

# Forestry, Flooding and the Water Environment

## Tuesday 22<sup>nd</sup> September 2015

Scottish Natural Heritage, Great Glen House, Inverness

### Meeting Note

This document has been drafted as a high level note of the day's events, highlights the key themes that were identified as a result of the discussions and provides reference materials. This paper was drafted in conjunction with Forestry Commission and Highland Council staff who were instrumental in the development and delivery of the event. Many thanks.

#### **Welcome and introduction**

Steve McFarland, SEPAs flood risk management north region manager welcomed everyone to the event and set the scene as very much a day of learning for all participants, encouraged attendees to network

#### **Presentation 1 - Water Framework Directive, river basin management planning, RBMP and Floods Directive – implementation in Scotland?**

Jenny Davies, SEPA river basin planning coordinator for north highland introduced the principles of the water framework directive and the implementation of river basin management planning in Scotland since the first plans were published in 2009. Steve then introduced the floods directive and the actions that will arise from the plans that are due to be published later this year. The slides are available at;

<http://www.sepa.org.uk/environment/water/river-basin-management-planning/who-is-involved-with-rbmp/area-advisory-groups/north-highland/>

#### **Flooding and Woodlands**

#### **Presentation 2 - Overview of forestry in Highland, review of Forest and Water Guidelines land use & forest planning / consultation. John Risby Conservator, Highlands and Islands.**

John Risby provided an overview of forestry production in the area at present and the likelihood that it will increase in future. Reference was made to best practice, the forest and water guidelines and the importance of good planning and consultation. He explained the importance of buffer zones and drainage that were common issues often overlooked in planning or supervision of sites. John went on to describe the associated risks and benefits with woodland development and management and highlighted that as forestry expands in Highland there may be more cultivation on fragile peaty soils. This combined with strange weather episodes exacerbated by climate change highlights the importance of planning and managing forests in accordance with best practice to alleviate associated risk. John highlighted the process and opportunities in developing new woodlands and associated benefits for water quality, flooding and ecology and the grants that support this.

#### **Presentation 3 - Overview of evidence base for flooding and woodlands (potential for natural flood management, benefits of woodland, situations which can lead to increased flood risk) Fiona McLay, SEPA Flood Risk Management**

Fiona outlined the risks of flooding at a national level and principle of sustainable flood risk management across the catchment and the principle of natural flood management and potential benefits and risks from forestry, as well as current mitigation. Fiona explained that

the science and evidence base to support the influence of forestry on flooding was limited and not currently conclusive but that the evidence base is building and informing the development of guidance. The importance of land use planning, engagement and consultation was highlighted to help deliver best practice. The Pickering Beck case study (reference below) was used as a demonstration of what can be achieved. The slides are available at; <http://www.sepa.org.uk/environment/water/river-basin-management-planning/who-is-involved-with-rbmp/area-advisory-groups/north-highland/>

#### **Presentation 4 - Flooding and woodlands – Highland examples, Matt Smith, Flooding manager, Highland Council**

Matt provided a summary of the council's roles and activities associated with flood risk in the area. He provided a summary of the risks and issues associated with poor land-use planning decisions in the past with the location of developments putting pressures on upstream land managers. Matt went on to discuss the planning process but highlighted the need for the councils flood risk team to be more involved the in process and review the need to include drainage proposals if there are potentially vulnerable areas downstream of a site. The slides are available at; <http://www.sepa.org.uk/environment/water/river-basin-management-planning/who-is-involved-with-rbmp/area-advisory-groups/north-highland/>

Case studies were used to run 2 workshop sessions in the morning that explored various issues and questions. The paper covering the outcomes of these workshops is available at; <http://www.sepa.org.uk/environment/water/river-basin-management-planning/who-is-involved-with-rbmp/area-advisory-groups/north-highland/>

#### **North Highland Area – RBMP pressures and how to address them?**

##### **Presentation 5 – River basin management planning, Jenny Davies, RBMP,SEPA**

Jenny delivered a presentation outlining the principles of RBMP. She covered the condition of the water environment across Scotland and then more focused on Highland. Pressures from forestry were discussed and the outcomes of the harms project in the south of Scotland were used to demonstrate the most common issues on forest sites. The sector engagement and liaison being run by SEPA and FCS was highlighted and attendees were encouraged to attend if possible or feed into the guidance development process.

Geraldine Wight a water specialist from SEPA based in Dingwall then provided a local case study. Geraldine discussed the pressures associated with the high phosphorus levels on the Loch Shin catchment (forestry and fish farming) and the work that has been carried out to identify the sources and reduce them. The case study provided and good example of the regulatory approach to seek improvements with stakeholders in partnership.

Jenny then continued to discuss diffuse pollution, the mitigation in place for forestry through general binding rules, GBRs and our regulatory role in delivering these. Jenny finished by explaining the development of the work to address forestry pressures through developing useful guidance and materials, educating and informing with key organisations, stakeholders and industry representatives. Attendees were encouraged to feed into this process if they felt they had identified a need or gap. The slides are available at;

<http://www.sepa.org.uk/environment/water/river-basin-management-planning/who-is-involved-with-rbmp/area-advisory-groups/north-highland/>

#### **Summary of the day**

The main themes that arose from the discussions and workshops centred around better engagement and communication.

1. Need to improve understanding between agencies – how to use flood maps / PVA

- maps and strategies in forestry planning
2. Need to plan operations effectively with early engagement to identify risks and determine how to address
  3. Need to ensure implementation is in line with what was agreed at planning stage and with Forest Water Guidance
  4. Improvements in statutory planning process with the desire to see less generic information and more site specific detail included.

## Useful links

Forestry commission Scotland <http://scotland.forestry.gov.uk/>

FCS soil and water pages <http://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/soil-and-water-management>

FCS diffuse pollution pages - <http://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/soil-and-water-management/diffuse-pollution>

Highland council <http://www.highland.gov.uk/>

Highland council flooding pages

<http://www.highland.gov.uk/info/1210/environment/81/flooding>

Highland council forestry services

[http://www.highland.gov.uk/info/1225/countryside\\_farming\\_and\\_wildlife/63/trees\\_and\\_forestry/](http://www.highland.gov.uk/info/1225/countryside_farming_and_wildlife/63/trees_and_forestry/)

SEPA <http://www.sepa.org.uk/>

SEPA RBMP <http://www.sepa.org.uk/environment/water/river-basin-management-planning/>

SEPA flooding <http://www.sepa.org.uk/environment/water/flooding/>

SEPA flood maps <http://map.sepa.org.uk/floodmap/map.htm>

Scotland's environment website <http://www.environment.scotland.gov.uk/>

ConFor (Confederation of forest industries) <http://www.confor.org.uk/>

Scottish woodlands ltd <http://www.scottishwoodlands.co.uk/>

Forest industry and safety accord <http://www.ukfisa.com/>

## Interesting papers and reference material

Role of Productive Woodlands in Water Management

<http://www.confor.org.uk/NewsAndEvents/Listings.aspx?pid=29&id=2791>

Cumbria Woodlands - <http://www.cumbriawoodlands.co.uk/woodland-management/water-quality-on-harvesting-sites.aspx>

Woodlands for water <http://www.forestry.gov.uk/fr/woodlandforwater>

Slowing the flow at Pickering Beck <http://www.forestry.gov.uk/fr/INFD-7ZUCL6>

Pontbren project - a farmer lead approach to sustainable management in the uplands

<http://www.woodlandtrust.org.uk/publications/2013/02/the-pontbren-project/>