



Water Framework Directive River Basin Management Plans and Programmes of Measures - Shannon IRBD

Habitats Directive Article 6 Assessment



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Acronyms

AA	Appropriate Assessment
DEHLG	Department of Environment Heritage and Local Government
DOE NI	Department of Environment Northern Ireland
FPM	Freshwater Pearl Mussel
NIEA	Northern Ireland Environment Agency
NPWS	National Parks and Wildlife Service
POMS	Programmes of Measures
RBD	River Basin District
RBMP	River Basin Management Plan
SAC	Special Area of Conservation
ShIRBD	Shannon International River Basin District
SPA	Special Protection Area
WFD	Water Framework Directive

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Executive Summary

Habitats Directive Article 6 assessments are required under the Habitats Directive (92/43/EEC), and are required where a plan or project may give rise to significant effects upon a Natura 2000 site. Natura 2000 sites are those identified as sites of Community importance designated under the Habitats Directive (Special Areas of Conservation, here after referred to as SACs) or the Birds Directive (Special Protection Areas, here after referred to as SPAs). In the case of the present assessment, Ramsar sites are also included in the assessment as Northern Ireland policy affords them the same protection as Natura 2000 sites (Dodd *et al.*, 2008). It is important to note that the phrase ‘*Appropriate Assessment*’ is sometimes used more loosely to refer to the whole process set out under Articles 6(3) and 6(4) of the Habitats Directive (Dodd *et al.*, 2008), and therefore note that for the present assessment the term ‘*Habitats assessment*’ will be used, not ‘*Appropriate Assessment*’ (which refers to Stage 2 in the sequence under Habitats assessment).

Article 6 of the Habitats Directive sets out provisions which govern the conservation and management of Natura 2000 sites. Article 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment:

“Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subjected to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In light of the conclusions of the assessment of the implication for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public”

Importantly, a Habitats assessment has a narrow focus i.e. the maintenance of the integrity of the site and assessing the significance of the effects on designated interest features and the conservation objectives of the site. It is a protection led assessment and is carried out using the precautionary principle.

The assessment of the Draft River Basin Management Plan (RBMP) and Programme of Measures (POMs) for the ShIRBD produced the following findings:

Where potential impacts from the Draft RBMP/POMs were identified, alternatives have been proposed, and the decision process detailed in assessment/summary tables. These alternatives have been incorporated in to the Draft RBMP. The implementation of the POMs are highly desirable in order to protect, improve or maintain the current favourable conservation status of many of Ireland and Northern Ireland's Natura 2000 and Ramsar sites, however, in their implementation, there is potential for impacts, either directly or indirectly to Natura 2000/Ramsar sites as for e.g. they may involve the construction of new infrastructure in order to reduce waste water loadings to receiving waters. While there are *potential effects* which could accrue from the implementation of such measures as specified in the Required, Other Required and Additional Measures under the POMs, and also from other policies, plans and programmes in isolation, or in combination with each other, these cannot be assessed at present as the extent of their implementation is as yet unknown at the water body level. As these other policies, plans and programmes are implemented at a local level, and the water body specific measures under the Draft RBMP/POMs are identified at this scale, it is advisable to map these out spatially to gain a fuller understanding of their relationship with Natura 2000/Ramsar sites, and a screening exercise under the habitats assessment for potential impacts carried out. If the assessment shows the potential for impacts, an Appropriate Assessment should be carried out. To assist in the screening exercise, this assessment has identified where screening/AA may be required, and where NPWS/NIEA should be consulted.

1.0 Introduction

Article 6 is one of the most important articles of the Habitats Directive in determining the relationship between conservation and site use. Article 6(3) requires that “*Any plan or project not directly connected with or necessary to the conservation of a site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives.*” A Habitats Directive Article 6 Assessment of the River Basin Management Plan (RBMP) and Programme of Measures (POMs) was carried out in parallel with the Strategic Environmental Assessment (SEA) process, and the findings of the habitats assessment used to guide the development of the alternatives considered as part of the SEA. The purpose of this report is to describe how that habitats assessment was carried out, and also to detail the results and conclusions from the assessment.

1.1 Water Framework Directive (WFD)

The WFD (2000/60/EC, Directive of the European Parliament and of the European Council establishing a framework for Community action in the field of water policy) is the most substantial piece of water legislation ever produced by the European Commission. It will provide the major driver for achieving the sustainable management of water on the island of Ireland and other Member States for many years to come. The Directive, introduces a new perspective in terms of water management, which is based on River Basin Districts (RBDs) and requires that all inland and coastal waters within defined river basin districts must reach at least *good status* by 2015. It sets out how this is to be achieved through the establishment of environmental objectives and ecological targets for surface waters. These objectives and targets will be clearly set out in a RBMP that will also include a POMs which will set out how these targets are achieved. The result will be an improved water environment achieved by taking due account of environmental, economic and social considerations.

The WFD’s implementation is onerous and it raises many challenges. The specific objectives of the WFD are;

- to protect and enhance the status of aquatic ecosystems (and terrestrial ecosystems and wetlands directly dependent on aquatic ecosystems);

- to promote sustainable water use based on long-term protection of available water resources;
- to provide for sufficient supply of good quality surface water and groundwater as needed for sustainable, balanced and equitable water use;
- to provide for enhanced protection and improvement of the aquatic environment by reducing / phasing out of discharges, emissions and losses of priority substances;
- to contribute to mitigating the effects of floods and droughts;
- to protect territorial and marine waters;
- to establish a register of protected areas e.g. areas designated for the protection of habitats or species.

Member States will have to ensure that a coordinated approach is adopted in the implementation of the POMs to achieve these objectives. The WFD's objectives can be best summarised as:

- maintaining “high status” of waters where it exists;
- preventing any deterioration in the existing status of waters; and
- achieving at least “good status” in all waters by 2015.

The WFD was transposed into national law in Ireland by the European Communities (Water Policy) Regulations 2003 (SI No. 722 of 2003) and in Northern Ireland by the Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2003 (S.R. 544 of 2003), which provided for essential, technical transposition of the Directive. These Regulations established 8 River Basin Districts on the island of Ireland, of which the Shannon International River Basin District is one (see **Figure 1** below).

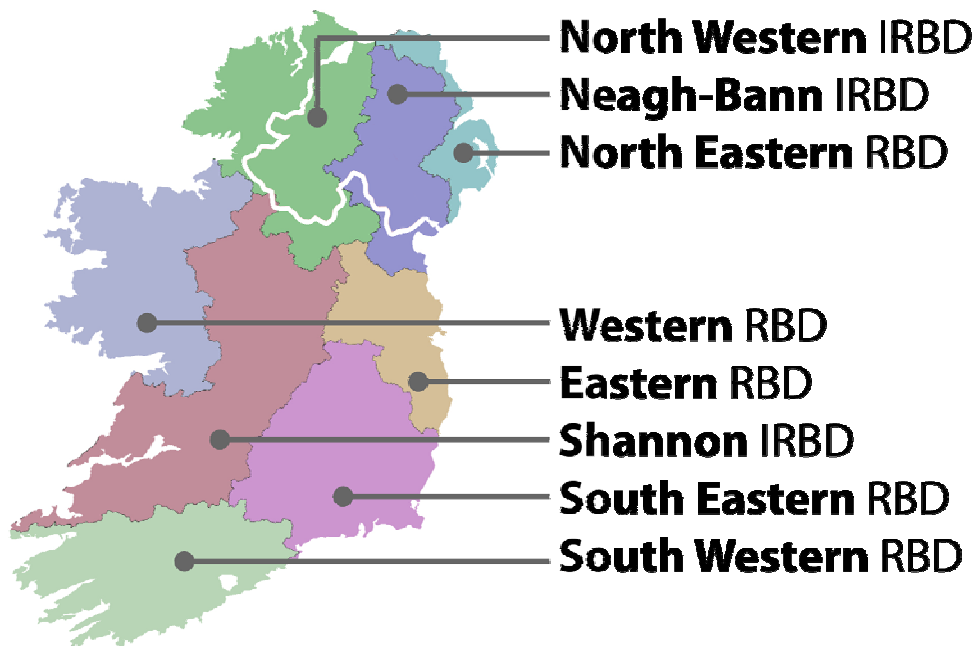


Figure 1 River Basin Districts on the island of Ireland

As stated, the purpose of the WFD is to maintain the “high status” of waters where it exists, prevent deterioration in existing status of waters and to achieve or restore at least “good status” in relation to all waters by 2015. The mechanism by which this is to be achieved under the WFD is through the adoption and implementation of RBMPs and POMs for each of the eight identified RBDs.

1.2 Shannon International River Basin District (ShIRBD)

The ShIRBD is the largest river basin district in Ireland, comprising a land area of approximately 18,000 km² and includes an extensive area of central Ireland, from its source in County Cavan to the mouth of the Shannon Estuary. The Shannon River Basin District drains significant portions of counties Cavan, Clare, Galway, Kerry, Leitrim, Limerick, Longford, Offaly, Roscommon, Tipperary and Westmeath and lesser areas of counties Cork, Laois, Mayo, Meath and Sligo. Lough Derg and Lough Ree are the principle lakes along the Shannon River. The Rivers Suck, Inny and Brosna are among the principle tributaries of the upper Shannon and the Rivers Fergus, Maigue, Deel and Mulkear are among the principle tributaries of the lower Shannon region. The river becomes tidal a short distance upstream of Limerick City and the estuary of the Shannon extends from Limerick westwards to the Atlantic Ocean. A small portion of County Fermanagh contributes to groundwater flow in the headwaters of the catchment, therefore the ShIRBD is classified as an International RBD.

Agriculture is the predominant land use throughout the ShIRBD (70.7%), although there are also significant areas of peatlands (11.1%) and forestry (3.2%) (Table 1.2). The population of the Shannon IRBD is 670,000, which is a lower population density than in eastern Ireland. The largest urban area is Limerick City but other sizable towns include Ennis, Tralee, Mullingar, Athlone, and Tullamore.



Figure 2 Shannon IRBD

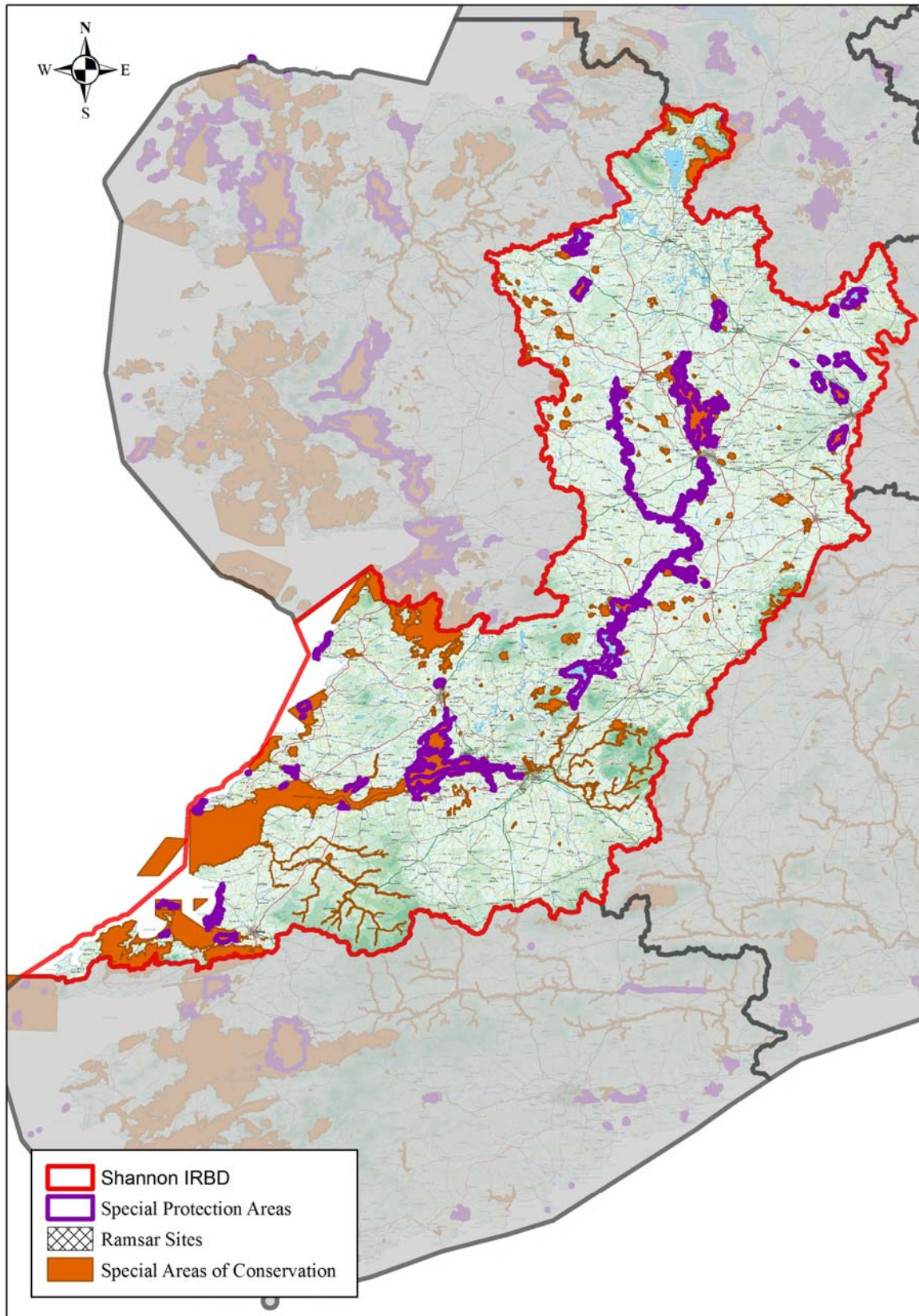


Figure 3 Map of SACs, SPAs and Ramsar sites in the ShIRBD

1.3 Strategic Environmental Assessment (SEA)

SEA is a process for evaluating, at the earliest appropriate stage, the environmental effects of plans or programmes before they are adopted. Habitats Directive Article 6 assessment is a complementary process to SEA and is specifically designed to protect European sites. Habitats Directive Article 6 assessment differs from SEA in one critical respect: it *obliges* any plan/programme to note and integrate its findings and modify the relevant plan/programme where necessary. Habitats assessment allows for the assessment of the effects of a plan or project on a European site to enable a judgement to be made on whether there will be an adverse effect on the site's integrity. It is important to note that the phrase '*Appropriate Assessment*', refers to a stage in the sequence under Habitats assessment, and is sometimes used more loosely to refer to the whole process set out under Articles 6(3) and 6(4) of the Habitats Directive (Dodd *et al.*, 2008), and therefore note that for the present assessment the term '*Habitats Directive Article 6 assessment or Habitats Assessment*' will be used, not '*Appropriate Assessment*'. The table below illustrates the linkages between the SEA and the habitats assessment. Liaison between the SEA team and the habitats assessment team was critical throughout the process to ensure that results from the habitats assessment was incorporated in to the SEA Environmental Report, but more critically that it could facilitate changes to the Draft RBMP and thereby make it a more robust Plan.

Table 1 Links between the SEA process and the Habitats Assessment Process

Stage	SEA	Habitats Directive Article 6 Assessment	HA stage definitions
1	Screening	Screening	The process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant.
2	Scoping	Appropriate Assessment	The consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts.
3	Alternatives	Assessment of preferred alternatives	The process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 sites.
4	SEA Statement	Assessment where no alternatives exist	An assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed

1.4 Habitats Directive Article 6 assessment (Habitats Assessment)

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora better known as “The Habitats Directive” provides the framework for legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network. The Habitats Directive and the Birds Directive and sites designated under them form this network of European protected sites that are better known as the Natura 2000 network. This consists of;

- Special Areas of Conservation (SACs) for flora, fauna and habitats of Community interest under the EU Habitats Directive;
- Special Protection Areas (SPAs) for rare, vulnerable or migratory birds under the EU Birds Directive; and
- Sites that are being considered for designation as one of the above are referred to as cSAC (candidate) or pSPA (proposed).

Ramsar sites are wetlands of global importance, listed under the Convention on Wetlands of International Importance. Ramsar sites overlap with SACs and/or SPAs. In Northern Ireland it is Government Policy to afford them the same protection as European sites (Dodd *et al.*, 2008). While a similar policy does not exist in Ireland, they indirectly afforded protected due to the overlap with Natura 2000 sites and therefore included for the purposes of this report.

Article 6 sets out provisions which govern the conservation and management of Natura 2000 sites. Article 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment:

“Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subjected to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In light of the conclusions of the assessment of the implication for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after

having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public”

This assessment is underpinned by the precautionary principle, especially in the assessment of potential impacts and their resolution. If it is not possible to rule out a risk of harm on the evidence available then it is assumed a risk may exist and it needs to be dealt with in the assessment process, preferably through changes to the proposed measure or through options such as avoidance or mitigation if possible. One example of this from the Draft RBMP is illustrated under the additional measures (further actions) that are proposed. The measure ‘Chanelisation impact remediation schemes’ (PM6 in Table 6 in section 3.0) is proposed which would include such remediation works as the re-meandering of straightened channels, reconstruction of pools, substrate enhancement, removal of hard bank reinforcement/revetment or replacement with soft engineering solutions. Channelisation/restoration/enhancement schemes have the potential to improve previously impacted rivers from these types of works, and this in particular could benefit rivers which were previously straightened, or where habitats for fish spawning etc. were destroyed in Natura 2000/Ramsar sites. This in turn would allow naturalisation of the river channel and the flora and fauna to re-colonise areas which were unsuitable as a result of channelisation impacts. However, in order for this measure to be applied, assessments of where such remediation works are needed, needs to be carried out, as proposed in the measure detailed as PM5 (Table 6 in Section 3.0). In the assessment of this measure therefore, without knowing the locations for where remediation schemes will take place, it is recommended that such schemes are screened to determine whether a likely significant impact from the schemes are expected to occur to a Natura 2000/Ramsar site as a result of activities in/adjacent to/in the catchment of a Natura 2000/Ramsar site.

1.5 Stages of the Habitats assessment

The stages of an Habitats assessment are outlined in the European Commission guidance ‘*Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological Guidance on the provision of Article 6(3) and 6(4) of the ‘Habitats’ Directive 92/43/EEC*’ (EC 2002) and ‘*Managing Natura 2000 Sites: The provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC*’ (EC, 2000). The Habitats Directive promotes a hierarchy of avoidance/protection, mitigation and compensatory measures. First the proposed scheme

should aim to avoid any negative impacts on European sites by identifying possible impacts early in the plan/programme making, and designing the plan/programme in order to avoid such impacts. Second, mitigation measures should be applied, if necessary, during the appropriate assessment process to the point, where no adverse impacts on the site(s) remain. If the proposal is still likely to result in adverse effects, and no further practicable mitigation is possible, then it is rejected. If no alternative solutions are identified and the plan is required for imperative reasons of overriding public interest (IROPI test) under Article 6(4) of the Habitats Directive, then compensation measures are required for any remaining adverse effect. A flow diagram is presented below illustrating the four stages of the Habitats assessment process, modified from European communities (2002), and as presented in Mayes (2008). These are also set out below.

Stage 1 Screening

The first stage is to determine if the plan/programme is directly connected with or necessary to the site management for nature conservation. If the answer is no, as is the case with the Draft RBMP, it must be determined if the plan/programme is likely to have significant effects on a Natura 2000/Ramsar site(s). If the answer is yes, then the assessment advances to Stage 2. Stage one screening involves the identification of the plan/project objectives, and a review of alternatives methods to achieving the objectives.

Stage 2 Appropriate Assessment (AA)

The second stage is to determine if the plan/programme will adversely affect the integrity of the Natura 2000/Ramsar site(s). This involves the identification of potentially affected water bodies and their location in relation to Natura 2000/Ramsar sites. It involves the identification of the habitats and species within these sites, and an assessment of the significance of impacts on their conservation status. An assessment of cumulative impacts (both from the plan/programme objectives, and other policies, plans and programmes) should be carried out, and mitigation measures proposed for potential impacts if possible. These mitigation measures should then be consulted upon with the relevant agencies and the public, and following receipt of comments, if it can be concluded that no adverse impacts are found on the integrity of the site, the plan/programme may proceed for approval. If not, then the assessment advances to Stage 3.

Stage 3 Assessment of Alternative solutions

Stage 3 involves the identification of alternative solutions following a review of the outcomes of Stage 2. Alternative solutions should be developed, and Stage 1 and Stage 2 assessments completed for these alternatives. If there are no alternative solutions identified, then the assessment advances to Stage 4.

Stage 4 Assessment where no alternative solutions exist and where adverse impacts remain

Stage 4 assessment examines whether there are imperative reasons of overriding public interest (IROPI) for the plan/programme to go ahead. If the answer is yes, then compensatory measures need to be agreed with the European Commission, before the plan/programme can proceed. If not, then the plan/programme is rejected.

1.6 Consultation

Consultation on the methodology used for the Habitats assessment (described in section 2.0 below) and the results from the assessment was held with the National Parks and Wildlife Service (NPWS) (part of the Department of Environment Heritage and Local Government), and the Natural Heritage section of the Northern Ireland Environment Agency (NIEA) who are the competent Authorities for the conservation of habitats and species on the island of Ireland. Comments were received on the methodology which informed the process and developed the methodology to its final form. In addition a one day workshop was held with NPWS and a separate workshop with NIEA to review the outcomes of Stage One Screening, and to discuss suggested changes to the Draft RBMP as a result of findings. Potential mitigation measures arising from the POMs were also discussed and recommendations made for the assessment of future plans or programmes where decisions should be made on a case by case basis.

This Habitats Assessment Report does not form the final step in the process. The consultation programme on the draft RBMP and POMs will also provide an opportunity for statutory bodies and stakeholders to comment on the findings of this report. The development of the consultation programmes for the draft RBMP, the SEA Environmental Report and the Habitats Directive Article 6 assessment report are currently underway. Please see the

SHIRBD website (www.shannonrbd.com) and the NIEA website (www.ni-environment.gov.uk/wfd) for details of these which will be posted as they become available. Following consultation, the comments received will be considered and a revised Final RBMP, SEA statement and Habitats Directive Article 6 Report, will be completed.

Written submission or observation are now invited with respect to the draft Shannon International River Basin Management Plan, associated SEA Environmental Report and Habitats Directive Assessment. Written submission should be forwarded for the attention of Enda Thompson or Jo Campbell on or before the 22nd of June 2009 (contact details below). These submissions/observations will be taken into consideration before finalisation of the RBMP. Early responses would be appreciated to allow more time to clarify and resolve issues that may arise.

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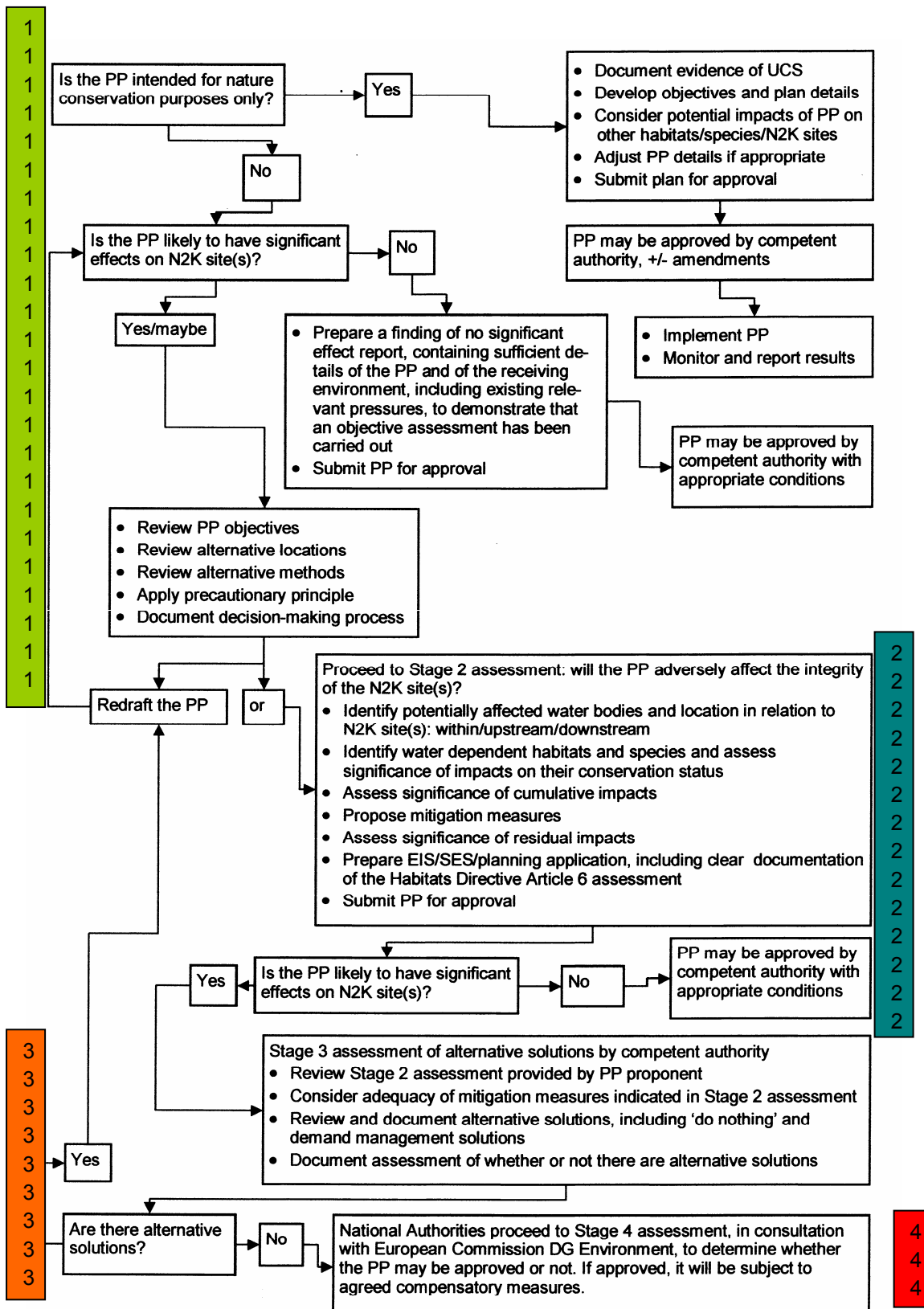
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Comments can also be sent via www.ni-environment.gov.uk/wfd



Flow diagram of the four stages of the Habitats assessment process, modified from: European Communities 2002, and presented in Mayes (2008)