

Groeslon Flood Alleviation Scheme

PUBLIC CONSULTATION DROP-IN SESSION

YGC, Penrallt Offices, Ffordd Pafiliwn, Caernarfon, Gwynedd, LL55 1BN



ygc@gwynedd.llyw.cymru



01286 679426

Scheme overview

Gwynedd Council are aware of historic flooding issues affecting the area surrounding Cae Sarn and Dyffryn Terrace in Groeslon, and as such are in the process of developing a scheme which can reduce the risk of flooding for local residents.

The scheme is being developed as part of the Welsh Government's Flood and Coastal Erosion Risk Management Programme. An initial business case was submitted to Welsh Government in 2021, and we are currently working on the detailed design stage, due for completion later this year. Following completion of the design the Council will need to make a further application to Welsh Government to fund the construction phase. As yet we do not have a proposed date for start of construction.

The main objective of the proposed scheme is to reduce flood risk associated with two open watercourses which approach the village from higher ground to the east, which are culverted beneath highway crossing and residential properties. Flood risk is primarily caused by the fact that historical culverts are not sufficient to convey peak flows during/following periods of heavy rainfall. This problem is likely to become worse in the future with more unpredictable rainfall events expected as a result of global climate change.

The development of the design has been supported by a hydraulic modelling exercise to identify the scale of flood risk and the areas which are most susceptible. The output of the model is consistent with the Council's understanding of previous flooding problems in the village. The model can also be used to test the effectiveness of different design solution.

Various high-level options were considered during the development of the initial business case in 2021. Upgrading existing culverts to increase capacity was not selected as a preferred option due to cost and construction constraints. The preferred option which was taken forward to the current design stage involves directing peak flows towards a dedicated flood storage area, with release from this area controlled to a rate which should reduce the risk to downstream properties. We are also considering the construction of local defences where modelling has shown that risk of water breaking out of bank is at its highest.

Currently we are using our flood model to assess which of these flood risk management measures or combination of measures provides the most effective solution. The final design will need to provide a positive cost-to-benefit ratio in order to qualify for future funding from Welsh Government.

Ymgynghoriaeth
GWYNEDD
Consultancy



Ariennir gan
Lywodraeth Cymru
Funded by
Welsh Government

