Written evidence submitted by The Keswick Flood Action Group (FLO0038)

Keswick Flood Action Group was formed after the 2005 floods. Since then Keswick has experienced two more flood events: 2009 and, despite a new £6.1million flood defence scheme completed in 2012, a further devastating flood affecting 515 properties during Storm Desmond in 2015. We remain vulnerable, weary that we have supplied evidence to so many reports over the years and yet nothing much has changed. However, we passionately believe that our experience is mirrored in many communities across the country, and that our only option it to continue to speak out in the hopes that, eventually, the Government will listen and act accordingly.

1. Is Flood Risk Management Effective? Clearly not given the shameful number of flood incidents and homes devastated this last winter.

Over the years we have come to believe that the Environment Agency (EA) is not fit for purpose as a Flood Risk Management Authority. The EA's focus is diverted by a plethora of rules and regulations designed to protect various habitats/species and these rules always take precedence over what should be overriding priority - the protection of communities, properties and lives from flooding. **The current bureaucracy and legislation hinder any realistic approach to flood risk reduction**.

The situation needs to be turned on its head. **The need for legislation to protect communities should be paramount. It should then accommodate, whenever possible, the needs for biodiversity rather than looking at how to manage our rivers and environment for the benefit of biodiversity and then hoping that some flood risk reduction might be achieved as a consequence of that.**

The legislation for the protection of the natural world leaves any possibility for flood protection to take a very poor second place. It hinders any progress. Flood defences take around 7 years to achieve. Even something as simple as regular gravel removal in a stretch of river requires surveys and reports rather than a pragmatic approach, employing common sense and an appreciation of how rivers have been managed for generations. It is costly, both in time and money. Communities who work hard in their spare time to make a difference and to get their voice heard are drowned out by a myriad of NGOs who are paid to attend meetings and to know all the relevant rules and regulations they need to ensure that their interest, be it flora, fauna or fish, has the protection it deserves.

What is needed is a Flood Risk Management Authority which does what it says – actually, actively, manages flood risk – not a regime which hopes to "manage expectations" or falls back on "community resilience". Phrases which the Dutch would refuse to accept. **Communities need and deserve protection if at all possible, at the very least for actions to attempt to reduce the scale of flooding.**

With Brexit there is the opportunity to create legislation which puts flood risk reduction at the top of the agenda. Managing our water in this way does not mean that the environment will suffer, in fact it can help protect it. **The environment can adapt much more easily that than communities can**.

2 Lessons learned from last winter: Natural Flood Management (NFM) cannot be effective with the sheer scale of the problem; not now, and certainly not in the future, given forecasts. Funding for NFM schemes focus on environmental gains, flood alleviation might be a welcome – very minor - additional bonus.

Government response to flooding remains largely reactive NOT proactive. In order to manage flows and reduce flood risk we need to use all the means we have at our disposal. That demands a whole-catchment approach so that problems are not passed onto other areas. It should aim to try to stagger peak flows in a river's various tributaries by incorporating off-line storage (pre-planned and with adequate compensation for landowners/farmers), and considering the part lakes and reservoirs can play in managing peak flows.

There should be a balanced approach to reservoir management, backed up by legislation, which recognises the significant role these structures can play in managing flood risk alongside their duty to supply water in times of drought. Effective reservoir management to provide storm space, particularly in the winter months, to reduce flood risk could have played a key part in reducing flooding in the Sheffield area from the Don in November 2019. Adequate reservoir storm storage space could also have played a part in reducing peak flows on the Severn in February 2020. In countries like New Zealand there is a clear duty on reservoir operators to acknowledge the impacts of flooding downstream of their assets and there are penalties if actions to provide storm space are not undertaken. In the UK a water company's only concern is likely to be penalties if drought measures become necessary. Flooding downstream of their assets is seen as an "Act of God" so any real duty of care to those downstream is ignored.

The management of Thirlmere Reservoir has been identified as a key to effectively reducing the flood risk for Keswick since the 2005 floods. **15 years on, numerous meetings/reports/studies /surveys the much-needed increased release regime at Thirlmere for storm storage and flood alleviation is still not in place**. **Its instigation is more likely to be achieved at some stage in the future because it is beneficial to salmon rather than because it has been demonstrated to be key to flood risk reduction.** A disgraceful situation for our community after three recent severe flood events.

3 Costs: With reference to the "Cumbria Community Consultation Submission" (Faith Cole 2018) the list of costly and critical impacts, not simply on homes and businesses includes:

community welfare	services	critical infrastructure
roads rail & bridges	the local economy	power/water supply
tourism/productivity	landfill	parks and leisure facilities

Flooding also damages:

- Farming (stock proofing/access/gravel deposits on pastures, livestock drowned etc)
- The rural landscape (forest paths, tracks, culverts etc)
- Habitats and nature also suffer from damaging high flows, stranding fish etc.

For Cumbria, the EA's "Estimating the economic costs of the 2015 to 2016 winter floods" (January 2018) sets out the extent of the flood's impact. The costs to individuals from long-term anxiety and trauma cannot be quantified.

DEFRA focuses on the environment and biodiversity. Rural communities' needs are overlooked. Partnership funding puts a huge burden on smaller, rural settlements and in towns like Cockermouth and Keswick where flood defences were significantly improved after the 2009 floods but were overtopped again in 2015 there is no funding to reduce flood risk for these communities. **The Funding Formula discriminates against vulnerable communities with lower house prices, does not take into account depth of flooding – or effectively reflect return periods for flood incidents.**

A more realistic budget is needed, acknowledging climate change forecasts and appreciating the full balance of costs in the areas as set out above, if flood prevention is not achieved. **Currently all that the Derwent Catchment has been offered is funding for NFM which takes the focus away from achieving strategic, realistic flow management.**

3 Climate Change: indicates that we need to be prepared for both too much and too little rainfall. There needs to be investment in a fully integrated national water network with improved storage. Thirlmere reservoir, in Keswick's upper catchment, was overspilling uncontrollably for weeks earlier this year, exacerbating the town's flood risk, causing fear and anxiety for so many, and yet it is now much lower than would normally be expected with summer close at hand. This surely tells us something about the need to reorganise the entire industry to ensure that water can be transported to where it is needed and stored safely where it does not increase flood risk.

Back in 2012 Keswick had a new sewage system installed in the town. It was designed merely to a 1:30 year event because that was all that was required. **There needs to be a complete overhaul of the legislation for all water infrastructure – drainage systems etc. to ensure that it is fit for purpose and takes into account forecasts for climate change, acknowledging regional increases where appropriate.**

Reduced funding for local Government has meant that drains are not cleaned out regularly, pipework is ancient, dilapidated, poorly maintained and not designed to cope with the impacts of the intense storms for which we need to plan.

4 Community Involvement: All we get from the EA are a succession of reports and little action. If the reports themselves could prevent flooding we would have been safe by now. Vast numbers of EA staff are employed on studies and surveys, and yet there is little evidence of anyone actually DOING anything. Rivers are choked with gravel with which landowners dare not interfere. **There is too heavy a reliance on modelling and little value placed on local knowledge.**

As far as the reports themselves go they take far too long and are never delivered on time, often months (or even years) later than were first intended. It seems that only another flood event galvanises anyone into action. This has to be more than allowing flood groups/local councils to read reports – eventually and if they are lucky! Communities should be able to input

from the outset to ensure that the scope and direction of any scheme/report is appropriate. Staff turnover means that, **even if a community is lucky enough to have one named contact person allocated to their catchment, with staff changes there is no consistent approach**. Relationships are over almost as soon as they are established and corporate knowledge can be too easily lost, filed away in someone's computer.

5 Natural Flood Management: whilst this can be welcomed in many cases the focus on NFM means that the scale of the problem is not being appreciated. NFM was supposed to be part of a "basket of measures" which would include hard engineering etc. NFM is the easy (probably less expensive) option. We have not seen a strategic, joined up, well researched, approach. Rather an opportunity to find a farmer who is prepared to have a grant to have some trees planted on sections of his land with the hope that, at some stage in the future it might have some benefit for flood alleviation

The community are weary of hearing about "slowing the flow". What is needed is a concerted effort to try to manage peak flows. No amount of river meandering and leaky dams saves a community when the entire valley floor is under several feet of water. Furthermore, the wrong sort of trees may be planted in the wrong places, there is no long-term maintenance plan for tree management or the management of leaky dams. Whilst it clearly keeps well-meaning NGO staff happily employed, **it is of little effect given the scale required and, sadly, diverts money, focus and energy away from schemes which could make an appreciable difference to a community's flood risk.** With forestry management and the removal of mature timber an area can be in a situation of tree deficit for decades whilst newly planted trees take time to grow. We do not have that time to wait, solutions are needed now.

6 Resilience: The Government has championed flood resilience and property level flood protection. Protecting your home from flooding takes more than the purchase of flood gates. Water will find a way in through mortar/plaster/floor tiles. To achieve anything near flood resilience properties need to have waterproof concrete floors, tiled using swimming pool adhesive, waterproof plaster etc etc. The costs are considerable and, for most, prohibitive.

Whilst FloodRe has certainly benefitted many home owners, businesses still face an often-impossible task to find affordable insurance in flood risk areas. However, the area where the insurance industry could take a much greater part is in assisting the property owner after a flood. **Whilst policies offer like-for-like replacement, loss adjusters should be able to offer much needed independent advice as to how to restore a property and have the ability to negotiate a portion of the costs towards resilient rebuilding** eg. offering the cost of relaying floorboards towards installing a waterproof concrete floor, ensuring the electrics are installed from the first floor down to avoid sockets/wiring within a metre of ground level.

Many more properties are experiencing deep water flooding and thus a greater risk of structural damage. Flood resilience measures should not be used for flood levels over 900mm as water pressure externally may cause structural damage. **Thus, flood prevention should be paramount**. **Resilience does not take the fear or the anxiety away each time heavy rain is forecast**. The impact on mental health, not merely in the short term whilst cleaning out contaminated filth and trying to deal with insurance claims/builders but the long-term

impact in communities which have suffered severe and repeated flooding is not fully appreciated. The cost in depression, alcohol abuse and so on is borne by families and the NHS. Being praised as a "resilient community" is an insult, it demonstrates little understanding for the overwhelming trauma, which many of us have had to endure for months as our homes dry out, because we literally have no choice.

Developments: Ideally d**evelopment should not take place on flood plains; legislation needs improving to prevent EA recommendations being ignored.** Flood risk needs to be more thoroughly considered for all developments to take into account water passage from above and around a proposed site and through the entire area NOT simply calculations of rainfall on impermeable areas.

SuDS: We have worked with Cumbria County Council (CCC) on four new housing estates where SuDS have failed (Kendal, Keswick and Cockermouth) and one site (Seaton) where local drainage concerns are not being properly addressed in the planning stage. A consultant was appointed by the Council and the report from site visits on 5/6 June 2019 has still to be shared and lessons learned from this report have presumably not, so far, been put into place/acted upon.

We supplied details of SuDS issues to CCC, Hampshire Council for a DEFRA submission and United Utilities. **Is information being effectively shared between authorities so that lessons can be learned and best practice achieved?** We have no evidence of a joined-up approach.

There seems no effective mechanism to share best practice, reports get written… and then? We have identified many SuDS issues which are not adequately addressed including:

- The need for a common set of standards/better communication/a clear understanding of the detail of the site with quality control in place throughout the build.
- SuDS requirements agreed early in the process and designed by suitably qualified engineers.
- All legislation should be provided at the start, should fit together and not contradict other regulations (e.g. Buildings Control) and should not be applied retrospectively.
- Clear guidance needed regarding the suitability of the site for SuDS: geology/gradient.
- Appropriate rainfall figures (not simply regional/national average figures), storm frequency & suitable allowances for climate change to be used in calculations.
- Percolation tests should be accurate and comprehensive, need clear guidance and can differ for times of the year. Storm frequency & duration need considering.
- Potential conflict of interest over costs. A developer may have budgeted a set number of home units to be able to make a profitable return on the land purchase costs.
- Planning Authority not using the legislation available to it effectively.
- Possibility of excess runoff having significant effects on dwellings on at lower levels.
- External drainage surveys not properly investigated/mapped.
- Inadequate site monitoring whilst under construction to ensure compliance with legislation.

Long term maintenance of SuDS installations is not properly considered. The cost may fall to the new home owner with the additional problem that the adoption of roads/drainage systems may prove difficult. Homes built after 2009 will not qualify for Flood Re. **There is, therefore, a greater responsibility on authorities to ensure that builders are not putting properties at risk of water ingress.**

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