

## **P-04-537 Planting Trees to Reduce Flooding, Correspondence from the petitioner to the Clerking Team, 17.02.14**

Morning Kayleigh,

Apologies for the delay in getting back to you on this. Here are some comments which could be forwarded to the committee for the next time they discuss this item as I understand it's too late for tomorrow's meeting.

The natural environment and trees in particular can play a huge part in helping to absorb surface water run-off and thus reduce peak flooding flow.

Broadleaved woodland is on average 67 times more effective than improved, grazed grassland at absorbing surface water run-off

- To coincide with the handing in of our Petition, we have Published a major report 'Holding back the waters', showing the huge potential for the Welsh Government and its new environmental body Natural Resources Wales, to use woodlands and trees as an effective, and cost effective means of reducing flood risk to some of the 357,000 properties in Wales, a sixth of the building stock, that are currently at risk from flooding, alongside more traditional hard engineering flood defences where appropriate.
- 10 million trees - high density planting
- The report highlights three case studies of how this is already happening across Wales, two in Powys, one in Denbighshire - this includes the Pontbren Project.
- The Welsh Government is already spending, directly or indirectly, £44m a year on flood defences and this is forecast to rise to £135m by 2035. Yet planting native trees and woodland in the right places, for example in the form of shelter belts in upper river catchments, can be a more economic way to reduce general flood risk. Broadleaved woodland is on average 67

times more effective than improved, grazed grassland at absorbing surface water run-off. If tree shelter belts are located in the right places on improved land, reductions in peak flow of around 40% may be achievable.

- The scientific data collected at the Pontbren scheme in Powys, has shown conclusively that strategically planted, narrow, fenced shelterbelts of trees across slopes capture water run-off from the pasture above and allow it to soak more rapidly into the soil.
- The Pontbren Scheme in Powys provided an excellent example of what this approach might mean in practice. Here, ten farmers have worked together to plant over 120,000 trees and shrubs, to create or restore over ten miles of hedges and create numerous ponds. Now nearly 5% of the Pontbren land is woodland, pond and hedgerow. Crucially, this has been achieved with no loss of agricultural productivity. Indeed the aim was to reduce costs, make farming more sustainable and improve prospects for the next generation on these family farms.
- Coed Cadw have already announced that we are ready to put our money where our mouth is and provide £20,000 towards the cost of a scheme, or schemes, in Wales, which can help demonstrate the effectiveness of using trees to reduce flood risk and improve water quality. we already have agreed to support one project. Perhaps WG could match our fund?
- We welcome the move towards river catchment plans and the current round of workshops and we hope that these will see experienced staff on the ground working with landowners to provide real impetus towards modifying land management to address water quality and flood management issues. We don't have the capacity to engage in all 14 catchments but we hope to be directly involved in work in several of them.

- We'd also like to draw attention to porous cities – large areas of impervious concrete and tarmac contribute to flash flooding. Suitable urban drainage design incorporating tree planting and other vegetation can provide solutions and make the urban environment much more attractive and healthy. The forthcoming report on urban tree cover in Wales, shortly to be published by NRW highlights the extent of the opportunity to greatly increase tree cover in Wales's towns and cities.

Kind Regards,

Angharad