

Environmental Pillar Submission to the Public Consultation on the SEA for the Draft Forestry Programme 2014-2020



One of the Many Negative impacts of Clear-felling

Recommendations to Improve the New Forestry Programme 2014-2020

13th Oct 2014

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Contents

| | Page |
|--|-------------|
| 1. Introduction. | 3 |
| 2. Outline Statement | 4 |
| 3. Climate change impacts. | 6 |
| 4. Biodiversity | 7 |
| 5. Acidification issues related to current Forestry model and potential solutions | 7 |
| 6. Impact of Clear-felling on Soil and Water with the associated Carbon release issue | 8 |
| 7. Afforestation targets and sustained yield objectives. | 9 |
| 8. RDP relevance. | 12 |
| 9. Forestry and Water Quality | 14 |
| 10. Coillte relevance to the scoping of this SEA. | 14 |
| 11. SEA and new Forestry Programme Background. | 15 |
| 12. Tourism and Employment | 15 |
| 13. Summary of Environmental Pillar observations. | |
| 14. Environmental Pillar recommendations and observations for new Forestry Programme. | 16 |
| Contact Information | 23 |

15. Introduction.

The Environmental Pillar welcomes the opportunity to input into this process and has collated this submission to the SEA to address some of the key shortcomings of same so that they may be addressed in the process. The Environmental Pillar however wishes to state that this submission is not comprehensive coverage of all the wide ranging concerns of the member groups, which include climate change impacts of afforestation on peat soils; lack of adequate support for agroforestry or native woodland conservation; absence of cohesive or effective measures to address wide ranging biodiversity loss resulting from afforestation and forest management practises; more effective water protection measures. The key to making the forestry programme truly sustainable is to incorporate and apply ecosystem based management tools and principles. This is both a legal requirement under the Convention on Biological Diversity and at the same time the basis for good forestry practice. We look forward to an opportunity to discuss these issues with you at your earliest opportunity.

16. Outline Statement

Sadly the historic unsustainable model of large monocultures of non-native species designed for clear-felling has not been replaced with this new program but rather reinforced.

A sustainable forestry program should not have biodiversity elements as optional add-ons. If the Government is serious about creating forest cover in Ireland then a program needs to reflect the need for mixed species of native provenance broadleaf trees as a basis for continuous-cover forest management strategies. This new Forestry Program proposes more large plantations, and continues to support the outdated unsustainable industrial model that has largely produced poor outcomes in the last 25 years.

These failures can be measured by: the serious impacts on biodiversity; the destruction of valuable habitats through unchecked afforestation; and, for example, the contamination of our rivers driving one species (the freshwater pearl mussel) almost to extinction, at huge financial costs to the exchequer. Coillte was established to manage 7% of the country's land area and has been responsible for, many of these problems. The meagre returns from Coillte in recent years of dividends in the region of €2 million pale into insignificance when the huge set up costs are considered, plus the ongoing annual subsidies received by the state forestry company for road repair and construction.

A Forestry Program that does not address the structure, policies, remit and role of Coillte is failing to acknowledge the elephant in the room.

While the Environmental Pillar welcomes the introduction of the new measures for agroforestry, and forest fibre production as evidence of some progression within the programme, we are disappointed to note the lack of flexibility and options available within these proposed measures. We are also dismayed to see the lack of promotion of our more climate resilient, environmentally and socially richer native species in the new schemes as well as within some of the existing schemes. This is all the more relevant when one takes into account that the Irish Forestry Industry is subsidised to the tune of 100% and yet there is no onus on the Private sector to provide any recreational, energy, timber or non-timber benefits to local communities as a social environmental dividend.

Ireland has the lowest forest cover (10.7%) in the EU after Malta, a small Island with population constraints. Ireland's current forestry plan was initiated in 1996 with a target to achieve 17% forest cover by 2030. This was funded under Rural Development Programmes until 2007, when the State decided to fund the plan via the exchequer so that the 100% grants could be

continued. Under RDP funding rules only 80% grants were allowable, this is the situation applying today.

The poor state of Irish Forestry is supported by the last Forest Europe report 2010, where Ireland scored last in all six tables relating to the criteria for Sustainable Forest Management agreed at Ministerial conferences on the Protection of Forests in Europe in Helsinki 1993 and Lisbon 1998¹. Ireland is proposing to fund its new forestry programme under state aid rules, however this will be subject to an ex ante evaluation and the current SEA (Strategic Environmental Assessment) to which this submission is directed, after which Europe will decide if the plan is sustainable and will deliver Public Goods while protecting the Environment or not.

The SFM criteria relate to the main objectives of the 2006 EU Action Plan for Sustainable Forest Management.²

¹http://www.foresteurope.org/documentos/State_of_Europes_Forests_2011_Report_Revised_November_2011.pdf

²http://ec.europa.eu/agriculture/fore/publi/2007_2011/brochure_en.pdf

17. Climate change impacts.

Sustainably managed forestry can mitigate against climate change through sequestration of carbon by growing trees. Forests, including their soils and ground litter, act as carbon stores. Forestry can also assist adaptation to climate change, and forestry itself will need to adapt to climate change. Many Irish habitats provide valuable ecosystems services in terms of climate change mitigation and adaptation. This includes bogs and peat soils as a significant store of carbon, which when drained release large quantities of carbon dioxide and methane into the atmosphere, contributing to rather than mitigating against climate change. Sustainable management of forestry should factor in climate change as a key component of planning for the future of Irish forests yet the programme fails to do this to any meaningful extent. Soil types must be a key factor in assessing the climate mitigation potential of afforestation.³

The programme needs to make far more of continuous cover approaches to forestry, which focus on the use of native species and local provenance are most appropriate to climate change mitigation, adaptation, and increasing resilience, as they encourage structural and species diversity and native species evolutionary adaptation to place, by promotion of natural regeneration. These, in turn, increase the resilience of forests to pests and diseases; to fire; extreme weather events; as well as greatly increasing carbon storage and benefiting biodiversity and ecosystems services.

Each year the wake up calls are becoming louder, for Ireland to diversify its forest tree species and prioritise our native species and woodlands. Ash dieback, Chalara fraxinea and sudden oak death, Phytophthora ramorum are now firmly established in the country where it is affecting mainly non-native tree species, and whilst the spread of these diseases relies on a range of vectors, vulnerability to infection and ease of transmission are likely to be impacted upon by climate change.

³ <http://www.limerickandtipperarywoodlandowners.ie/PDFFiles/ClimatechangeandIrishForestry.pdf>

18. Biodiversity

The Convention on Biological Diversity informs us that natural plant succession is the foundation for Biodiversity. The Environmental Pillar cannot see how this draft Forestry Programme is equipped to deliver this vital ecosystem service. The SEA needs to address this serious deficit in the Programme. In this context, the 2008 ECJ court case, C-215/06⁴ against Ireland concerning the Derrybrien landslide in paragraphs 88 and 107, it queries why no EIA was conducted in advance of the clear-felling by Coillte, the State forestry board of 263 ha.

Ireland's last report to the CBD in 2010 showed the extent of habitat degradation and yet no serious effort has been made to halt, conserve or restore these habitats. The SEA needs to look at updating the data that provided the basis for this report.

To highlight the internationally recognised biodiversity value of Native Woodland, a recent UK Woodland Trust publication in 2001 showed that in one acre of Native Woodland, there are 4 tons of bacteria, 1.5 tons of fungi, 0.5 tons of field plants, 500lbs of earthworms, 340 lbs of protozoa, 90lbs of slugs and snails, 50lbs of spiders, and 9lbs of beetles. All of which are made of carbon as well as contributing significantly to local biodiversity.

19. Acidification issues related to current Forestry model and potential solutions

According to COFORD research in 2007⁵, native trees were shown to help buffer rising acidity caused by extensive blanket coniferisation in our uplands. In this context the Environmental Pillar recommends zero afforestation of our delicate uplands by exotic conifers, in line with the legal requirements of the precautionary principle.

For acid sensitive areas COFORD recommended, native Sessile Oak our deep rooting climax vegetation, downy birch a soil improver that raises the ph of acid soils and rowan. Scots Pine, being high in associated rare insects and companionable with Birch and European Larch (non-native but deciduous) are capable of reducing Ireland's progressively sour soil chemistry.

The Environmental Pillar is surprised to see none of these recommendations being focused on in the new Programme. The inadequacy of the Native Woodland Scheme does nothing to remedy this.

⁴ <http://curia.europa.eu/juris/liste.jsf?language=en&num=c-215/06>

⁵ <http://www.coford.ie/media/coford/content/publications/projectreports/acidsoils.pdf>

20. Impact of Clear-felling on Soil and Water with the associated Carbon release issue

The Environmental Pillar wishes to highlight the overwhelmingly negative consequences of the preferred harvesting method of this Forestry Programme, namely clear-felling. We also note the failure of the Programme to provide any vision to phase out this out and begin to align our Forestry model with a more holistic one which is in keeping with the EU objectives via Helsinki and Lisbon forestry criteria and objectives.

The following text underlines the negative impacts of clear-felling as a policy and practice.⁶

Modern timber removal operations involve high capital investments in mechanisation and high quality road construction. For such operations to be economically viable, large timber volumes have to be logged per hectare (Wyatt- Smith, 1987; Whitmore , 1991). The minimum profitable volume per unit area is, however, often much lower than believed, as shown by the profitable creaming operations of species with widely dispersed individual trees (cf, Palmer, 1975)The perceived dictates of harvesting economics is one of the main causes for undesirably high harvesting intensities, This results in:

- *selection of inappropriate yield regulation approaches and associated excessive canopy opening;*
- *pressure for unsustainable harvesting levels;*
- *damage to residual vegetation, including to the regeneration and recruits of desirable timber species;*
- *damage to the soil via serious compaction.*

Highly mechanised logging with heavy machines creates conditions not usually encountered in nature (Whitmore, 1991). Particularly troublesome is soil compaction (e.g. Malmer and Grip, 1990), and also disruption of the soil surface, which destroys seedlings, the humus layer and superficial feeding roots and affects the soil seed bank (Whitmore, 1991)

⁶ *An unconventional approach to timber yield regulation for multi aged, multi species forests. I. Fundamental considerations, by Armin H.W. Seydack, reprinted from Forest Ecology and Management series. <http://www.sciencedirect.com/science/article/pii/037811279503577W> Forest Ecology and Management*

Labour intensive, rather than highly mechanised logging, provides scope for the involvement of a larger number of local people, leading to a better base for socio - economic development (Neil, 1981; Ocana - Vidal, 1992)

21. Afforestation targets and sustained yield objectives.

The Environmental Pillar would also wish it to be noted that the target of 17% forest cover by 2030 attached to the current forestry plan, “Growing for the future” has now been adjusted to 18% forest cover by 2046 in the new draft programme. This represents a serious step down in ambition.

The most recent National Forestry Inventory report shows a 0.5% increase in tree cover between 2006 and 2012, at that rate it will take c.80 years to reach 18% tree-cover. Can we wait that long just to achieve what is only half the current EU average of 37%. Also the afforestation targets of the last programme, 15000 ha per annum, were not achieved, instead lower figures of .c. 6000 ha per annum have become the norm. Figures from the Forestry Industry study⁷ show afforestation dropping from 10,096 ha to 6.652 ha between 2005 and 2012.^{8,9}

The Sustainable Yield/ Allowable Annual Cut analysis and figures should be included in the National Forestry Inventory.

When this is matched to the allowable annual harvesting figures for this plan under the principle of sustained yield, we are fearful that the growing stock accumulation each year has fallen far short of what has been allowed to be harvested. This may actually lead to deforestation in the near future. Incidentally the Pillar cannot find any figures related to the annual accumulated forest growth which should be more than the annual harvested amount for the sustained yield to be sustainable. This figure is not in the National Forestry Inventory.

In order to identify and document the area of land suitable for afforestation and reach afforestation targets, as required by Government and EU legislation and policy, an objective and scientifically based mapping exercise is required. This would identify land availability and determine which areas are and are not suitable for afforestation and would facilitate evidence

⁷ [http://www.iffpa.ie/Sectors/IFFPA/IFFPA.nsf/vPages/Press_and_Publications~an-overview-of-the-irish-forestry-and-forest-products-sector-2013-21-07-2009/\\$file/IFFPA%20Review%202013%20FINAL.pdf](http://www.iffpa.ie/Sectors/IFFPA/IFFPA.nsf/vPages/Press_and_Publications~an-overview-of-the-irish-forestry-and-forest-products-sector-2013-21-07-2009/$file/IFFPA%20Review%202013%20FINAL.pdf)

⁸ <http://www.agriculture.gov.ie/nfi/>

⁹ <http://www.teagasc.ie/forestry/docs/advice/Forestry%20Economic%20Review%202012-2013.pdf>

based assessment of the extent to which national afforestation goals could be met without needing to negatively impact biodiversity objectives or afforest land cover and habitat types which are a priority for nature conservation. The Environmental Pillar is eager to advise and assist with such a process and recommends that such a strategic approach would be a significant assistance to facilitate achievement of afforestation targets in a sustainable and strategic manner.

The Pillar would recommend that the Forest Service and DAFM are involved along with the EPA and DAHG in MAES (Mapping and Assessment of Ecosystem Services). This exercise to addressing our knowledge base of Irelands Natural Capital is now a national (Actions for Biodiversity 2011-2016, Target 3) and international imperative (EU Biodiversity Strategy to 2020, Action 5; CBD Strategic Plan 2011-2020, Target 2).

7.1 Suitable and available land for afforestation.

One obstacle to increasing our low tree-cover is the competition for land created by the government's plan to increase food production by 50%, under Food Harvest 2020. This is likely to create increased competition for land use and will likely make the meeting of the afforestation targets more challenging. The scale of this problem becomes apparent when this is combined with;

- poor ecological conditions and the need to achieve Favourable Conservation Status for protected species and habitats in Natura 2000 network,
- annexed grassland types outside of Natura 2000 which are in need of protection, and
- sensitive sites identified under the WFD,

We must reasonably ask where will the extra 7% forest-cover come from in this new programme, when we are now only at 11%? This question can only be addressed by the completion of a **Strategic mapping of land availability** for afforestation as well as systematic site ecological assessments as recommended by BIOFOREST¹⁰ report.

Taking all of the above into consideration we cannot see how this new plan for forestry in Ireland will ever achieve its objectives and justify the spending of more public money. No cost benefit analysis that takes into account the pressures on the plan which includes the real costs

¹⁰ <http://www.ucc.ie/research/crc/Bioforest/index.htm>

on soil, water, local communities and biodiversity of the negative side of the main Industrial model has ever been conducted.

7.2 Semi-natural and species rich grassland

Semi-natural and species Rich Grassland in Ireland is found in many areas outside of protected sites and supports a wide variety of invertebrates and a high diversity of birds. They are also particularly suitable for ground nesting birds, many of which have been facing severe declines in recent decades.

Some types of semi-natural species rich grassland habitats are protected by the Habitats Directive because they have declined so much in extent and will be lost unless measures are taken to protect them and ensure that they are managed appropriately. Extensive grazing has maintained these habitats for thousands of years and now appropriate grazing regimes need to be maintained if they are to continue to deliver the range of public benefits which they are valued for. The overall quality of each of the Irish Annex I grassland habitats surveyed in response to Article 17 requirements of the Habitats Directive was 'Unfavourable – Bad', emphasising their vulnerability and the urgency with which they need to be studied, monitored and offered suitable management support measures. Ireland would be failing to meet a range of legal conservation commitments if we allow afforestation of annexed semi-natural grassland types. Indeed Ireland is already failing to meet conservation requirements by failing to facilitate appropriate management of these semi-natural grassland habitats. This is not addressed adequately in the SEA, measures must be incorporated for the protection of annexed and species rich grassland both within and outside of the Natura 2000 network of designated sites, through both strategic measures (strategic mapping of land availability – referred above) and through site by site assessments of all proposed new afforestation (as recommended by BIOFOREST).

7.3 Breeding Waders

Ireland had witnessed severe declines of breeding Curlew and other breeding waders in recent times. A BirdWatch Ireland survey in 2011 of selected areas previously occupied by Curlew in Donegal and Mayo indicates declines of up to 90% since 1988-1991. The Curlew is a globally threatened bird. Ireland still had a good population of Curlew in 1990, estimated at 5,000 breeding pairs. However, the dramatic population crash since then calls for urgent action to stem the decline and protect the remaining breeding sites from loss. It is likely that there may be less than 200 pairs of breeding Curlew left in Ireland. Irish breeding Curlews nest in a range of habitats, including damp, rushy pastures and open bog and heath. Loss and fragmentation of

habitat in the uplands is thought to be one of the main reasons for the decline. This occurs through afforestation, mechanised peat extraction, wind farm developments in upland areas (and associated infrastructural changes) and intensification of grassland management. Direct loss of open breeding habitat is one of the factors driving declines in Curlew as well as other breeding waders such as Dunlin and Golden Plover. The SEA does not consider this serious problem adequately and must ensure that all planned afforestation in breeding habitat for Curlew should be screened for impact on breeding curlew prior to afforestation. This will require dedicated surveys during the breeding season following standard methodology for this species and will need action from the Forest Service as well as support from the NPWS.

7.4 Afforestation Licencing

Bio-forest (a major research initiative carried out collaboratively between the EPA, COFORD, and several Irish Universities) identified shortcomings in the protection and management of biodiversity in the afforestation consent procedure, especially in non-designated sites. The synthesis report states that "*lack of adequate strategic assessment, failure of regulations to require biodiversity assessment for the vast majority of afforestation proposals, and serious deficiencies in those biodiversity assessments that are carried out mean that sites of high biodiversity importance are currently at risk of being damaged by afforestation*". This conflict has not been addressed in the draft new Forestry Programme. These robust scientific recommendations must be finally given a firm footing in Irish Forest Policy through the introduction of a requirement for pre-afforestation ecological surveys which should take place on all new afforestation sites before consent and grant aid are granted.

22. RDP relevance.

Under current agreed EU state aid rules, exchequer funded forestry plans must be subject to the RDP criteria for forestry funding in line with RDP funded plans. As the 1996 plan predated the EU SEA Directive concerning plans and programmes, this will be the first SEA to be conducted on the Irish forestry model.

8.1 Rural Development Programme

Rural Development Programme rules as set out under Commission delegated Regulation, 11 -3 – 2014. There are certain specific requirements to protect vulnerable habitats, ecosystems and sites, including water and soil. Two articles specifically relate to Forestry and the environment.

Article 6. Afforestation and creation of woodland

‘(d) in the case of afforestation operations leading to the creation of forests of a size exceeding a certain threshold, to be defined by Member States, the operation shall consist of either:
(i) the exclusive planting of ecologically adapted species and/or species resilient to climate change in the bio-geographical area concerned, which have not been found, through an assessment of impacts, to threaten biodiversity and ecosystem services, or to have a negative impact on human health; or
(ii) a mix of tree species which includes either:
– at least 10 % of broadleaved trees by area, or
– a minimum of three tree species or varieties, with the least abundant making up at least 10 % of the area. ‘

Article 8. Conservation of genetic resources in agriculture and Forestry¹¹

8.2 EU Priorities for rural development

There are six EU Priorities for rural development¹², the main one concerning forestry is, Restoring preserving and enhancing ecosystems dependent on agriculture and forestry. There are three cross cutting objectives, Innovation, Environment and Climate change.

‘(6) Minimum environmental requirements with which the afforestation of agricultural land must comply should be laid down ensuring that no inappropriate afforestation of sensitive habitats including areas under high natural value farming takes place and that the need for resilience to climate change is taken into account. On sites designated as Natura 2000, afforestation should be consistent with the management objectives of the sites concerned. Special attention should be paid to specific environmental needs for particular sites such as the prevention of soil erosion. More stringent rules should be provided for afforestation operations leading to the creation of larger forests in order to take into account the impact of scale of those operations on the ecosystems and to ensure that they comply with the objectives of the Green Infrastructure Strategy³ and new EU Forest Strategy⁴’

¹¹ <http://ec.europa.eu/transparency/regdoc/rep/3/2014/EN/3-2014-1460-EN-F1-1.Pdf>

¹² <http://www.environ.ie/en/Publications/Community/RuralDevelopment/FileDownload,35200,en.pdf>

23. Forestry and Water Quality

There are serious impacts on water quality from afforestation and forest management, particularly in upland areas and areas with thin or otherwise fragile/erodible soils. Impacts include nutrient enrichment, sedimentation and consequently loss of wildlife and ecosystems services. Water pollution presents a very real cost to society, in terms of both the loss of valuable ecosystem services, damage to fisheries, and increased costs of treatment for drinking water.

The Environmental Pillar does not consider that the forestry programme contains sufficient measures to promote and monitor the protection and enhancement of water quality and water status in all aspects of forestry, so as to ensure that forestry plans, operations and forest-based activities regulated and supported by the state are compatible with the objectives of the WFD.

24. Coillte relevance to the scoping of this SEA.

A review of Coillte the state forestry body was completed in 2012, the subsequent report is critical to evaluating the new forestry plan, for ex ante and SEA purposes, unfortunately the government has refused to place the report in the public domain. The failure to access the Coillte review will seriously undermine the foundations of the new Forestry Programme in terms of Environmental and Social objectives.

Coillte the Irish Forestry Board, a semi state company dominates the Irish forestry Industry, controlling 53% of forest lands, occupying 7% of the land area of the state. They control the supply of most of the saw logs for the timber Industry and own a major board making plant using most of the thinnings from the public forest estate. The Coillte estate is spread over many parts of Ireland, especially uplands many of which contain NHA's, PNHA's, SAC's, SPC's, Natura 2000 and National parks.

Coillte are clear-felling 5,800 ha per year at over 500 sites, whilst thinning 21,500 ha across 800 sites as well as building 10km of new roads annually. Coillte harvest 2.4million cu m of timber every year, while private harvesting amounts to 0.5 million cu m per year, emphasising how significant a player they are. This is despite the fact that private forestry amounts to 47% however this is mostly plantations less than 20 years old¹³. A large amount of fertiliser and

¹³ <http://www.ucd.ie/hydrofor/docs/Presentations.zip>.

herbicide is also required every year for this state forestry company, the residue ending up in our soils and rivers (a more natural forestry model based on continuous cover low impact systems focused on native trees would not require such chemical inputs).

25. SEA and new Forestry Programme Background.

The State has been conducting a review of forestry since 2002, seeking submissions from stakeholders on at least three occasions. The last call was in 2010 and resulted in a draft report being published in 2013 with recommendations for a new forestry plan to be called, Forests, Products and People.¹⁴ With no prior notification, an SEA was also conducted by the Department of Agriculture, Food and Marine on this same long awaited draft review of Ireland's Forestry Industry report. This report was unable to critique and include Coillte as it stated that a review report on Coillte, which was completed in 2012 was not made available to the team. In relation to Forestry impacts on water and soil quality, no baseline studies were available either.

The absence of examination of alternatives is also in breach of EU SEA Directive guidelines.

26. Tourism and Employment

We can also see no attempt to address the negative landscape impacts of the exotic conifer tree farming model on our future tourism potential. Ecotourism including visits to authentic wilderness is the fastest growing area for global tourism. The figure of 1900 new employees from (Ni Dubhain et al 2006) mentioned in the consultants environment report section Public Perceptions 5.3.11, as a prediction is based on 15000 - 20,000 ha pa afforestation which is not happening.

27. Summary of Environmental Pillar observations.

Taking all of the above into consideration the Environmental Pillar fail to see how this so called new plan for forestry in Ireland will ever achieve its objectives and justify the spending of more public money. No cost benefit analysis that takes into account the pressures on the plan which includes the real costs on soil, water, local communities and biodiversity of the negative side of the main Industrial model has ever been conducted.

¹⁴<http://www.agriculture.gov.ie/media/migration/forestry/publicconsultation/forestpolicyreview/ForestPolicyReviewpublicconsult21Jun2013.pdf>

28. Environmental Pillar recommendations and observations for new Forestry Programme.

14.1 Under Measure 4.1. Afforestation and Creation of new woodlands.

- A realistic rate of general afforestation must be funded allowing for natural regeneration combined with existing scrub to be acknowledged as woodland with suitable funding for fencing to safeguard and allow these young woodlands to establish. It is clear the proposed rate of 8000 -15000 ha pa will not be achieved.
- Grants for agroforestry should be increased to ten years in line with the wood fibre production grants. The replanting obligation needs to be made flexible for agroforestry to allow the benefits of this new concept to manifest, so that farmers will see it as an essential component of their farm in time, otherwise farmers will not take this option up.
- The afforestation programme should be based on 50% broadleaf with native provenance as an underlying principle
- We are told new sites will be on better land than was the case before, this should then allow for more diversity of species with emphasis to natives.
- Conifer dominated plantations should not be permitted in Natura 2000 and other ecologically sensitive areas nor should they be funded by the exchequer through the Forest Service.
- Provision must be made ensure transparent and robust monitoring of potential impacts from afforestation on ecological and water resources at a scientifically appropriate frequency or at least on an annual basis, whichever is greater.

14.2 Under measure 4.1.2 Agroforestry

The proposal to allow only one type of agroforestry system, a silvo pastoral one with only species recommended, oak, sycamore and cherry, with conifer option (Sitka Spruce?) as a pilot project consisting of 34ha per year, renders this measure incapable of providing the scientifically supported multiple benefits. This is a mere token measure with no real thought having occurred other than how to make a new measure fit into the existing timber production

model. The inclusion of a conifer option supports our concern. There is no emphasis on specifying use of native species with different abilities to confer to multiple environmental benefits. A target of at least 120ha per annum should be set and achieved.

Other options must be included in the measure such as prioritising riparian planting for the buffering protection against pollution run off from farms, increased nutrient/trace element inputs from leaf fall, stabilising of river banks, filtering of water and benefits for aquatic life, creation of coupes/copses on open land as well as marginal areas of farms using only native species. The failure to propose the use of agroforestry for buffering to mitigate against the worst excesses of nitrogen and phosphate run off, from the agri-sector, is alarming. The Environmental Pillar calls for Imagination and flexibility to ensure that this measure maximises its appeal for farmers, especially as it is the first time to be introduced.

In the consultants' environmental report section Soil and Land Use 6.1.15 it states planting under Agroforestry should protect water quality, prevent surface run off, and reduce erosion. In 6.1.18 The report refers to forest soils of broadleaves locking up more carbon than conifers and that Agroforestry and the Neighbourwood measures will help prevent flooding.

The Pillar finds it difficult to imagine this measure having any real impact as the amount of land for Agroforestry is so small at 36ha coupled with the fact that the sites where the Neighbourwood projects will occur has not been finalised.

Regards land suitability, recognition of natural regeneration via the plant succession process of native species should be allowable, which will improve poor land, this should allow for scrub to be recognised as an agroforestry option which could be funded via the native woodland scheme conservation measure as well as creating an example of cross-cutting measures, absent from the current unimaginative programme.

The destruction of valuable scrub habitat all around the country right now is an absolute disaster for our environment. There needs to be joined up thinking between the Department of Agriculture who are forcing this devastating habitat removal via the single farm payment criteria, the NPWS, and the Forest Service whose remit is to increase and regulate/protect our extremely low tree cover.

This is hardly an example of Smart agriculture/forestry, when the left hand of the same department blocks and diminishes the right hand. At the very least farmers should be given the option to retain scrub. For this to happen scrub must be recognised as the first stage of forest

regeneration by the two sections of the same Department. Joined up thinking is needed very urgently if the public are to have confidence in the same department of agriculture.

In section Socio Economics 7.3.5 of the consultant's environmental report, it states that the EPA considers Agroforestry element to be the best mechanism to establish links between the RDP Ecological Focus Areas and the WFD. The RDP objective is for 5% of farm area to be set aside for EFA's. The report, in 7.3.8., (with regard to water protection), goes on to recommend merits in exploring synergies between the afforestation measure and actions under the RDP GLAS measure, proposing native woodland buffers.

14.3 Under measure 4.1.2.2 Forestry for Fibre.

The Environmental Pillar is disappointed to see the list of proposed species included under this measure such as eucalyptus, poplar, hybrid aspen, and Italian alder. Some of these species have the potential to become invasive. Poplar, hybrid aspen, and eucalyptus are also known to scavenge nutrients and water from surrounding areas. Eucalyptus is also highly flammable and frost vulnerable. The Pillar is also aware that genetically engineered versions of the Eucalyptus species are being grown for biofuel.¹⁵

We would have concerns that GM trees would be grown in Ireland. Poplar is also being grown as a genetically engineered tree for pulp in China with potential environmental problems.¹⁶

Hemp should be considered as a shrub for this measure. Teagasc have conducted extensive research into hemp with favourable results, it requires no fertilisers etc, and produces two crops per year under favourable circumstances whilst enriching the soil it grows in.

Native species such as birch, alder, and willow should be allowed as should SRC or short rotation coppicing for community wood fuel allotments, if this programme is genuinely interested in ensuring public goods and services are accumulating into the future.

There is no provision within the programme to encourage and support local community district heating systems, fuelled by locally managed SRC sources. This is a serious sustainability deficit and glaring omission considering the pressure communities have been placed under via ongoing austerity measures year on year. This would help to firstly ensure management of

¹⁵ <http://www.theguardian.com/environment/2012/nov/15/gm-trees-bred-world-energy>

¹⁶ <https://www.testbiotech.org/en/node/434>

hedgerows and small woodlands currently neglected and secondly it would encourage the creation of new native woodlands which would help to achieve the aspirational afforestation targets proposed, however difficult to achieve as already highlighted in the introduction.

14.4 Under measure 4.2 Forest roads, drainage and archaeology

Monitoring for archaeology/ecology/water impacts should be part of the criteria for funding. Drains in uplands must no longer be permitted to run vertically down slopes, a herringbone design with shallower depth should be insisted upon, which is less damaging from an erosion point of view.

14.5 Under measure 4.3 Reconstitution of woodlands.

Increased use of native species has been proven to be less susceptible to climate pressure, eg, storms and disease. The 50% broadleaf requirement should extend to this measure with a native stipulation, this should occur in buffering zones on the perimeter of plantations too to increase protection from wind pressure.

14.6 Under measure 4.4 Neighbourwood scheme

The Environmental Pillar sees another opportunity for cross cutting between this scheme, the Afforestation and Creation of woodlands, Biomass, Agroforestry and Native Woodland Schemes. The introduction of imaginative crosscutting measures would ensure that funding not drawn down for unrealistic afforestation targets can be redistributed across these other schemes. This would ensure the Public Goods return could be maximised. One other issue of concern is the fact that local authorities which are targeted for this funding have little or no expertise or track record in delivering or managing community woodland projects.

Areas of these new woodlands could be set aside for SRC (Short Rotation Coppicing) of native species, for community fuel allotments and should be eligible for support under this measure too. Funding for managing invasive species where the woodland is an established one should receive support as well, possibly through the woodland improvement scheme. The name could be changed to Neighbour - nativewood scheme to reflect the above.

The Irish people began as a woodland people with wonderful traditions legends, myths and ancient Brehon laws protecting trees and nature going back 3000 years this needs to be reflected in the new Forestry Programme.¹⁷

Emphasis should be placed on native species for all the known benefits, as well as the cultural heritage aspect which is currently ignored in our forest policy objectives.

14.7 Under measure 4.5 Woodland Improvement

For the Neighbourwood scheme, funding should be allocated specifically for invasive species management. The Scheme should be for predominantly native and broadleaf forests – allowing for stands of Scots Pine (conifer) and some beech

14.8 Under measure 4.6 Native Woodland Scheme

Funding for invasive species management under Element 1- Conservation for existing valuable woodlands is needed. Recognition of natural regeneration via the succession process should be introduced to ensure that all aspects of native woodland creation is catered for.

Element 2 Afforestation

A new element needs to be introduced to target coastal erosion which has been very much in focus this winter, native species adapted to coastal areas should be planted as shelterbelts to assist in our first line of defence against the Sea and Wind. This shelterbelt plan was in the original reforestation plan for Ireland produced by Horace Plunkett via the recess committee in 1897. Shelterbelts for inland areas are also needed and could be supported in this measure, a ten foot high shelterbelt gives one hundred feet of wind abeyance.

The targets set out in the SEA of 360ha per annum can be exceeded within the overall budget of the proposed Forestry Programme by the following means:

- Maintain original formula from the launch of the Scheme in 2001, of one third of funding for private sector and one third each for NPWS and Coillte
- Apply half rate of grant and no premium to public bodies e.g Coillte and NPWS.(therefore each 100ha of funding yields 166ha of area into Scheme)
- Transfer 100ha / annum from the NWS afforestation to NWS Conservation
- Transfer 100ha per annum of ordinary afforestation to NWS Conservation

¹⁷ <http://www.historyireland.com/gaelic-ireland/early-irish-farming-fergus-kelly-dublin-institute-for-advanced-studies-16-isbn-1855001802/>

- Expect that c.40% of Neighbourwood applications will be compartments that best practise would determine should be in NWS Conservation
- Allow an annual amount of Emerging Semi natural Woodland (Scrub) to be taken into to NWS Conservation at about half of grant rate on average.

This would yield around 2,400ha for the 6 year period to be spread across the priority areas, for example:

- Freshwater Pearl Mussel sites 300ha
- Oak acid sites 900ha
- Emerging semi-natural 600ha
- Other more alkaline 300ha
- Neighbourwood 300ha

The economic argument for increasing our extremely low native woodland resource was clearly made in 2004 via two reports, A Guide to Irish Hardwoods, by Gordon Knaggs and Stella Xenopoulou.¹⁸

This report, by Gordon Knaggs and Stella Xenopoulou highlighted, for the first time, the properties, conversion methodology and uses of Irish Hardwoods.

The guide was supplemented with , Market Review and Technical performance of Irish Hardwoods, by Stella Xenopoulou¹⁹. It showed the demand for more availability of this resource from 250 businesses employing 800 people. Another 1000 native hardwood users were identified who were part time. The review documented the ever growing use and appreciation of native hardwoods. This proven demand has not yet been properly responded to by the Forest Service and Forest Industry.

14.9 Under measure 4.7.1.3 Knowledge transfer/training.

Targeted training should include continuous cover forestry; and low impact silvicultural systems including coppicing. This training should be opened up to communities for managing their own Neighbourwood schemes. . A clear distinction needs to be made between training for tree farming and training for Sustainable Forest Management of native/semi natural woodlands to include agroforestry and hedgerow management. Specific training for this more ecosystem

¹⁸[http://www.coford.ie/media/coford/content/publications/projectreports/GuideHardwoods.p
df](http://www.coford.ie/media/coford/content/publications/projectreports/GuideHardwoods.pdf)

¹⁹ <http://www.coford.ie/media/coford/content/publications/projectreports/MarketReview.pdf>

management approaches needs to be introduced to enable farmers to maximise the multiple benefits from these resources. Options for training in Agro-forestry systems are also required.

14.10 Under measure 4.10 Forest Genetic Reproductive Material

Plant Health: All material dispatched from tree nurseries should include provenance certificates at point of sale for all RDP or State aided schemes including GLAS, to confirm that it is indigenous genetic stock or other identified sources.

Support for tree nurseries to focus on native species to ensure long term supply of relevant stock, Oliver Rackham an authority on native woodlands states that the native trees are sensitive/adapted to within a ten mile radius and we should be planting areas with stock from within this ten mile radius. A commitment needs to be made to the nursery industry that long term multiannual funding is in place to ensure they can operate securely. This has been a huge problem in the past and remains a critical issue. It also makes so much sense to invest in this most indigenous industry which properly supported can provide long term employment for many people desperately seeking meaningful employment. This relates to the Public Goods and Services which this forestry programme is charged with delivering under EU CAP and RDP criteria.

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This submission was developed using the Environmental Pillar processes but is not necessarily the policy of each member group in the pillar.

Environmental Pillar members: An Taisce. Bat Conservation Ireland, BirdWatch Ireland. CELT - Centre for Ecological Living and Training. Coast Watch. Coomhola Salmon Trust. Crann. ECO UNESCO. Feasta. Forest Friends. Friends of the Earth. Good Energies Alliance Ireland. Global Action Plan Ireland, Gluaiseacht. Hedge Laying Association of Ireland. Irish Doctors Environment Association. Irish Natural Forestry Foundation. Irish Peatland Conservation Council. Irish Seal Sanctuary. Irish Seed Saver Association. Irish Whale and Dolphin Group. Irish Wildlife Trust. The Native Woodland Trust. The Organic Centre. Sonairte. Sustainable Ireland Cooperative. VOICE. Zero Waste Alliance Ireland