other flow control structure	4 (3/2)	No	No	Yes ²	No	
	- new barrages	2 (1)	Yes/No	Yes ^{1/2}	No	No	- can use the planning system, but more likely under the Transport and Works Act 1992
Buildings and Structures	- new access ramp to watercourse	2	Yes	No	No	No	- would benefit from permitted development if on operational land (level of EA - 3 (2))
	- new access roads and associated structures	2	Yes	No	No	No	- would benefit from permitted development if on operational land (level of EA - 3 (2))
	- alteration/extension to building	3 (2)	Yes	No	No	No	- would benefit from permitted development if on operational land within limits for alterations and extensions defined in the GPDO (level of EA - 3 (2))
	- maintenance of building	4	No	No	No	No	
	- new building	2	Yes	No	No	No	- even on operational land a new building requires planning permission
Bridges	- new bridge	2	Yes	No	No	No	
	- new bridge on operational land	3 (2)	No	No	Yes ⁶	No	
	- maintenance of bridge	4	No	No	No	No	

Type of Works/ Activity	Type of Structure/Solution	Minimum Level of Environ- mental Assessment	Requires Planning Permission	Schedule 2 Project (SI 88/ 1199 as amended)	Permitted Develop- ment	Land Drainage Improve- ment (SI 88/1217)	Comment
Aqueducts/ Water Pipelines	- aqueducts/water pipelines above ground level	2 (1)	Yes	Yes ³	No	No	
	- aqueducts/water pipelines below ground level	3 (2)	No	Yes ³	Yes ¹	No	- assumes that the works are in connection with 'conserving, redistributing or augmenting water resources'
Monitoring Equipment and Water Resources Activities	- new survey and investigation equipment in, on or over land for less than six months	4	No	No	Yes ³	No	
	- new survey and investigation equipment in, on or over land for longer than six months	2	Yes	No	No	No	- unless on operational land in which case it would be permitted development (level of EA - 3 (2))
	- new survey and monitoring equipment for measuring flow (eg. telemetry/level gauges)	4	No	No	No	No	
	- improvement to survey and monitoring equipment for measuring flow	4	No	No	No	No	
	- repair or maintenance of works for measuring flow in watercourses	4	No	No	Yes ⁴	No	
	- new weather stations	2	Yes	No	No	No	- assuming they constitute development. - unless for less than six months or on operational land in which case it would be permitted development (level of EA - 4 (3/2))
	- new monitoring boreholes (with above ground structures)	2	Yes	No	No	No	- unless for less than six months or on operational land in which case it would be permitted development - could also benefit from permitted development under Class A (a) if all development is below ground (level of EA - 4 (3/2))
	- maintenance of monitoring borehole	4	No	No	Yes ¹	No	

Type of Works/ Activity	Type of Structure/Solution	Minimum Level of Environ- mental Assessment	Requires Planning Permission	Schedule 2 Project (SI 88/ 1199 as amended)	Permitted Develop- ment	Land Drainage Improve- ment (SI 88/1217)	Comment
Gauging Stations	- new gauging station (including weir and/or other works in channel)	2	Yes	No	No	No	- a new structure to measure flow is not included under Class A (d) permitted development
	- improvement to existing gauging station	3 (2)	No	No	Yes ⁴	No	
	- maintenance or repair to existing gauging station	4 (3/2)	No	No	Yes ⁴	No	
	- new gauging hut (for longer than six months)	2	Yes	No	No	No	- would constitute permitted development under Class A (e) if it was a temporary structure (ie. less than six months) and the land returned to its former condition
	- overhead cable across a river for calibrating equipment	2	Yes	No	No	No	- unless for less than six months or on operational land in which case it would be permitted development
Environmental Enhancements <i>including:</i> - <i>River Restoration projects;</i> - <i>Conservation activities;</i> - <i>Fish Passes;</i> - <i>Fisheries Projects.</i>	- low flow amelioration	2 (1)	No	No	Yes ²	Yes	- these projects may not be implemented by the Agency and therefore the appropriate procedures need to be considered case by case
	- river restoration schemes	2 (1)	No	No	Yes ²	Yes	
	- in-channel habitat creation and environmental enhancement	3 (2)	No	No	Yes ²	Yes	- some activities may require planning permission (level of EA - 2) - on operational land these activities may be permitted development. Some activities may not be 'land drainage improvement' and each proposal should be considered on a case by case basis
	- wetland creation/enhance.	3 (2)	No	No	No	No	- unlikely to constitute development
	- routine habitat/vegetation management	4	No	No	No	No	
	- new fish pass built into an existing structure	2 (1)	No	No	Yes ²	Yes	
	- modification to existing fish pass	3 (2/1)	No	No	Yes ²	Yes	
	- removal of obstruction to fish passage	3 (2/1)	No	No	Yes ²	Yes	
	- new bypass channels (incl. with fish passes)	2	Yes	No	No	No	- unless on operational land in which case it would be permitted development (level of EA - 3 (2))

Type of Works/ Activity	Type of Structure/Solution	Minimum Level of Environ- mental Assessment	Requires Planning Permission	Schedule 2 Project (SI 88/ 1199 as amended)	Permitted Develop- ment	Land Drainage Improve- ment (SI 88/1217)	Comment
Recreation Activities	- provision of recreational facilities and enhancements	2	Yes	No	No	No	- the need for planning permission will depend on the nature of the proposals - some activities will benefit from permitted development if they are on operational land (level of EA - 4 (3/2)) or will be very minor (3 (2))
	- routine maintenance	4	No	No	No	No	
Waste Management Activities	- disposal of dredgings off-site	2 (1)	Yes	Yes ⁵	No	No	- installations for the disposal of controlled waste require planning permission and fall under SI 88/1199
Sea Defences - offshore techniques	- offshore breakwaters and stable bays	2 (1)	No	Yes ⁴	No	No	- not under the planning system. Permission from Crown Estates and a FEPA licence may be required for extraction and deposition
	- barrages and barriers	2 (1)	Yes/No	Yes ⁴	No	No	- can use the planning system, but more likely under the Transport and Works Act 1992
Sea Defences - low shore techniques	- beach recharge (non cohesive and cohesive)	2 (1)	No	Yes ⁴	No	No	- not under the planning system. Permission from Crown Estates and a FEPA licence may be required for extraction and deposition
	- increase natural sedimentation by constructing new groynes, revetments etc	2 (1)	Yes	Yes ⁴	No	No	
	- improvement and repair of groynes, revetments etc & pumping	3 (2/1)	No	Yes ⁴	Yes ²	Yes	
Sea Defences - upper shore techniques	- new sea walls and flood embankments (dykes, bunds & levees)	2 (1)	Yes	Yes ⁴	No	No	
	- improvement, repair and maintenance of sea walls and flood embankments (dykes, bunds & levees)	3 (2/1)	No	Yes ⁴	Yes ²	Yes	

Type of Works/ Activity	Type of Structure/Solution	Minimum Level of Environ- mental Assessment	Requires Planning Permission	Schedule 2 Project (SI 88/ 1199 as amended)	Permitted Develop- ment	Land Drainage Improve- ment (SI 88/1217)	Comment
Sea Defences - upper shore techniques (cont)	- managed retreat	2 (1)	No	No	No	No	- will depend on what works are proposed for managed retreat, they may constitute development
Sea Defences - supra shore techniques	- dune building and beach ridge restructuring	2 (1)	No?	Yes ⁴	No	No	- clarification on whether this constitutes development is required
	- new cliff strengthening works	2 (1)	Yes	Yes ⁴	No	No	
	- improvement, repair or maintenance of cliff strengthening works	3 (2/1)	No	Yes ⁴	Yes ²	Yes	- need to clarify if constitute 'land drainage works' under the GDPO

Appendix VIII: Example Contents of Environmental Assessment Documentation

It is intended that following more detailed consultations with the Regional EA Contacts that standard contents are produced for the main EA documents (ie. Scoping Report, Environmental Report, Environmental Statement and Environmental Action Plan). This guidance will be included in a revision to the National Handbook.

To illustrate the likely contents of an Environmental Report and Environmental Statement (which will be very similar in structure, but the ES is likely to be more detailed) an example has been included below. Note that the contents of an Environmental Action Plan are described as one of the sections in an ER/ES.

Example Contents of Environmental Report/Environmental Statement:

SUMMARY

Include a one page non-technical summary. This should state, if applicable, that the report has been prepared under the Land Drainage Improvement Works (Assessment of Environmental Effects) Regulations (SI 88/1217) or Town and Country Planning (Assessment of Environmental Effects) Regulations 1988 (Statutory Instrument 88/1199) to document the environmental impact of the works. A description of the works should be given including their location, size and the anticipated start date and duration of construction. Impacts remaining after mitigation should then be outlined, along with any enhancements.

INTRODUCTION

This should explain the purposes of the report and, where applicable, why the Agency has produced an Environmental Report or an Environmental Statement.

THE EXISTING ENVIRONMENT

This should describe the general setting of the works, indicating whether it is rural, urban, residential or industrial. The location of affected properties, designated sites, footpaths, and ecologically interesting species and habitats should be noted.

THE PROBLEM, ALTERNATIVES CONSIDERED AND PROPOSED WORKS

This should explain why work is needed, what alternatives to solve the problem have been studied and why the proposed works have been selected. A more detailed description of the proposed works should then be given. This should include the location of access roads, site compound and any spoil tips. The start date, duration and methods of construction should also be described.

CONSULTATIONS

This should detail both internal and external consultees who have been involved in discussion about the project's environmental effects.

POTENTIAL IMPACTS AND MEASURES FOR MITIGATION / ENHANCEMENT

Potential impacts arising from both the construction phase and as a result of the end state of the project should be described in the following sub-headings. This should include maintenance.

During Construction - Adverse impacts and how these will be minimised

End State Impacts - Description of long term impacts, such as loss of mature trees, sinuous river morphology and permanent land-take.

Measures for Mitigation /Enhancement - Description of mitigation measures, landscape or habitat reinstatement and works designed to enhance the environment.

Conclusion - This should be followed by the sentence below, modified as appropriate: "It is considered that because of the small-scale of the works/localised nature of the impacts/duration of the works, there are not likely to be any significant effects on the environment".

ENVIRONMENTAL ACTION PLAN

The Environmental Action Plan should either form a chapter in the EA documentation or a stand alone document. The Plan should include:

- a clear summary of the mitigation and enhancement measures included in the EA document;
- the environmental constraints of the site (mapped on a plan if necessary);
- the objectives and targets to ensure delivery of the project within the required environmental constraints (these could be linked to the success criteria identified during the feasibility stage of the project);
- details of the environmental monitoring, auditing and quality assurance that is appropriate for the project;
- details of any environmental specifications that are required in the contract document.

SUPPORTING DOCUMENTATION

This should list and detail the documents that are available for inspection.

APPENDICES

This could contain the following (as appropriate), a Location Plan, Designations, Site Plan/Sketch of Works, Landscape Plans for reinstatement, mitigation and enhancement.

Appendix IX: Environmental Statement Review Criteria

Project..... Ref. No.

ES prepared by Pub. Date

Reviewer's Name Date

Starting Time (reading ES)
Finishing Time (reading ES)
Time taken

Starting Time (questionnaire)
Finishing Time (questionnaire)
Time taken

Overall Grade

Introduction to the Review Criteria

- Produced to help Environment Agency staff critically review Environmental Statements (ESs).
- For use to assess ESs produced by consultants for Environment Agency projects.
- Do not replace the requirement for functional specialists to review data collection, analysis and conclusions.
- May also be used in whole or in part to assess Environmental Reports not constituting statutory Environmental Statements.
- Based on the current Midlands Region Review Criteria and to be subject to further development based on the experience of their application nationally.

Notes for Reviewer

Please read through the ES document and then complete the questionnaire below, with reference to the ES document. Each section starts with a key question and then has a list of specific headings for you to review the ES against.

Please tick one box per question.

The boxes - ☐☐☐☐☐☐ - represent a rated scale response from 'very poor' through to 'excellent', ie.

[V.Poor][Poor][Unsatisfactory][Satisfactory][Good][Excellent]

These ratings are defined below, based on the Institute of Environmental Assessment Review Criteria.

Very poor: important tasks poorly done or not attempted.

Poor: significant omissions and inadequacies.

Unsatisfactory: parts well attempted, but must as a whole be considered just unsatisfactory because of omissions and inadequacies.

Satisfactory: despite omissions and inadequacies.

Good: only minor omissions and inadequacies.

Excellent: no task left incomplete.

If you wish to change your mind, please circle the incorrect ticked box and tick a new box.

Sections 3 and 4 have additional boxes to indicate whether you consider survey data or consultees were required, or not required. These are shown as tick boxes 'R' (required) and 'NR' (not required).

1.0 The Project

'Was sufficient data provided to enable a non-specialist to visualise the project?'

	Very Poor	Excellent
1.1 Objectives	000000	
1.2 Justifications	000000	
1.3 Design, size, scale	000000	
1.4 Visual impression of project	000000	
1.5 Construction method	000000	
1.6 Duration of construction	000000	
1.7 Flood risks	000000	
1.8 Link with other projects	000000	

Comments

.....

2.0 Site and Local Environment

'Was sufficient data provided to enable a non-specialist to visualise the Site and Local Environment?'

	Very Poor	Excellent
2.1 Maps of area directly affected	000000	
2.2 Indication of area affected	000000	
2.3 Photographs	000000	
2.4 Adjacent land-use	000000	
2.5 Site designations	000000	
2.6 Local Plans	000000	
2.7 Legal Rights	000000	

Comments

.....

3.0 Baseline Conditions

'Were baseline surveys sufficient?'

or was R] survey data required, but not provided?

NR] survey data not required?

	Very Poor	Excellent	R	NR
3.1 Search of existing data	000000	0 0		
3.2 Recreation survey	000000	0 0		
3.3 Aquatic species survey	000000	0 0		
3.4 River corridor survey	000000	0 0		
3.5 Terrestrial species survey	000000	0 0		
3.6 Tree survey	000000	0 0		
3.7 Conservation site designations	000000	0 0		
3.8 Ecological survey	000000	0 0		
3.9 Ornithological survey	000000	0 0		

3.10 Fisheries survey	000000	0 0
	Very Poor	Excellent
		R NR
3.11 Invertebrate survey	000000	0 0
3.12 Species list	000000	0 0
3.13 Rare species data check	000000	0 0
3.14 Water quality	000000	0 0
3.15 Water Flows	000000	0 0
3.16 Flood Flows and levels	000000	0 0
3.17 Biological survey	000000	0 0
3.18 Geomorphological survey	000000	0 0
3.19 Geology and soils survey	000000	0 0
3.20 Agricultural land-use survey	000000	0 0
3.21 Landscape assessment survey	000000	0 0
3.22 Archaeological survey	000000	0 0
3.23 Legal Rights survey	000000	0 0
3.24 Health and Safety survey	000000	0 0
3.25 Other survey	000000	0 0
3.26 Other survey	000000	0 0
3.27 Indication of uncertainty of data	000000	0 0
3.28 Indication of additional data required	000000	0 0

Comments

.....

4.0 Consultation

'Were the range of consultations undertaken sufficient?'

or was R] consultation required, but not undertaken/recorded?

NR] consultation not required?

	Very Poor	Excellent
		R NR
4.1 English Nature/CCW	000000	0 0
4.2 Countryside Commission	000000	0 0
4.3 English Heritage/Cadw	000000	0 0
4.4 County Ecologist	000000	0 0
4.5 County Archaeologist	000000	0 0
4.6 Royal Commission of Historic Monuments	000000	0 0
4.7 Local Auth. County	000000	0 0
4.8 Local Auth. District	000000	0 0
4.9 Local Auth. Parish Council	000000	0 0
4.10 Local Auth. TPOs	000000	0 0
4.11 Local Auth. Listed Buildings	000000	0 0
4.12 Local Auth. Local Plans	000000	0 0
4.13 Local Auth. Highways	000000	0 0
4.14 Local Auth. Env. Health	000000	0 0
4.15 Local Auth. Other	000000	0 0

	Very Poor	Excellent
		R NR
4.16 County Wildlife Trust	000000	0 0
4.17 RSPB	000000	0 0
4.18 British Trust for Ornithology	000000	0 0
4.19 Local Wildlife Groups	000000	0 0
4.20 Environmental Groups	000000	0 0
4.21 CPRE/W	000000	0 0
4.22 Angling Clubs	000000	0 0
4.23 Local User Groups	000000	0 0
4.24 Ramblers Association	000000	0 0
4.25 National Trust	000000	0 0
4.26 Navigation Authority	000000	0 0
4.27 Land owners	000000	0 0
4.28 Local residents	000000	0 0
4.29 Owners of Legal Rights	000000	0 0
4.30 Other	000000	0 0
4.31 Env. Agency Area Flood Defence	000000	0 0
4.32 Env. Agency Area Flood Defence Tech Liaison	000000	0 0
4.33 Env. Agency Area Water Quality	000000	0 0
4.34 Env. Agency Area Biologist	000000	0 0
4.35 Env. Agency Area Catchment Mgt	000000	0 0
4.36 Env. Agency Area Planning Liaison	000000	0 0
4.37 Env. Agency Area Fisheries	000000	0 0
4.38 Env. Agency Area Conservation	000000	0 0
4.39 Env. Agency Area Rec. and Nav.	000000	0 0
4.40 Env. Agency Estates	000000	0 0
4.41 Env. Agency Legal	000000	0 0
4.42 Env. Agency Estates Terrier	000000	0 0
4.43 Env. Agency Area Waste Reg.	000000	0 0
4.44 Env. Agency Area IPC/RAS	000000	0 0
4.45 Env. Agency Other	000000	0 0
4.46 Comments included in EA/ES	000000	0 0
4.47 Public Consultation	000000	0 0
4.48 Specific meetings held	000000	0 0
4.49 Public awareness of EA process	000000	0 0
4.50 Press releases	000000	0 0

Comments

.....

5.0 Impacts and Effects

'Were the full range of impacts and effects sufficiently identified?'

	Very Poor	Excellent
5.1 Key issues identified	000000	
5.2 Effects of site investigation	000000	
5.3 Effects of design, size, scale	000000	
5.4 Effects of construction	000000	
5.5 Effects of operation of project	000000	
5.6 Effects of maintenance works	000000	
5.7 Temporary effects	000000	
5.8 Permanent effects	000000	
5.9 Direct effects	000000	
5.10 In-direct effects	000000	
5.11 Cumulative effects	000000	
5.12 Short term effects	000000	
5.13 Long term effects	000000	
5.14 Uncertainty of prediction	000000	
5.15 Explanation of methodologies	000000	
5.16 Checklists used	000000	
5.17 Use of Matrices	000000	
5.18 Conflicting impacts	000000	
5.19 Beneficial effects covered	000000	
5.20 Adverse effects covered	000000	
5.21 Safety implications	000000	
5.22 Energy	000000	
5.23 Materials	000000	
5.24 Reversibility of effects	000000	

Comments

.....

6.0 Impact and Effect Prediction, Magnitude and Significance

'Were the indications of the likely magnitude and potential severity of the impacts and effects sufficient?'

	Very Poor	Excellent
6.1 Magnitudes	000000	
6.2 Significance	000000	
6.3 Reference to quality standards	000000	
6.4 Ranges of uncertainty stated	000000	
6.5 Subjective statements minimised	000000	

Comments

.....

7.0 Alternatives

'Were all reasonable alternatives identified, assessed and their rejection justified sufficiently?'

	Very Poor	Excellent
7.1 All alternatives identified	000000	
7.2 'Do Nothing' option considered	000000	
7.3 Alternative locations considered	000000	
7.4 Alternative designs considered	000000	
7.5 Valid rejection reasons	000000	

Comments

.....

8.0 Mitigation Measures

'Were all adverse effects mitigated and is the justification for any which are not sufficient?'

	Very Poor	Excellent
8.1 Mitigation measures relevant	000000	
8.2 Effectiveness of mitigation	000000	
8.3 Details of implementation	000000	
8.4 Commitment to implementation	000000	
8.5 Effect of mitigation assessed	000000	

Comments

.....

9.0 Enhancement

'Were the enhancement measures proposed sufficient?'

	Very Poor	Excellent
9.1 Enhancement measures relevant	000000	
9.2 Effectiveness of enhancement	000000	
9.3 Details of implementation	000000	
9.4 Commitment to implementation	000000	
9.5 Effect of enhancement assessed	000000	

Comments

.....

10.0 Monitoring Programme

'Is the monitoring programme planned sufficient to ensure that the issues covered in the EA/ES will be implemented?'

	Very Poor	Excellent
10.1 Pre-start survey	000000	
10.2 Comprehensive programme	000000	
10.3 Brief for EA Monitoring Officer	000000	
10.4 Commitment to implementation	000000	
10.5 Planned liaison with third parties	000000	
10.6 Post-project EA appraisal planned	000000	
10.7 EA quality assurance system	000000	
10.8 EA on progress meeting agenda	000000	
10.9 Environmental Action Plan provided	000000	
10.10 Construction work monitoring	000000	
10.11 Liaison programme landowner etc.	000000	

Comments

.....

11.0 EA/ES Layout and Presentation

'Is the layout sufficiently clear and logical?'

	Very Poor	Excellent
11.1 List of contents	000000	
11.2 Clear introduction	000000	
11.3 Non-Technical summary	000000	
11.4 Technical terms and initials	000000	
11.5 References quoted	000000	
11.6 Index	000000	
11.7 Integrated document	000000	
11.8 Logical layout	000000	
11.9 Paragraph numbering	000000	
11.10 Ease of cross references	000000	
11.11 Impacts separated logically	000000	
11.12 Impacts and mitigation linked	000000	
11.13 Maps and diagrams clear	000000	
11.14 Photographs	000000	
11.15 Appendices used	000000	

Comments (11.0)

.....

12.0 Emphasis

'Is the EA/ES a sufficiently un-biased document?'

	Very Poor	Excellent
12.1 Presentation of adverse impacts	□□□□□□	
12.2 Prediction of uncertainty	□□□□□□	
12.3 'Unknowns' stated	□□□□□□	
12.4 Lack of bias	□□□□□□	

Comments

.....

13.0 Key EA/ES Issues

'What do you as the reviewer consider to be the five key issues of this EA/ES, list them below. How are they handed in this EA/ES?'

	Very Poor	Excellent
13.1	□□□□□□	
13.2	□□□□□□	
13.3	□□□□□□	
13.4	□□□□□□	
13.5	□□□□□□	

14.0 Overall Impression of EA/ES

Reviewer's other comments (if any)

.....

.....

	Very Poor	Excellent
Readability	□□□□□□	
Overall impression of EA/ES	□□□□□□	

Appendix X: Standard Adverts

Advertisement 1. SI 88/1217 (Land Drainage Improvement) Notification of proposed Environmental Statement

THE LAND DRAINAGE IMPROVEMENT WORKS (ASSESSMENT OF ENVIRONMENTAL EFFECTS) REGULATIONS 1988

This notice is issued in accordance with Statutory Instrument 1988: No. 1217, as amended by Statutory Instrument 1995: No. 2195 - The Land Drainage Improvement Works (Assessment of Environmental Effects) (Amendment) Regulations.

The Environment Agency is looking at options for [DETAILS OF SCHEME - NATURE, SIZE AND LOCATION INCLUDING GRID REFERENCES]. The options considered will include the 'do nothing' option.

The Environment Agency has carried out an initial environmental scoping exercise. The Agency plans to undertake a full Environmental Assessment in respect of these proposals, and to publish an Environmental Statement for public consultation. The proposals will be discussed with the appropriate statutory conservation bodies, local authorities and other relevant organisations. Where environmental effects are inevitable, appropriate protection and mitigation measures will be identified and implemented as an integral part of the project.

Any person or body who wishes to discuss the likely environmental effects of these proposals may contact [NAME] at the [OFFICE], tel: [TEL No.], if possible, within 28 days of the publication date of this notice.

[CONTACT NAME & ADDRESS]

NOTE: ENSURE COPY SENT TO CONSULTATION BODIES

Advertisement 2. SI 88/1217 (Land Drainage Improvement) Environmental Statement

**THE LAND DRAINAGE IMPROVEMENT WORKS
(ASSESSMENT OF ENVIRONMENTAL EFFECTS) REGULATIONS 1988**

This notice is issued in accordance with Statutory Instrument 1988: No 1217, as amended by Statutory Instrument 1995: No. 2195 - The Land Drainage Improvement Works (Assessment of Environmental Effects) (Amendment) Regulations.

The Environment Agency is proposing to [DETAILS OF SCHEME - NATURE, SIZE AND LOCATION INCLUDING GRID REFERENCES].

The Environment Agency has carried out an Environmental Assessment of these works. The proposals have been discussed with the appropriate statutory conservation bodies, local authorities and other relevant organisations. The Agency is satisfied that, as a result of this assessment, the possible environmental effects of the works have been determined and minimised as far as possible. Where environmental effects are inevitable, appropriate protection and mitigation measures have been identified and will be implemented as an integral part of the project. The Environmental Assessment in respect of this proposal, has been published as an Environmental Statement for public consultation for a period of 28 days.

The Environmental Statement may be consulted during the consultation period at [LIBRARY/SHOP] [ADDRESS], between [TIME AND DAYS OPEN]. A copy may also be consulted at The Environment Agency [OFFICE] between [HOURS].

Any person or body who wishes to make representations to The Environment Agency in relation to the likely environmental effects of this proposal may do so in writing by [DATE: 28 DAYS AFTER THE PUBLICATION DATE OF THE LOCAL PAPERS]. If no representations are received in respect of the proposal within this time period, then the proposal will proceed to be implemented. It is anticipated that works will commence in [SEASON AND YEAR].

Representations in writing should be sent to:

[CONTACT NAME & ADDRESS]

NOTE: ENSURE COPY SENT TO CONSULTATION BODIES

**Advertisement 3. SI 88/1217 (Land Drainage Improvement) Environmental Report
to support decision for no Environmental Statement**

**THE LAND DRAINAGE IMPROVEMENT WORKS
(ASSESSMENT OF ENVIRONMENTAL EFFECTS) REGULATIONS 1988**

This notice is issued in accordance with Statutory Instrument 1988: No. 1217, as amended by Statutory Instrument 1995: No. 2195 - The Land Drainage Improvement Works (Assessment of Environmental Effects) (Amendment) Regulations.

The Environment Agency, is proposing to [DETAILS OF SCHEME - NATURE, SIZE AND LOCATION INCLUDING GRID REFERENCES].

The Agency has carried out an environmental assessment of these works and has determined that they are not likely to have significant environmental effects. The Agency, therefore, does not intend to prepare an Environmental Statement in respect of this proposal. An Environmental Report is however available which gives a brief environmental assessment of the proposed works and the reasons for the Agency's decision.

The Environmental Report may be consulted during the consultation period at [LIBRARY/SHOP], [ADDRESS], between [TIME AND DAYS OPEN]. A copy may also be consulted at The Environment Agency [OFFICE] between [HOURS].

Any person or body who wishes to make representations to The Environment Agency in relation to the likely environmental effects of this proposal may do so by [DATE: 28 DAYS OF THE PUBLICATION DATE OF THE LOCAL PAPERS]. If no representations are received in respect of the proposal by this date, then the proposal will proceed without the publication of an Environmental Statement. It is anticipated that construction will commence in [SEASON AND YEAR].

Representations in writing should be sent to:

[NAME AND ADDRESS]

NOTE: ENSURE COPY SENT TO CONSULTATION BODIES

Advertisement 4. SI No. 88/1199 (Planning) Environmental Statement

**TOWN AND COUNTRY PLANNING
(ASSESSMENT OF ENVIRONMENTAL EFFECTS) REGULATIONS 1988**

This notice is issued in accordance with Statutory Instrument 1988: No 1199 - Town and Country Planning (Assessment of Environmental Effects) Regulations, as amended.

Proposed [FLOOD DEFENCE/WATER RESOURCES] development at [ADDRESS OR LOCATION OF PROJECT INCLUDING GRID REFERENCES].

I give notice that The Environment Agency will be applying to the [NAME OF LOCAL PLANNING AUTHORITY] for planning permission to [DESCRIPTION OF THE PROPOSED WORKS].

The Agency has carried out an environmental assessment of these works. The proposals have been discussed with the appropriate statutory conservation bodies, local authorities and other relevant organisations. The Agency is satisfied that, as a result of this assessment, the possible environmental effects of the works have been determined and minimised as far as possible. Where environmental effects are inevitable, appropriate protection and mitigation measures have been identified and will be implemented as an integral part of the project.

The Environmental Assessment in respect of this proposal, has been published as an Environmental Statement for public consultation. Following the public consultation period the Agency will submit the Environmental Statement as information in support of the planning application. Members of the public may inspect copies of the Environmental Statement at: (a) [LIBRARY/SHOP], [ADDRESS], between [TIME AND DAYS OPEN]; (b) The Environment Agency [OFFICE] between [HOURS]; and, (c) the [LOCAL PLANNING AUTHORITY OFFICE], between [TIME AND DAYS OPEN]. Copies will be available for inspection until [DATE - 21 DAYS AFTER PUBLICATION IN ONE LOCAL PAPER (Nb. NOTICE REQUIRED ON SITE FOR AT LEAST 7 DAYS PRIOR TO THIS DATE)].

A copy of the Environmental Statement may be obtained from The Environment Agency [OFFICE] free of charge, so long as stocks last.

Anyone who wishes to make representations about this Environmental Statement should write to: [NAME OF CHIEF PLANNING OFFICER AND ADDRESS OF LOCAL PLANNING AUTHORITY] by [DATE - 21 DAYS AFTER PUBLICATION IN ONE LOCAL PAPER].

Signed [NAME]
On behalf of The Environment Agency
Date [DATE - AT LEAST 21 DAYS BEFORE END OF CONSULTATION PERIOD]

NOTE: ENSURE COPY SENT TO CONSULTATION BODIES

Appendix XI: Glossary and Abbreviations

Glossary

Audit

The process used to compare impacts predicted in an environmental assessment with those which actually occur.

Baseline Studies or Survey

Collection of information about the environment which is likely to be affected by the project.

Approval in Principle

Initial application for grant aid submitted to MAFF/WO for the approval of a proposed project prior to formal approval.

Environmental Action Plan (EAP)

A stand alone report or section within another environmental assessment (q.v.) document (eg. an Environmental Report or Environmental Statement (q.v.)) which ensures that constraints, objective and targets are translated into contract documents and practice on the ground from the ES or ER.

Environmental Assessment (EA)

EA applied at the project level is a process intended to ensure that environmental impacts of schemes are identified prior to the work being carried out so that proposals can be modified or managed in such a way that adverse impacts are avoided or minimised. It is also referred to in the literature as Environmental Impact Assessment (EIA) and Environmental Appraisal.

Environmental Assessment Regulations

This is used in the Handbook to refer to the Regulations by which EA has been adopted in the UK. For Agency projects this is principally the Land Drainage Improvement Works (Assessment of Environmental Effects) Regulations SI 88/1217 and the Town and Country Planning (Assessment of Environmental Effects) Regulations SI 88/1199.

Environmental Report (ER)

An Environmental Report is produced for projects which do not require an Environmental Statement (q.v.), including for projects requiring planning permission from a local authority and where the effects of the proposal will not be significant. The ER is similar in content but less detailed than an Environmental Statement.

Environmental Statement (ES)

The document produced when environmental assessment is formally required under the EA Regulations (q.v.). It is also referred to in the literature as an Environmental Impact Statement.

Mitigation Measures

Steps which may be taken to minimise, eliminate or compensate the adverse effects of a development.

Scoping

The process of deciding which developments require an environmental assessment to be carried out and identifying key issues in an environmental assessment. The EA should then focus upon these important concerns.

Signing-off

The process by which EA documents (eg. ES and ER) are signed-off by internal Environmental Specialists.

Strategic Environmental Assessment (SEA)

EA applied at the programme, plan or policy level (ie. earlier in the decision making process than project level EA) to ensure that environmental implications are identified prior to their implementation so that they can be modified to avoid or minimise the adverse environmental effects.

Abbreviations

CC	-	Countryside Commission
DETR	-	Department of the Environment, Transport and Regions
DoE	-	Department of the Environment (now DETR)
EA	-	Environmental Assessment
EAP	-	Environmental Action Plan
EH	-	English Heritage
EIA	-	Environmental Impact Assessment
EN	-	English Nature
ES	-	Environmental Statement
GPDO	-	The General Permitted Development Order
IEA	-	Institute of Environmental Assessment
LPAs	-	Local Planning Authorities
NRA	-	National Rivers Authority
MAFF	-	Ministry of Agriculture Fisheries and Food
QA	-	Quality Assurance
RSPB	-	Royal Society for the Protection of Birds
SEA	-	Strategic Environmental Assessment
SI	-	Statutory Instrument
SLA	-	Service Level Agreements
TCPA	-	Town and Country Planning Act 1990
WO	-	Welsh Office