

Mr Alan Sheridan  
Department of Agriculture, Food & the Marine  
Johnstown Castle Estate  
Co. Wexford

1<sup>st</sup> October 2018

Our Ref: SCP151212.2

**Re. *Draft Plan for Forests and Freshwater Pearl Mussel in Ireland* and Strategic Environmental Assessment Environmental Report**

Dear Mr Sheridan,

The Environmental Protection Agency (EPA) acknowledges your notice, dated 13<sup>th</sup> July 2018, in relation to the *Draft Plan for Forests and Freshwater Pearl Mussel in Ireland* (the Plan) and the accompanying Strategic Environmental Assessment (SEA) Environmental Report.

We welcome the preparation of the Plan as an important component of the national strategy for the conservation of the freshwater pearl mussel (FPM) in Ireland. This submission is intended to support the preparation and delivery of an effective Plan and to promote full and transparent integration of the Plan and SEA processes.

A number of key comments and observations are provided below. Specific comments on particular aspects of the Plan and the SEA Environmental Report are provided in Appendices I and II to this submission. These comments, together with those provided in our earlier SEA Scoping submission (dated 5<sup>th</sup> February 2016), should be considered in finalising the Plan and SEA.

**Background**

Our *Water Quality in Ireland 2010-2015* report (EPA, 2017) noted the decline in high status sites in Ireland, especially those of highest quality (Q5). In relation to water-dependent habitats and species protected under the Birds and Habitats Directives, part of the role of the River Basin Management Plan is to contribute to achieving water conditions that support favourable conservation status. The FPM is subject to the most stringent protections in law to achieve this objective equating to high status (e.g. EQR >0.9 / Q value 4-5 or 5) (SI No. 296 of 2009). The characterisation process carried out by EPA for the River Basin Management Plan has identified that forestry activities are the most important significant pressure impacting on high status waterbodies. It is therefore important that appropriate measures are implemented as a matter of urgency.

We acknowledge and welcome that good progress has been made in recent years in evolving forestry management practices towards protecting our freshwater resources. These include the development of policy documents and legislation aimed at reducing negative impact and, where possible, providing valuable

ecosystem benefits (e.g. *Forests and Water: Achieving Objectives under Ireland's River Basin Management Plan 2018-2021* (DAFM 2018)). Of particular note is the improved regulation of felling, afforestation, fertilisation, forest road construction and the removal of the obligation for reforestation (Forestry Regulations S.I. No. 191 of 2017).

## Key Comments

### Components of the Plan

We broadly welcome the strengthened controls on forestry activities proposed in the Plan. We note, however, that the success of many of the proposed measures is, as yet, untested. New afforestation within FPM catchments may continue to present a risk, despite mitigation, of sediment and nutrient loss in the short term. On this basis, we recommend it would be useful to carry out a trial, in collaboration with NPWS, to test the proposed approach to new afforestation in a limited area before the widespread roll-out of the plan. One of the non-priority FPM catchments may be suitable for this test.

The requirements of the FPM in terms of environmental flow, nutrients and sediment<sup>1,2</sup> may require an even more restrictive approach to afforestation in certain circumstances than that currently proposed in the Plan. This will require collaboration with authorities, in particular NPWS.

Monitoring of the effectiveness of measures within individual catchments and of the overall performance of the Plan will be key and should inform future periodic reviews and updates of the Plan (discussed below).

The Plan refers to other possible processes that may operate in parallel to the Plan but which have not been included in the Plan as they are currently undefined. Examples include a programme of conversion / buffer retro-fitting by Coillte and the targeting of sites where particular problems or opportunities exist, which will involve the new LAWSAT office. The Plan could include provisions for the piloting of these approaches, with a view to informing future reviews/iterations of the Plan.

Overall, the Plan would benefit from more decisive language and stronger commitments, particularly in the sections setting out the various Plan measures to be implemented (*Section 4: Forests & FPM Management Framework, Section 5: A Model for Woodlands & Forests within FPM Catchments, Section 6: Awareness-Raising & Training* and *Section 7: Monitoring*). This would provide stakeholders with greater certainty about which actions are required to be implemented and who is responsible for their implementation, ultimately reducing the risk of poor delivery of the Plan.

### Existing Forestry

We note the challenges involved in restructuring existing forests and recognise that the operations involved in felling existing forested areas poses a significant challenge in highly sensitive FPM catchments. The draft Plan states that a 'do nothing' approach is untenable in most situations, as existing forests will reach a point where they become prone to windblow, resulting in an uncontrolled situation. The Plan also states that DAFM cannot compel individual forest owners to undertake specific measures aimed at protecting and enhancing water quality. Incentivising specific measures by forest owners would appear necessary to prevent a 'do nothing' scenario arising. It would be beneficial for the Plan to be explicit on how this will be implemented, with specific reference to private forestry owners.

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<sup>1</sup> Moorkens EA, 2010. Addressing the conservation and rehabilitation of *Margaritifera margaritifera*(L.) populations in the Republic of Ireland within the framework of the habitats and species directive. *Journal of Conchology* 40:339–350.

<sup>2</sup> Moorkens EA, Killeen IJ, 2014. Assessing near-bed velocity in a recruiting population of the endangered freshwater pearl mussel (*Margaritifera margaritifera*) in Ireland. *Aquatic Conservation: Marine and Freshwater Ecosystems* 24:853–862.

## **Climate Change**

The challenges posed by climate change and the implications of extreme weather events merit further consideration in the Plan and SEA. More intense rainfall events, for example, can greatly exacerbate soil erosion in forestry plantations particularly during planting and harvesting stages, with associated impacts on nutrient loading and sedimentation in receiving water bodies, while other impacts may include storm damage to trees, droughts and forest fires, invasive species spread etc. Relevant national, regional, local authority and forestry sector climate adaptation plans should be taken into account, as relevant and appropriate to the Plan.

## **Plan Implementation**

While implementation aspects are covered in various sections, the final Plan would benefit from the inclusion of a dedicated section on 'Implementation'. This should describe how the Plan will be rolled out and implemented across the FPM catchments and set out clear roles, responsibilities and, where possible, timelines. Relevant mitigation measures identified in the SEA and AA should be incorporated into this section on implementation, as appropriate.

We note that the Plan will have a gradual/phased implementation in each of the FPM catchments as individual forestry sites go through their natural cycles (i.e. afforestation/reforestation, thinning, forest road construction, felling, fertilisation, etc.). Some indication of the expected timeframes involved in the implementation of the Plan measures would be useful to include.

To assist in the roll out of the Plan at the catchment level, there would be merit in preparing a series of individual catchment-level implementation programmes. This would enable forestry activities within the individual FPM catchments to be planned and managed as part of an integrated catchment management approach, while taking into account additional pressures and potential cumulative environmental impacts (in particular on water quality and biodiversity, including fisheries). The Plan should promote the continuation of ongoing collaboration with other projects such as Kerry LIFE and the Pearl Mussel Project in this regard. It should also be clearly established as a Plan that supports and compliments the overall objectives of the National River Basin Management Plan.

We note that multiple different stakeholders will be involved in implementing the Plan (DAFM, Forest Service, NPWS, Forest Owners/Registered Foresters/Forestry Operators, WFD Regional Operations Committees, LAWCO and LAWSAT Offices, EPA, Inland Fisheries Ireland, Teagasc etc.). In finalising the Plan, the roles and responsibilities of the different stakeholders, and how these will be coordinated, should be clearly described with a view to providing clarity, transparency and accountability. Consideration should be given to establishing a formal mechanism for cooperation/coordination, for example by way of a High Level Coordination / Implementation Group or similar. This group or an associated consultative group or forum could also include representatives of stakeholder groups identified above and forestry owners of significant stands within the 8 priority catchments.

## **Monitoring**

In finalising the Plan, more detailed and specific information should be included on the Plan implementation monitoring, including the different spatial scales at which the monitoring will be carried out (sub-catchment/catchment/national level), roles and responsibilities, frequencies, indicators, targets, data sources and reporting.

*Section 5.4 Catchment level impacts* should be expanded to include more detail on the envisaged outcomes of the Plan. This section should refer to the indicators that will be used to monitor the implementation of the Plan, currently described in *Section 7.4 Overall monitoring of the plan*. Targets should be set to monitor

the implementation of the Plan and evaluate its success in achieving its objectives over the short, medium and long term. The targets set should take into account the long rotation times involved in forestry and the phased manner in which the measures will be implemented at individual site level to achieve forest restructuring, as well as the slow growth rate of FPM. This could be accompanied by relevant maps or graphs, to help visualise the envisaged outcomes of the Plan over short, medium and long term time horizons.

As well as direct surveys of FPM populations within each catchment (to be undertaken by NPWS), relevant fisheries / salmonid related monitoring should also be considered.

Plan implementation monitoring should, where possible, be linked with the SEA monitoring to evaluate the wider environmental performance (both positive and potential negative) of the Plan over its lifetime.

### **Reporting**

The final Plan should include commitments to periodically report on the Plan implementation monitoring and the associated environmental (SEA and AA) monitoring. This reporting should capture implementation at relevant scales.

Periodic reporting will provide a formal mechanism for review of the effectiveness of measures and to identify any deficiencies or implementation issues as they arise, including the need for remedial actions to be introduced where any Plan-related adverse environmental effects are identified during implementation.

The inclusion of reporting provisions will also make the Plan more robust and provide for accountability and transparency during implementation. The Plan implementation and associated environmental monitoring reports, along with a summary of key progress and findings and relevant data and mapping, should be made available to statutory authorities, key stakeholders (including the suggested High Level Coordination / Implementation Group) and the public.

### **Future Reviews of the Plan**

The draft Plan proposes that the Framework / list of options will be refined on an ongoing basis via a feedback loop. In finalising the Plan, we recommend that DAFM should consider a fixed timeframe for review of the Plan. This would allow for a more structured periodic assessment of, and reporting on, the Plan's implementation and delivery and related environmental performance. This will also provide an opportunity to reassess the effectiveness of the Plan measures and to make any changes necessary by way of updates or amendments to the Plan, at fixed intervals. It will also provide an opportunity to take account of new research findings and emerging best practice. Aligning reviews of the Plan with the other relevant plan/monitoring/reporting cycles could be considered as appropriate (e.g. RMBP cycle or Article 17 reporting cycle). The requirements of the SEA, Habitats and Water Framework Directives should be taken into account in future periodic reviews of the Plan, as appropriate.

### **Compliance and Enforcement**

We recommend including a separate section on *Compliance and Enforcement*, setting out the various options available to DAFM under the Forestry Regulations to ensure compliance with licence conditions and provide for intervention where poor practice is observed, in support of implementing the Plan (e.g. suspending or revoking licences, financial penalties, sanctions, legal proceedings). This section could also set out the relevant roles and responsibilities of other key public authorities, such as the Local Authorities or Inland Fisheries Ireland for example. In describing DAFM's legislative remit and regulatory oversight role, the scope for DAFM to proactively intervene to stop poor practice where existing forestry activity is threatening a FPM SAC should be clarified. The Plan states that DAFM cannot compel individual landowners

or forest owners to undertake specific measures aimed at protecting and enhancing water quality and FPM but instead must await licence applications before it can act. In this context, the provisions for amending or revoking an issued licence where the continuation of the licence could threaten a Natura site, should be clarified.

### **Environmental Assessments**

In finalising the Plan, we recommend including a section describing the statutory environmental assessment (SEA/AA) processes carried out as part of the preparation of the Plan. This should refer to the relevant directives and related national regulations and should summarise the overall findings of the SEA and AA processes. Including a summary of the key findings, recommendations and mitigation measures of the SEA / AA, and how they have been reflected in the Plan, would be very beneficial. A schematic showing the link between the Plan making process and SEA/AA processes, would also be useful.

### **Future Modifications to the Plan**

Where modifications to the Plan are proposed, these should be screened for likely significant effects in accordance with the criteria as set out in Schedule 1 of the SEA Regulations (S.I 435 of 2004) and should be subject to the same method of assessment applied in the “environmental assessment” of the Plan.

### **SEA Statement – “Information on the Decision”**

Following adoption of the Plan, an SEA Statement should be prepared that summarises the following:

- How environmental considerations have been integrated into the Plan;
- How the Environmental Report, submissions, observations and consultations have been taken into account during the preparation of the Plan;
- The reasons for choosing the Plan adopted in the light of other reasonable alternatives dealt with; and,
- The measures decided upon to monitor the significant environmental effects of implementation of the Plan.

A copy of the SEA Statement with the above information should be sent to any environmental authority consulted during the SEA process.

Should you have any queries or require further information in relation to the above, please contact me directly.

I would be grateful if an acknowledgement of receipt of this submission could be sent to: [sea@epa.ie](mailto:sea@epa.ie).

Yours sincerely,



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Dr Tara Higgins  
SEA Section, Office of Evidence and Assessment

## Appendix I. Specific Comments on the Plan

### Plan Title

We recommend that the Plan title should refer to the timeframe over which the Plan will apply. A subtitle to reflect what the Plan is seeking to achieve could also be considered. There should be consistency in references to the Plan title throughout the Plan, SEA Environmental Report and Natura Impact Statement ('Plan for Forests' vs 'Plan for Forestry' etc.).

### Executive summary

The Executive Summary should use non-technical language as far as possible. Abbreviations or acronyms (e.g. reference to 'EIP scheme') should be defined. In describing the key components of the Plan and what it is trying to achieve, information should be provided on expected outcomes, targets and timeframes, how the Plan will be implemented, as well as proposed monitoring, reporting and future reviews of the Plan.

### Context

In describing the context for the Plan, a flow-diagram or schematic could be included to illustrate the relationship between the Plan and other key relevant plans and programmes such as the River Basin Management Plan, Forestry Programme, Freshwater Pearl Mussel Sub-Basin Management Plans etc. It would also be useful to expand upon on the broad range of positive environmental and societal benefits that the proposed measures can potentially deliver for wider biodiversity (salmonids, birds, plants etc.), flood protection, amenity/recreation areas, buffering water bodies against negative impacts from other land uses etc.

### Plan Objectives

*Section 1 Introduction* provides an overview of the key components of the Plan. We recommend providing a set of clear and concise Plan objectives, setting out what the Plan is hoping to achieve. These could be coded or numbered for ease of tracking and cross-referencing. Plan objectives should be linked with the relevant monitoring indicators outlined in *Section 7.4*, to enable progress on the Plan's implementation to be monitored and evaluated. The Plan should also set out appropriate targets for each of the objectives, along with appropriate timelines (e.g. short, medium and long term).

### Use of Acronyms / Abbreviations / Technical Terms

The Plan refers to many acronyms, abbreviations and technical terms. In finalising the Plan, consider using full names in place of abbreviations and simplifying the language where possible. This is in line with one of the recommended mitigation measures in the SEA Environmental Report. The National Adult Literacy Agency 'Plain English' guidelines, which advocate that all public sector bodies adopt the use of 'Plain English' in their communications, may be useful to consider ([www.nala.ie](http://www.nala.ie)).

### Figure Resolution

The poor resolution of some of the Plan figures and maps (e.g. Figures 2.2 and 2.3) should be resolved.

### Section 5 - Model

The inclusion of *Figure 5.1*, illustrating the different zones and describing the minimum set-back distances required, is useful. The inclusion of a scale bar in *Figure 5.1* could be considered to assist in visualising the widths of the different zones.

Section 5.3.1 cross-references Table 5 of DAFM's *Environmental Requirements for Afforestation* document (2016) which sets out the required width of the water setback at afforestation. There is merit in including

the relevant table in the Plan, to minimise the need for cross-referencing other documents. This equally applies to relevant aspects of other documents referred to in the Plan.

### **Appropriate Assessment Procedure**

The proposed Appropriate Assessment Procedure (AAP) will require all applications to be subjected to field inspection and referred internally to the Forest Service Ecologist and an appointed Forestry Inspector with a coordinating WFD role. We recommend that collaboration with NPWS is also required at this stage in the application process.

### **New Afforestation**

In relation any proposed new afforestation in the priority FPM catchments, we recommend that the following aspects should be considered:

- *Scale*

The Plan indicates that afforestation on greenfield sites could become a significant landscape feature. It would be useful to present some scenarios of the possible future extent of afforestation and its positioning in the catchment.

- *Nutrient and sediment loss*

For new afforestation, there may be a risk, despite mitigation, of compaction, change in land use with sediment and nutrient loss in the short term. As suggested earlier in this submission, there would be merit in carrying out a trial to test the proposed approach to new afforestation in a limited area before widespread roll-out of the plan. One of the non-priority FPM catchments may be suitable for this test. The EPA research project SILTFLUX final report<sup>3</sup> may be useful in suggesting approaches to sediment load estimation. We note that aspects of the Plan's approach have been used in Scotland<sup>4</sup> as part of a LIFE project ([www.pearlsinperil.scot/](http://www.pearlsinperil.scot/)) but that it is still too early to indicate a result in recruitment of new mussels<sup>5</sup>.

- *Hydrological Impacts*

Given the sensitivities of the FPM to the hydrological regime and potential for forests to impact on hydrological patterns (e.g. through canopy interception of rainfall), it would be beneficial to assess or model the impacts of existing and/or new forests on the catchment water balance and therefore on the average depth of water in the FPM locations, under a range of climate change scenarios.

### **Monitoring**

On the three levels of monitoring proposed in the Plan, there is merit in making a clearer distinction between site level monitoring to assess compliance with individual licences (levels 1 and 2) and plan implementation monitoring at the sub-catchment/catchment/national level (level 3).

#### *Onsite Monitoring by the Applicant*

The measurement of key parameters before, during and after forestry operations will provide quantitative information to enable the efficacy of the plan's implementation to be assessed and inform the refinement of management practices. We recommend that the following parameters, indicative of sediments, nutrients and acidification, are added to the monitoring programme required both before and during forestry operation:

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<sup>3</sup> [https://epa.smartsimple.ie/files/347278/113647/SILTFLUX\\_End\\_of-Project\\_Report.pdf](https://epa.smartsimple.ie/files/347278/113647/SILTFLUX_End_of-Project_Report.pdf)

<sup>4</sup> Cosgrove P, McInnes N, Dolby S, Gunn D, Shields D, Cosgrove C, Kortland K, 2017. Forest management and freshwater pearl mussels. Scottish Forestry 71:14–21.

<sup>5</sup> Cosgrove, Pers. Comm. 2018



- suspended solids
- benthic sediment
- turbidity
- nutrients
- pH
- alkalinity
- conductivity
- REDOX
- DOC, and
- colour

Clarification should also be provided in this section on the conditions under which operations can (or cannot) proceed. In addition, we recommend that silt traps, where installed, should have a maintenance schedule to reduce the risk of them acting as a source in the event of a high flow. As this section relates to 'during operation' monitoring, consideration could be given to renaming it '*Onsite monitoring by the Applicant / Licensee*'.

#### Onsite Monitoring by DAFM

Section 7.3 includes detailed information on the range of enforcement options available to DAFM. This information could be moved to a separate section on *Compliance and Enforcement*.

#### **Training**

We welcome the provisions in the Plan for awareness-raising and training, outlining in *Section 6*, which will be important to support the roll-out and delivery of the Plan. We note that these are in addition to the training and peer-to-peer learning proposed in the *Forests and Water* document. We recommend that consideration be given to including a requirement in the final Plan for all operational staff to attend a mandatory training and awareness session on best practice for carrying out forestry operations in FPM catchments.

#### **Threats**

We recommend that *Section 3* on threats would benefit from the inclusion of additional information on acidification pressures (many of the eight priority catchments are in acid sensitive areas), cypermethrin use and hydrological change due to climate change.

Cypermethrin can affect the insect community which are an important component of the river ecosystem, performing important grazing and recycling activities that can reduce filamentous and benthic algae. The disruption or removal of this 'support network' is a risk to the FPM, in addition to possible direct impacts<sup>6</sup>. We recommend that the Plan would benefit from the inclusion of a statement regarding restriction on any proposed use of cypermethrin in FPM catchments. The benefits of the lower use of cypermethrin in deciduous forestry could also be highlighted.

The Plan would also benefit from a greater emphasis on the potential impact of weather conditions before and during forestry operations. While weather considerations are addressed in terms of timing of operations (p.80), the importance of weather, especially rainfall, should be recognised throughout the Plan as a severe risk factor in dealing with forestry operations within FPM catchments. The Plan should recommend that forestry operations should not be carried out in the event of any prolonged period of rainfall or high magnitude rainfall events.

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<sup>6</sup> Köprücü K, Yonar SM, Şeker E, 2010. Effects of cypermethrin on antioxidant status, oxidative stress biomarkers, behavior, and mortality in the freshwater mussel *Unio elongatulus eucirrus*. *Fisheries Science* 76:1007–1013.



## Appendix II. Specific Comments on the SEA

### Non-technical summary (NTS)

The NTS should be listed in the Table of Contents. The language in the NTS could be simplified, with fewer acronyms, abbreviations and technical terms (see previous reference to NALA 'Plain English' guidelines).

### Scope of the Plan

References to the Plan applying to '27 no. FPM catchments' should be amended to clarify that the Plan applies to 26 SACs designated for the species plus the Owentaraglin subcatchment of the (Munster) Blackwater River SAC. References to the Owentaraglin 'catchment' should be amended to 'subcatchment' to avoid possible confusion.

### Other Relevant Plans and Programmes

In addition to the plans and programmes referred to in section 4 of the SEA Environmental Report, the following would be useful to consider as appropriate and relevant to the Plan:

- Ireland's Fourth Nitrates Action Programme (Good Agricultural Practice for Protection of Waters Regulations 2017) contains strengthened measures to prevent water pollution from agricultural sources (including limits on farm stocking rates, controls on spreading of organic and chemical fertiliser, and exclusion of cattle bovines from watercourses); it should be considered in the context of potential positive cumulative impacts on water quality within FPM catchments.
- Relevant national, regional, local authority and forestry sector climate adaptation plans should be taken into account. The reference to DECLG's 2012 *National Climate Change Adaptation Framework: Building Resilience to Climate Change* should be updated to refer to the new *National Adaptation Framework* published by DCCAE in 2018. The Agriculture and Forest Sector Adaptation Plan, which is due to be updated, should also be taken into account.
- OPW's series of Flood Risk Management Plans published in 2018 and associated flood maps (available on [www.floodinfo.ie](http://www.floodinfo.ie)) should be considered in the context of any planned flood alleviation measures within FMP catchments.
- *Section 4.3.5 Spatial Planning, Landscape, Human Beings and Economics* should refer to the *National Planning Framework – Ireland 2040*, which sets the framework for planning in Ireland up to 2040 and the Regional Spatial and Economic Strategies (in prep) which will give effect to the National Planning Framework at the regional level.
- The National Greenways Strategy (DTTAS, 2018) may be relevant to consider, in the context of maximising the potential use of state-owned forestry for amenity/recreation use, notwithstanding the primary aim of the Plan to protect FPM populations.
- References to the *Second Cycle of the WFD River Basin Management Plans* should be updated to refer to the *River Basin Management Plan for Ireland 2018-2021*.

### Assessment

The inclusion of a series of combined environmental sensitivity maps for the individual FPM catchments (or the 8 priority catchments) would be a useful addition, combining the wider range of environmental vulnerabilities /sensitivities that exist within and adjacent to the catchments (flood risk, biodiversity, water quality, forestry, residential areas etc.). If such datasets or GIS capacity is not currently available, we recommend including a commitment in the Plan to addressing this gap, in collaboration with other relevant stakeholders. Such a resource would assist in identifying and assessing potential cumulative impacts.

### **Mitigation Measures**

We note that *Section 9.3. Mitigation Measures* states that ‘*While the plan was being drafted, there was regular consultation with the team carrying out the SEA and AA procedure, and this fed into the plan itself, so that almost all of the mitigation measures proposed for the plan have already been incorporated into it*’. Table 9.1 details ‘*the most significant*’ of these mitigation measures. There is merit in including a comprehensive summary of the recommended mitigation measures arising from the SEA process in Section 9.3. It would be useful to expand Table 9.1 accordingly and to include an additional column highlighting where in the Plan the mitigation measures have been included. This is with a view to better showing how the SEA process has influenced the preparation of the Plan. Where mitigation measures recommended in the SEA are not included in the Plan, the reasoning for this should be provided. A clearer distinction should be made between mitigation measures and high level recommendations in the SEA Environmental Report.

### **SEA Monitoring**

We note that Section 9.2 of the SEA Environmental Report describes the three levels of monitoring proposed in the Plan. The SEA Environmental Report should provide details of the proposed programme to monitor the significant environmental effects of implementing the Plan, based on the relevant SEA environmental objectives. The SEA monitoring should incorporate potential positive and negative, temporary and permanent, and cumulative effects associated with Plan implementation. It should also be capable of identifying any unforeseen adverse impacts at an early stage, to enable any remedial action necessary to be undertaken as soon as practicable.

Relevant existing national environmental monitoring programmes should be reflected in the monitoring programme. WFD related monitoring, relevant aspects of Article 17 Reporting under the Habitats Directive and fisheries / salmonid monitoring are of relevance in this context. Provisions should also be included for links with project / licence specific monitoring.

The monitoring programme should be reviewed at regular intervals during implementation and updated, where necessary, to address any specific issues that arise and any new information/ datasets that become available. The recommended High Level Coordination / Implementation Group may have a role in this regard. This will provide a formal mechanism for review of specific aspects of Plan implementation, including the effectiveness of mitigation measures. It will also signal the need for remedial actions to be introduced where Plan related adverse environmental effects are identified during implementation.

### **Project Level Environmental Assessments**

The potential need for further environmental assessment at the project level to support individual forestry proposals should be more clearly described. This includes EIA, AA, WFD requirements, flood risk assessment, visual impact assessment etc. It would be useful to include a schematic to illustrate the different tiers of environmental assessments that may apply to forestry activities. The EPA guidance note [\*Integrated Biodiversity Impact Assessment – Streamlining AA, SEA and EIA Processes: Practitioner’s Manual\*](#) may be useful resource to refer to in this regard.