

Cairngorms National Park - Clim-ATIC Project

Climate Change Adaptation and Sustainable Flood Management

The Project Brief by Mike Donaghy Associates

27th May 2010

Background

Climate change projections indicate that flooding is likely to increase in frequency and magnitude in Scotland. The Scottish Government's policy is to manage floods in a sustainable way. In practice, this means moving away from simply trying to deal with flooding at its point of impact usually through hard engineering, and instead taking a catchment approach, looking at where floods arise, applying a wide range of measures and techniques such as planning controls, better flood warning, flood resilience and slowing the flow of water, mainly through land management, to vulnerable areas.

In the context of land management, this raises two related outcomes. The first is the increase in risk/vulnerability to managed land from the effects of flooding. The second is the role that land management could have, particularly in upland areas, in lowering flood risk to communities and land further downstream.

In the context of the Water Environment Water Services Act and the Flood Risk Management Act, both with strong components for sustainability, measures taken to manage the first outcome could work against those measures applied to achieve the aims of the second. A joined up approach is required and this is supported by the management frameworks created by both pieces of legislation.

The Cairngorms National Park Authority, the University of the Highland and Islands Clim-ATIC Project and SEPA are very keen to engage with land managers to explore their views, experiences, opinions and advice on the best way to adapt to climate change and fulfill the requirements of national and European laws.

This project will lead directly to a number of outcomes in the context of flood management and other related subjects. The first is to help form the Scottish Government's new policy on

the funding of land management measures to lower flood risk and to improve the water environment. This is urgently required and this project will be the first of its kind in Scotland to supply information to the process. Through this project land managers will be able to directly communicate to the Scottish government and its agencies their best ideas for how they can work with the authorities on the ground to help achieve the legislative aims. The second is that, in the face of current Common Agricultural Policy reform, the European Commission and Member States are exploring ways of reducing the CAP budget, integrating agricultural support schemes with other policy drivers and re-directing them towards clear societal benefits. This project is in an ideal position to inform that process. Third, in Scotland and the rest of the UK, knowledge of land management measures to lower flood risk is rather restricted and, in some cases, poorly understood. This is an opportunity for land managers to increase their knowledge of the measures and approach.

Initial and informal inquiries to individual farmers in a small focus group in Highland Perthshire as to land manager's attitudes to climate change adaptation and flood management brought a wide range and depth of responses. These varied from denial of climate change to despondency regarding the future of upland farming. Others simply said that they would do whatever they were paid to do. They were generally distrustful of the Government and its Agencies, preferring to deal with neutral or independent operators. One consistent theme was that virtually none of the focus group knew anything about land management measures to lower flood risk. There was also very little experience of working with other land managers in the longer term. This greatly hindered constructive engagement but revealed the starting point for the project. On a positive note, when measures were explained, understanding of their function and application was swift. Interest in learning more appeared to be genuine. They had no experience in proactive projects with the Government or its Agencies.

The objectives provided by the Steering Group for the Land Manager Consultation Brief are

1. To engage with land managers to gather views, inform and raise awareness about future possible changes in climatic conditions and extreme weather events (with input from UHI using UKCP09), focusing on flooding.
2. To inform land managers and raise awareness of the sustainable approaches to flood management introduced under the Flood Risk Management Act, focusing on promoting and explaining the role of land management and land use change to lowering flood risk (in conjunction with the SEPA and Scottish Government Flood Management teams)
3. To raise awareness of the important role that farmers/land managers have in lowering flood risk. Explore opportunities for study visits to demonstrate this benefit.
4. Through active discussion sessions, engage with, and explore the land managers' views on the impact of climate change, flooding on their land, *the role of their land in lowering flood risk elsewhere*, what their solutions may be and what their role may be. The aim would be to capture their experience, knowledge and views on;
 - a. scale of the flooding problem on their land (*and their land's role in lowering flood risk elsewhere*)
 - b. what they see the solution may be and their role in that process, focusing on what may be possible to be achieved through a more natural flood management approach, and
 - c. what incentives, including compensation may be necessary to trigger involvement
5. To work closely with SEPA and SG in order to use the results of this work to inform current thinking on delivery of the FRM Act and implications for land managers.
6. To produce a report that captures the results of the consultation

(Objectives agreed in a meeting with Clive Bowman of Clim-ATIC, Fiona Chalmers of CNPA and Mike Donaghy on 27th April, with further amendments by Andrea Johnstonova of SEPA. 4 and 4a text in italics added by MD 27th May 2010)

Land Manager Consultation Brief

Geographic area and sample population

On the above basis, I am proposing that an area of activity is identified in May/early June. That area should be several sub-catchments/parts of the upper Spey (with an estimate of the expected number of land managers in each area in brackets from which the sample will be taken): Laggan (6), Truim (5), Newtonmore (5), Kingussie (2), Insh and Feshie (4); Tromie (2), Aviemore (8), Coylum Br/Glenmore (8), Nethy Bridge (7), Boat of Garten (7), Dulnain Br area (11) and Grantown on Spey to Mains of Dalvey (9).

Engagement with Land Managers

Initially, I will be engaging one to one with individual Land Managers (LMs). It is my belief that this is more reliable and productive when building up a relationship with LMs, leading to better quality data and relationships, particularly in the longer term. Since the steering group's preference is for quality of information over quantity, I am planning to engage with around 12 LMs at an individual level throughout the project period (although this very much depends on the LMs' desire to engage in the first place). The geographic spread and large sample population should provide a useful range of LM activities and number of LMs from which to derive a sample for the project. If this proves to be impractical then my contingency is to form small focus groups based on theme e.g. moorland managers or location e.g. the Laggan area, for example. Nonetheless, in the light of the success of wider group discussion from the Clim-ATIC project, I intend bringing the LMs together in the second part of the project.

My initial engagement methodology will be to encourage the LM to talk about their experience of flooding and climatic impacts on their ground. I also want to understand their sense of place: where they see themselves in the catchment and their interpretation of the significance of that. This will take place in June and July 2010. I shall endeavour to find out their views and experience by discussing their knowledge and management of their ground with them. These will be recorded. I will also use this as an opportunity to build their knowledge and understanding of land management flood techniques and measures. This will be achieved with a PowerPoint presentation but also with the provision of project reports and links. It is likely that at this stage I will need to use

UKCP09 projections as part of my justification for approaching them in the first place. I shall need advice on how to access these and on how they are best presented. I will require also guidance from the Steering Group as to the possibilities of introducing the process of identifying vulnerability to likely impacts. It is likely that this would be used at an individual and group level. This period will also provide an opportunity for examining what support from Clim-ATIC partners in UHI may be required.

In the second period, August and September 2010, it is my intention to bring the LMs together for a wider group discussion of the aims of the project. This would be an excellent opportunity to include representatives from authorities, the Scottish Government and its Agencies, largely to listen and advise. Further capacity building could be achieved and participants will have had time to think about and discuss the issues brought up at the first engagement. We could also consider a visit to a demonstration site, if resources allow.

Although there are two main periods of engagement, it is my intention that discussion and dialogue between LMs and me or among LMs is strongly encouraged throughout the period.

Local Advisory Group

At the very start of the project, I would like to put together a small group of local advisors, prominent amongst the land management community, for example: Stuart Black of Nethy Bridge, Alastair MacLennan of Bailliefurth, Hamish Trench of CNPA and Lucy Grant of Laggan. One of the pieces of advice that I would like from the Advisory Group is the names of appropriate LMs in each section that I could approach in June. I already have the contact details for the above individuals.

Steering Group

It is my practice to update the Steering Group regularly by email and telephone. I am suggesting that we meet in late July or early August to update everyone in detail and to discuss progress. We should also meet in mid September to discuss the draft Final Report.

Reporting

I plan to have a draft report for the Steering Group ready by mid September and a final report acceptable to you before the end of September.

Estimated Project Timeline

1. Commence project first week in June 2010.
2. Form and then consult with Advisory Group in first two weeks of June 2010
3. Identify and contact LMs and commence first engagement second half of June and late July 2010
4. Meet with Steering Group early August 2010
5. Carry out second engagement with LMs August/early September 2010
6. Produce draft Final Report and meet with Steering Group in mid September 2010
7. Produce Final Report before the end of September 2010

Payment Structure and Dates

I have been informed that the total budget for this work is £15000. Therefore, I would like the payments for this work to be made in three portions associated with three milestones. The first payment, of £5000, to be made in the first half of June 2010, at the commencement of the project and at the formation of the Advisory Group. The second payment, of £5000, to be made at the beginning of August 2010, after the first engagement with LMs and prior to the second. The third and final payment, £5000, to be made on receipt of the Final Report at the end of September 2010.

Payments are to be made to the account of Michael J Donaghy, account number 00189480, RBS Pitlochry Branch, 84 Atholl Road, Pitlochry, PH16 5BJ. Sort Code 832617

About Mike Donaghy Associates

Mike Donaghy Associates is a consultancy based in Scotland and specialising in integrated catchment management and sustainable flood management. Mike has over thirty years experience as a policy officer, fisheries scientist and manager in the water environment. He is a specialist in the development of integrated catchment management and is a leading authority on sustainable flood management. He is the originator of the term Natural Flood Management and is an acknowledged authority on the development of land management methods to lower flood risk.

Since 2003, he has been a key player in national and international water policy development, including the Water Framework Directive and Floods Directive. He was strongly influential in the modernisation of flood legislation in Scotland. Mike was a significant member of the team that produced the Flood Risk Management Act 2009 and is closely involved in the production of Guidance related to the Act. He is an advisor to the Scottish Government, the European Commission and major NGOs and serves on a number of steering groups and working groups related to sustainable flood management, river basin management and land use planning at a national and international level. A skilled communicator, he lectures on catchment and sustainable flood management issues and is asked regularly to take part in radio and TV programmes and news interviews on water, flooding and freshwater fishes. He lives in Perthshire on a hill farm near Killiecrankie.