

From flooding to adventure play areas – the current planning challenges at Cairn Gorm

Description



The Allt Mhor, looking from just above the road bridge in Glen More, after a morning of heavy rain on 1st August. The footbridge is a further kilometre up stream. Photo Credit Alan Bratney.

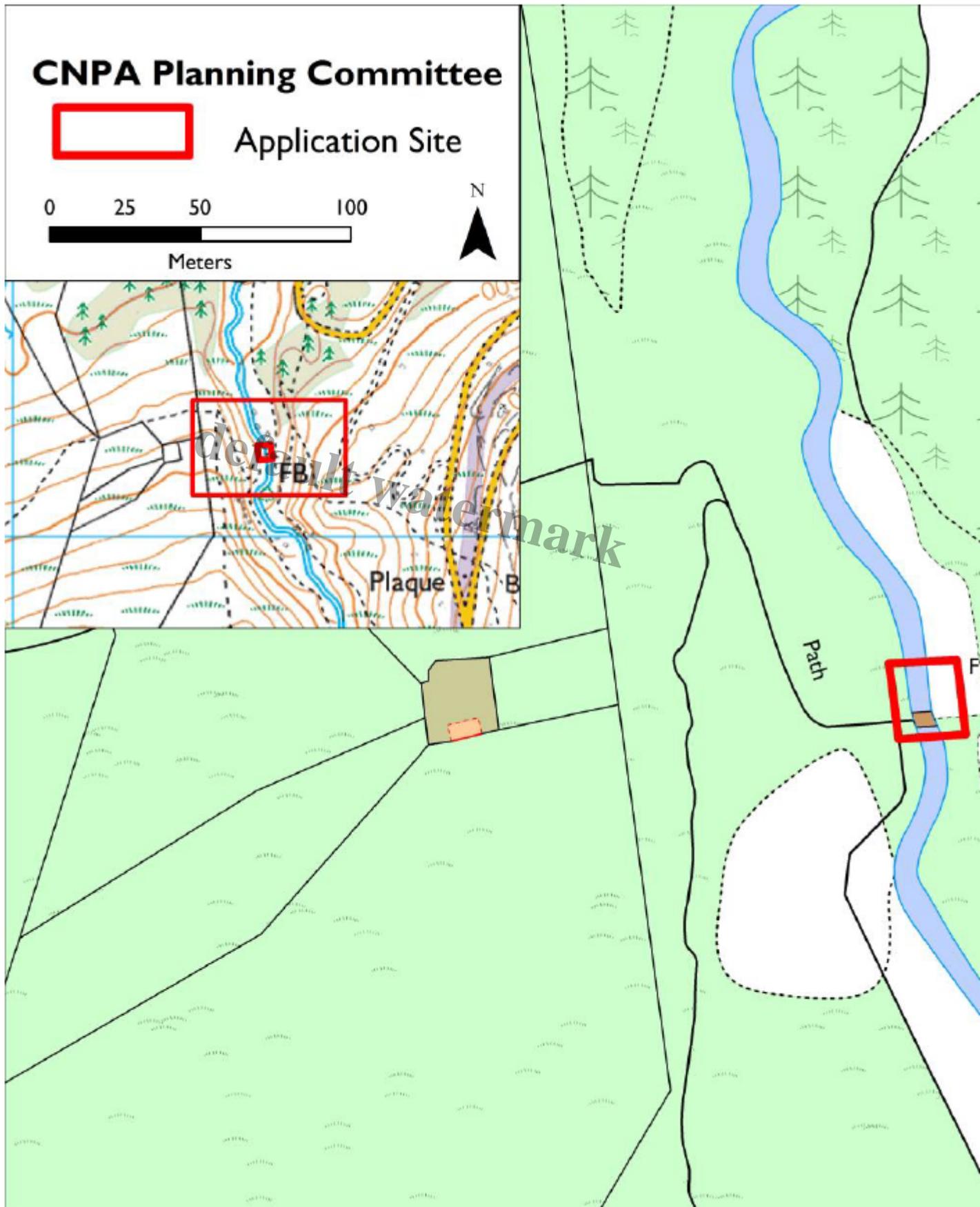
This post takes a further look at the environmental implications of Highland and Islands Enterprise's current planning application to create a beginner's ski area at Cairn Gorm and a new application to vary the conditions Highland Council attached to the temporary Adventure Play area in Coire Cas.

Development, erosion and flood risks at Cairn Gorm – proof of the problem

It was only after my post on [The future of snowsports and the environment at Cairn Gorm](#) that I realised that the Planning Committee of the Cairngorms National Park Authority had considered an application to replace the Utsi footbridge over the Allt Mhor at their August meeting ([see here for papers](#)).

The Allt Mhor drains Coire Cas and the northern corries and is crossed by the ski road which leads up from Glen More to Coire na Ciste and Coire Cas. The bridge, located near the sugar bowl car park, was named after the Swede, Mikel Utsi, who re-introduced the first reindeer back to the Cairngorms in 1952. The reason for the application is that *the integrity of the existing bridge [which dates from 1979] is being undermined by the watercourse*.

default watermark



© Crown copyright and database rights 2019. Ordnance Survey Licence number 100040965

The grey represents the ski road

The documentation provided by Forest and Land Scotland to support the application is extremely thorough and in complete contrast to what HIE has submitted for the proposed beginner's ski area up the hill as is the Cairngorms National Park Authority's Planning assessment. It confirms there are significant flood risks on the Allt Mhor and provides a valuable insight into the factors that will need to be considered by the CNPA when deciding the beginner's ski area planning application.

First, the new bridge will have a span of 28.2m compared with the existing bridge which is 21.5m wide and will be 3.3m above the deepest part of the river compared to 1.5m now:

6. The proposed development is the replacement of a pedestrian footbridge at the application site. The proposed bridge is to be sited between 1 and 2 metres from the existing bridge location. The existing structure is proposed to be demolished on completion of the replacement bridge installation. The existing bridge is a steel structure spanning an overall length of approximately 21.5 metres with a deck width of approximately 1 metre. The existing bridge has a deck to bed height of approximately 1.5 metres in the deepest part of the channel. The bridge is supported by stone abutments and a central pier. It is understood from the details that the existing structure is in a state of disrepair with the watercourse undermining the central pier through scour.
7. The replacement structure is proposed to be formed from two aerial tramway bridges, which are to be clad with timber. It will be supported by stone abutments and a central stone faced, concrete pier located on the existing site. The balustrades are proposed in timber. The structure is proposed to be 28.2 metres in length of approximately 28.2 metres with a deck width of approximately 3.3 metres. The deck to bed height is proposed at approximately 3.3 metres in the deepest part of the channel. The existing public footpath is proposed to be realigned to the points of the new bridge structure. One rowan tree located on the site is to be removed as part of the works.

CNPA's comparison between the existing and the proposed bridge from Committee Report

In a nutshell that tells you that the new bridge needs to be longer and higher to avoid it being washed away by extreme flood events. Following this logic, the ski road bridge over the Allt Mhor would appear to be at serious risk of being blocked, flooded or swept away because it's nothing like 28.2m wide or 3.3m high:



Photo Credit Alan Bratney 31st August

The photo above was taken by Alan Bratney, who intentionally went to look at the Allt Mhor road bridge after a morning of heavy rain on 31st August. Such rainfall is a fairly common occurrence. The photo shows how little room there is for flood water to pass under the bridge.



Photo Credit Alan Bratley 31st August

The level of the river on 31st August was significantly below those that occurred in the recent floods that have been covered on parkwatch. Add any more water to that by increasing the rate which water drains off the hill – which appears likely to happen if HIE’s plans to smooth large areas of Cairn Gorm for ski-ing go ahead – and you will have serious problems. This is not just about the risk to the bridge, or indeed the Glen More campsite, its about what happens downstream of that – the impact higher water levels would have on housing, farms and the increased erosive power of River Spey. The design of the replacement Utsi bridge should serve as a warning, a wake-up call.

Thankfully, there are signs in the Utsi bridge planning document that the Cairngorms National Park Authority is not just alive to the issues, it is considering them most carefully. I was very interested to see that as part of the planning assessment they had requested – revised waterway calculations – to calculate the flood risk and ascertain whether the design of the bridge was sufficient to avoid it being swept away:

2019/0051/DET

| | | |
|-----------|------------------|--------|
| VERSION | "FEH CD- Version | |
| CATCHMENT | GB | 298400 |
| CENTROID | GB | 298364 |

3 exported at 15:21:41 GMT Th
 807150 NH 98400 07150
 804747 NH 98364 04747

Waterway Calc NH 984 07 Utsi's Bridge 1621

| | |
|------------|----------|
| AREA | 14.415 |
| FARL | 0.981 |
| PROPWET | 0.68 |
| ALTBAR | 813 |
| ASPBAR | 342 |
| ASPVAR | 0.5 |
| BFIHOST | 0.358 |
| DPLBAR | 3.41 |
| DPSBAR | 285.7 |
| LDP | 6.53 |
| RMED-1H | 10.4 |
| RMED-1D | 46.5 |
| RMED-2D | 70.6 |
| SAAR | 1657 |
| SAAR4170 | 1703 |
| SPRHOST | 53.6 |
| URB CONC | -999999 |
| URBEXT1990 | 0 |
| URBLOC | -999999 |
| C | -0.01865 |
| D1 | 0.46616 |
| D2 | 0.54453 |
| D3 | 0.37003 |
| E | 0.25162 |
| F | 2.45464 |
| C(1km) | -0.018 |
| D1(1km) | 0.455 |
| D2(1km) | 0.514 |
| D3(1km) | 0.366 |
| E(1km) | 0.252 |
| F(1km) | 2.399 |

AE = 1- 0.015LN(AREA/0.5) = 0

RESHOST = BFIHOST + 1.3(SPRHOST)

QMEDrural = 1.172AREA*ae*(SAAR/100
 FARL*2.642*(SPRHOST/

QMED = 11.1
 Qbar = 12.4

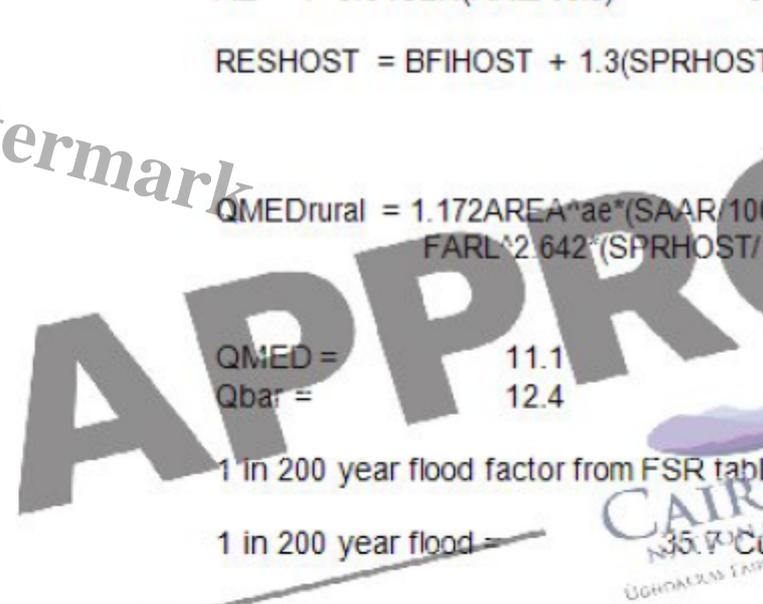
1 in 200 year flood factor from FSR table

1 in 200 year flood =

1 in 100 year flood from FSR Tables

1 in 100 year flood 30.6 CU

Other modelling estimates peak flow at
 Re-assess flows taking into account %



While gobbledegook to me and probably to most readers the point is that there are now means of calculating the amount of water which runs off from catchments into river systems in a given period of time. That means that any increased run-off from the creation of a beginners ski area and more importantly from creating new smooth pistes across the hill as recommended in the SE Group can be calculated, as can its impact on flooding.

The CNPA identified flooding and flood risk as one of the four main factors which needed to be considered as part of the Application. It concluded:

39. The proposed replacement structure is not considered to introduce any additional flooding impact from the existing impact previously established on site. Whilst there is an existing risk of flooding at the site itself, the vulnerability of the proposed use is classed as low and the proposal reduces the flood risk through the use of more flood resilient materials and design. The proposed change in dimensions from the replacement structure to the original is not considered to increase upstream or downstream flood risk. On this basis, the proposal is considered to comply with the requirements of Policy 10: Resources of the Cairngorms National Park Local Development Plan 2015. [â??seeks to ensure that all developments do not increase flood risk nor adversely impact on the water quality of the areaâ?•]

Apply that thinking to the proposed beginnerâ??s ski area and one would have thought the CNPA will have every reason to reject the Application. One assumes that Planning Officers have now asked HIE/CSML to provide a water drainage calculation for the proposed beginnersâ?? ski area as they did for the Utsi bridge. It will be interesting to see what is shown.

The position of the Scottish Environment Protection Agency

In the words of the CNPA in their Committee Report on the Utsi bridge:

Scottish Environment Protection Agency (SEPA) initially raised an objection to the application and requested the submission of additional information in support of the application. Following this submission, SEPA has removed their objection on flood risk grounds noting that the new bridge would be considerably elevated above the 1 in 200 year floor level and it would be unlikely that this structure would be at medium to high risk of flooring or cause an obstruction to flow.

It may seem strange therefore that last week, while lodging provisional objections to the Beginnerâ??s ski area planning application on the grounds that there was insufficient information to assess its likely impact on bog (Ground Water Dependent Terrestrial Ecosystems in the jargon) or pollution ([see here](#)), SEPA did NOT object on grounds of increased flood risk.

3.1 We have no objection to the proposed development on flood risk grounds. Notwithstanding this we would expect Cairngorms National Park to consult The Highland Council to undertake their responsibilities as the Flood Risk Management Authority. Please see the attached appendix with our technical assessment in this regard.

The explanation for this is that SEPA believes the site itself is unlikely to be put at increased risk of flooding if its smoothed out and drains are added. That appears true â?? its a sloping site, a necessary requisite for a beginnerâ??s ski area! HOWEVER, they then clarify in the technical appendix that this development could well cause flooding elsewhere through higher water run-off but its not their responsibility to address this:

The supporting statement shows two new drainage pipes which will drain into the watercourse, and we note the concerns from a third party regarding an increase in flood risk and discharge of water from the site into the small watercourse. We would assume that all surface water from the site would currently

drain into the small watercourse, but the new pipes may have the potential to increase the rate at which it discharges by increasing the efficiency of the drainage. Scottish Planning Policy states that surface water drainage measures should have a neutral or better effect on the risk of flooding both on and off the site. However we consider that the water quantity aspects of surface water drainage is the remit for the local authority to consider and are better placed to provide more detailed advice on this matter.

My understanding is that responsibility for assessing increased water run off may lie with the CNPA, which is lead Flood Risk Management Authority for the area, rather than that of Highland Council but whether or not I am right about this, the point is that the impact the proposed beginner's ski area on flooding in the Allt Mhor and wider afield needs to be properly assessed.

HIE/Cairngorm Mountain Scotland Ltd's latest planning application at Cairn Gorm

Just 10 weeks after having been granted planning permission by Highland Council for a temporary tube slide, zip line and play area by the side of the Coire Cas carpark ([see here](#)), CMSL have applied ([see here](#)) to vary the first of the conditions required in the Decision Notice:

“This Section 42 application does not proposed any change to the long-stop date of Planning Permission 19/01765/FUL (1 November 2021). It does proposes to not comply with the terms of Condition 1 of that permission. Specifically, this application seeks to remove from Condition 1 the provisions which require the removal of the equipment from the site for the five-month period of November-March (inclusive) in each and every year for the duration of the temporary permission.”

What this means is that HIE/CMSL no longer wish to remove the adventure equipment over the winter but would prefer to leave it exposed to the Cairn Gorm weather and in everyone's sight.

The application was to Highland Council and on Monday the CNPA decided NOT to call it in but to leave it to Highland Council to decide. I suspect they had little choice but to do this, having allowed Highland Council to decide the original application. The new application, however, is yet another example of HIE ignoring the CNPA's request for a masterplan at Cairn Gorm. The CNPA would be wise to advise HIE that until a masterplan is produced they will, in future, call in ALL planning applications at Cairn Gorm, however minor looking.

I hope that the objection I have lodged today speaks for itself and that other people will do so:

“I object to this proposal. The applicant has provided NO justification for removing Condition 1 from the Planning Consent granted by Highland Council and the reasons for imposing that condition therefore still stand. They were rightly imposed to reduce the impact of the “adventure” equipment on the landscape and the amenity of those visiting Cairn Gorm with the basic principle being that in periods when they could not be used they should be removed. In that respect, Highland Council should be asking the applicant to provide data on how many days its been possible to use the equipment to date since its been installed “ the high rainfall in the last month suggests not a lot. There is a high risk that if Highland Council removes this condition, CMSL could at some stage abandon the equipment

and would be under no obligation to remove it until the planning permission lapsed. Its worth also noting that while not calling in this application it is relatively minor the Cairngorms National Park Authority has for months been asking HIE for a masterplan for Cairn Gorm before any further planning applications are submitted and that if Highland Council consents this request, in the absence of a masterplan which shows how this allegedly temporary equipment fits into their long-term plan for Cairn Gorm, it will effectively encourage HIE to continue to ignore the pressing need for a masterplan.

Separately, I will ask HIE for data on how much usage there has been of the adventure play area and how much income they have raised from it. My suspicion is that its yet another ill-thought out loss maker which is why this application has been submitted: HIE don't want to pay for the costs of removing and storing the equipment over the winter.

Leaving the equipment in place during the Cairn Gorm winter can also only make it deteriorate more quickly. It provides another indication that this initiative has failed and the equipment is likely to be abandoned well before the five year period is up. There are lessons here for all the other developments HIE are considering on the mountain. Tourist facilities like adventure play areas and zip wires are inappropriate and should, where there is demand for them, be located low down in sheltered areas.

default watermark

What needs to happen

Both the Utsi bridge and Adventure play area application show is that there is a need for a masterplan for ALL proposed developments at Cairn Gorm.

A masterplan needs to include a comprehensive assessment of the impact of HIE's development proposals as a whole on flood risks. Cairn Gorm could, I believe, sustain some new development, but each new development will have an impact on flood risk and erosion. Consideration therefore needs to give to total impacts of what is proposed and how this could be offset, whether through removal of existing development or mitigation measures (such as reforestation of the hill). Overall limits then need to be set on the extent of any new development. The CNPA cannot do that while HIE continues to submit development proposals piecemeal. They were quite right to ask for a masterplan.

Both the CNPA and Highland Council also need to put a stop to HIE's continuous attempts to undermine previous agreements as represented by the new application to allow the adventure play area equipment to remain in place over the winter.

The contrast between Forest and Land Scotland's responsible approach to the Utsi bridge application and HIE's approach to planning applications at Cairn Gorm is striking. This offers further proof that the best way to start to address the planning and development failures at Cairn Gorm would be for Fergus Ewing, the Minister responsible for both agencies, to transfer the Cairn Gorm estate back to Forest and Land Scotland from HIE. When will he act?

Category

1. Cairngorms

Tags

1. Cairn Gorm
2. CNPA
3. conservation
4. flooding
5. planning
6. SEPA

Date Created

September 11, 2019

Author

nickkempe

default watermark