

## Forestry Workshop – Case Study Sessions

### CASE 1: Forest development

#### What issues might be considered planning the forestry proposal?

- Objective and purpose of the forest. How the forest areas will be managed – whether it is for commercial harvesting or for permanent land cover and the budget available.
- Available infrastructure – is there existing access? If not, what roads will be required, river crossings that will require appropriate authorisations. Timing implications
- The habitat survey findings – species present
- Watercourse information including monitoring, classification and FRM pressures on site and down stream pressures and land use.
- The soil assessment findings – will dictate species and type of planting/ cultivations and what risks from pollutants there are. Logistics of working on sensitive soils, implications on planting and drainage.
- Geography of the site including aspect of the site and need for shading, gradient/ topography of the site.
- Identification of the existing features on the site that can be worked with and enhanced
- Consider method of cultivation that is appropriate for the site

#### What information is available to understand flood management issues in the area?

- Land use surrounding site identify possible sensitivities or opportunities;
- Flood maps.
- Land owner and land manager knowledge
- Classification of water bodies, knowledge of flows and levels from local gauging data, infiltration rates.
- Importance of good baseline studies and site appraisal to identify what sorts of impacts there is potential for, and what opportunities there might be.
- Forest design plan can help.

#### What are the potential benefits? Are there any risks? What mitigation may be applied to manage risks?

##### Benefits

- Create robust riparian zones, create shading to reduce water temperatures and improve habitat, create permanent broadleaf zones to create habitat/ support ecology
- Improve soil stability and influence soil loss, sedimentation, pollutant release and runoff.
- Social benefits associated with linking the forest into the downstream town, recreation, green space and habitats benefits may be possible to secure supplementary funding to achieve these goals set up partnerships with the community and assess need/ want for these benefits (also opportunity).

##### Opportunities

- River restoration and to secure 'multiple benefits'
- Use good drainage practice to reduce runoff rates, diverting clean water away from the site
- Habitat protection and enhancement for local ecology
- Job creation
- Flood storage if needed
- Social and economic benefits
- Engagement and participation by stakeholders and interested community members can help with maintenance and protection of a forest site, reporting fire risks and participating volunteering works such as in clean ups or tackling invasive species.

##### Risks

- Insufficient assessment/ planning
- For riparian areas, there are problems with hare and deer. The ground can be difficult to prepare, often requiring hand preparation and frequent flooding can be problematic.

- Inappropriate implementation of roads and drainage is the most significant factor in runoff attenuation (or lack of it) and inappropriate methods can completely undo any benefit that would otherwise be secured by afforestation. Needs high priority as it is one of the most influential aspects of how the site will affect the catchment.
- Woody debris impacting downstream structures such as bridges and culverts;
- Commercial forestry is now on the rise again after years of native regeneration planting. Contractors therefore not experienced in up-to-date commercial forestry practices as all recent experience has been native woodland.
- Diffuse pollution affecting water quality down stream
- Other developments such as hydro in the catchment to consider
- Climate change – strange/ unseasonal weather patterns
- Development prospects near site e.g. increased population through housing development

### **What additional information/advice should be sought? What best practice is available?**

#### **Information**

- Neighbouring land use
- Community needs and wants for their area
- Forest research – case studies for example Cumbria woodlands
- FISA Forest Industry Safety Accord – good source of guidance
- Information from fishery groups – often non statutory consultees but a very useful source of information.
- Sediment management maps
- Timber transport forum info
- Site suitability
- Local development plans

#### **Best practice**

- Forest and Water guidance. Although it has gaps – it is clear on the need for buffer zones but contains no practical guidance on sizing and managing buffer zones. Previously this resulted in bare strips with no real benefit to the water environment. Understanding of good practice in buffer strips is improving.

### **How might stakeholders/partners be consulted on the proposal?**

**Speak to;** SEPA, FCS, transport Scotland, Fishery groups, neighbouring landowners/ land managers, community groups and councils.

Some participants identified the needs for improved stakeholder engagement/ understanding of forestry works

#### **How**

- Pre planning application engagement and consultation
- Use social media for community groups
- Feed all collated information into the planning application
- Community meetings often have very poor turnout – social media may be more effective now. Can run surveys through these.
- Best to do in the early stages to prevent changes and delays being applied
- How is often determined by the scale of works, locality, receptors etc

**Further comments.** Pre-application process is very important so information can inform the plan, rather than having a stab in the dark at a plan and having to change it all afterwards based on the outcome of the consultation. Timescale issues and requirement for more site specific information to be made available in consultation process. It can be difficult to get access to detailed information and get decisive comments through planning – often woolly and not clear guidance.

**Action taken to feed this into the planning department in SEPA by JD – done 24/09/2015**

### **Are there any issues about terminology?**

- Plain simple English – jargon free please!
- Language must be fit for purpose/ audience.
- Minimise the use of acronyms.
- River basin plans have distinctive language that can be confusing to begin with.

**How are agreed plans to manage flood risk management implemented? Are there limitations? How is this managed?**

**How**

- Need for supervision of contractors.
- Inspections of completed work.

**Limitations**

- Logistics of time some sites very remote.
- Resources of staff time – also tied to logistics.
- Economic feasibility.

**How is this managed?**

- Drainage practice was thought to be good across the board but we are aware of individual cases of very poor practice which need to be addressed.
- Appropriate funding allocated.
- Where opportunities arise there may be supplementary funding to achieve multiple benefits – think outside the box.

## **CASE 2: Natural flood management in the Peffery catchment**

**What information would you use to identify opportunities and risks in this area: Are you aware of any other information available? What other information would you require?**

- The flood map information presented was really useful – not everyone aware of its availability or where to access it.
- Confusion with Scotland's Environment website – thought that was the source of all available information.
- Information gained through consultation is often general and not specific. Need more site specific detailed information to usefully inform plans.
- More need for cooperation and sharing of available data between organisations and parties identified.
- Share the forest design plan
- Historical maps – re-alignment/ straightening disconnecting the flood plain
- Pollution inputs

**What opportunities can you identify?**

- Natural Flood Management techniques - may be opportunities to improve management of the existing forest in the headwaters, create riparian zones, buffer strips and blocked drains
- Further down the catchment there may be opportunity to open up areas of floodplain storage or enhance existing floodplain areas with riparian planting, creation of wetlands and permanent habitat creation. Current land use is agriculture
- Improve fish habitats and restore morphology of the river
- Presence of an existing river gauging station creates opportunity to gather data on impact of forestry activities – contribute to improved evidence and data availability

**Who has a role in identifying these opportunities? And implementing these opportunities?**

SEPA, Councils, landowners, Scottish government rural payments and inspections department, SGRPID for agri-environment schemes, Scotland's rural college, SRUC, Scottish tenant farmers association, STFAs, Scottish land and estates, SLE, national farmers union Scotland, NFUS, forestry commission Scotland, FCS, Traffic Scotland, Network Rail crofters association. RBMP and FRM Forums are key for bringing parties and stakeholders together and encouraging communication and consideration of measures.

**When do these opportunities need to be considered?**

- The Forest Plan (reviewed every 5 years) is the key stage – that is the time at which all the information should be gathered and the main opportunity to influence the strategy and measures that can be implemented.
- Local development plans.

**What barriers might there be to realising opportunities?**

- Landowners need to be engaged positively from the outset, not as an after thought. They need to buy-in to the strategy.
- Financial constraints short term and long term maintenance
- Loss of agri land/ change of land use

**What are the risks?**

- Increased flood risk downstream to Dingwall which is already a vulnerable area
- Unforeseen, unintended impacts. Due to poor understanding of how processes can be connected and knock-on impacts, lack of data and understanding. Activities designed to benefit some areas could have unforeseen impacts in other areas/issues.
- May be a lack of ambition. Tinkering round the edges may have little benefit and unforeseen negative impacts. Need to be more ambitious with our approach to see real benefits and gather good measurable evidence.
- Nothing changes and no improvements are seen
- Political will influences prioritisation

**Who has a role in identifying these risks? Mitigating these risks?**

- Landowner/ manager

**When do these risks need to be considered?**

- During the planning
- Prior to works on site maintenance, improvement works etc

**What might prevent these risks being identified or managed?**

- Workload pressures resulting in lack of time on site