

Cynllun Gwarchod rhag Llifogydd, Glan y Môr, Felinheli

Flood Protection Scheme, Beach Road, Felinheli

Cylchlythyr i drigolion / Newsletter for residents

Awst 2018 / August 2018



Sesiwn wybodaeth i'r cyhoedd

Diolch yn fawr i bawb a fynychodd y digwyddiad cyhoeddus yn y Felin Sgwrsio ar y 9^{fed} Orffennaf. Roeddem yn falch i weld cynifer yn mynychu ac rydym yn gobeithio fod hwn wedi rhoi blas i drigolion Y Felinheli, ac yn arbennig trigolion Glan y Môr, o'r hyn rydym yn bwriadu ei wneud fel rhan o'r cynllun gwarchod rhag llifogydd.

Roedd yr ymateb, ar y cyfan yn bositif, gyda nifer yn nodi y gallai'r cynllun fod yn gyfle ar gyfer gwella edrychiad Glan y Môr—yn ychwanegol i'r prif fwriad, sef gwarchod rhag llifogydd. Er enghraift, awgrymwyd y gellid rhoi borderi i blannu blodau yma ac acw ar hyd y wal; roedd nifer hefyd yn nodi y byddai'n dda cael gwared ar y 'bollards' concrit presennol.

Yn ogystal a'r agweddu cadarnhaol, codwyd nifer o gwestiynau a phryderon ynglŷn â'r cynllun. Rydym felly wedi paratoi'r Cylchlythyr yma er mwyn ceisio ymateb i'r cwestiynau hynny.

Public information event

Thank you to everyone who attended the public event in y Felin Sgwrsio on the 9th July. We were pleased that so many of you attended and hope that it was an useful opportunity for residents, particularly those who live on Beach Road, to find out about the proposed flood alleviation scheme.

The response to the consultation was generally positive, with many noting that the project could offer an opportunity to improve the visual aspect of Beach Road—as well as the primary objective, which is to provide flood protection for the street. For example, it was suggested that borders could be provided along the length of the wall to plant flowers; many also noted that it would be beneficial to remove the existing concrete bollards.

Many of you also asked questions and raised concerns about the proposed scheme. We have therefore produced this Newsletter in order to respond to those queries.



Pam fod angen cynllun i leihau risg llifogydd ar gyfer Glan y Môr?

Mae map llifogydd Cyfoeth Naturiol Cymru yn nodi y byddai llifogydd o'r llanw mewn digwyddiad '1 mewn 200 o flynyddoedd' yn effeithio ar oddeutu 39 eiddo ar Glan y Môr. Mae tebygolrwydd cymharol isel o'r math yma o ddigwyddiad mewn unrhyw flwyddyn benodol - tua'r un siawns â chael tri 'chwech' yn olynol wrth daflu dis, neu 8 'pen' yn olynol wrth daflu darn arian.

Er bod y siawns o lifogydd mor sylweddol a hyn yn gymharol isel, byddai'r canlyniadau i'r trigolion sy'n cael eu heffeithio yn ddifrifol. Yn ogystal â'r anghyfleustra o orfod adnewyddu eu heiddo ac efallai yr angen i symud i lety dros dro, byddai dŵr dwfn a thonna'u'n golygu y gallai fod risg i fywyd mewn digwyddiad o'r fath.

Yn ychwanegol at y risg a achosir gan lifogydd o '1 mewn 200 mlynedd', byddai rhannau o Glan y Môr mewn perygl o lifogydd mewn digwyddiadau llai. Er enghraift, rydym yn amcangyfrif bod y lifogydd a ddi-gwyddodd ym mis Ionawr 2014 o ganlyniad i ddigwyddiad '1 mewn 20 mlynedd'.

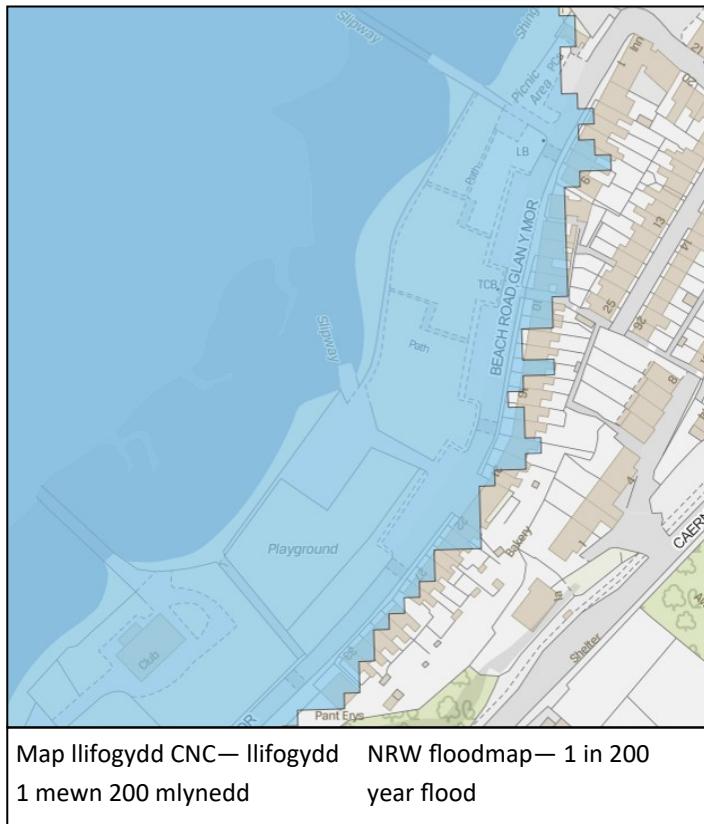
Beth am y dyfodol a'r risg oherwydd newid yn yr hinsawdd?

Mae'r mwyafrif o wyddonwyr yn credu y bydd effeithiau newid yn yr hinsawdd yn arwain at gynnydd yn lefel y môr dros y ganrif nesaf. Mae'n anodd amcangyfrif o faint yn union y gall lefelau môr godi, fodd bynnag, mae canllawiau di-weddraf Llywodraeth Cymru yn awgrymu y bydd lefelau môr yn cynyddu 0.45m (17.7 modfedd) dros y 50 mlynedd nesaf; 1.12m (44 modfedd) dros y 100 mlynedd nesaf.

Byddai'r cynnydd hwn yn cynyddu'r risg i eiddo ar Glan y Môr

Why is it necessary to build a flood alleviation scheme for Beach Road?

Natural Resources Wales' floodmap indicates that approximately 39 properties on Beach Road would be affected by flooding in a 1 in 200 year tidal flood event. This type of event has a relatively low probability of occurring in any given year – approximately the same chance as getting three consecutive 'sixes' when throwing a dice, or 8 consecutive 'heads' when tossing a coin.



Whilst the chances of such a devastating flood occurring are relatively low, the consequences to affected parties would be significant. As well as the disruption of having to renovate their properties and possibly needing to move to temporary accommodation, the presence of flowing water and waves means that there could be a risk to life in such an event.

In addition to the risk posed by a 1 in 200 year flood, parts of Beach Road would be at risk of flooding in lesser events. For example, the flooding which occurred in January 2014 is thought to be as a result of a 1 in 20 year event.

What about the future and the risks posed by climate change?

Most scientists believe that the effects of climate change will result in a rise in sea level over the next century. The exact amount by which sea levels may rise is difficult to estimate, however, the Welsh Government's latest guidance suggests that sea levels will increase by 0.45m (17.7 inches) over the next 50 years; 1.12m (44 inches) over the next 100 years.

This rise would significantly increase the risk to properties on Beach Road. Our proposed scheme would offer protection over the next 50 years and would be designed so that it can be enhanced in future, should that prove necessary.

yn sylweddol. Byddai ein cynllun arfaethedig yn cynnig am-diffyniad dros y 50 mlynedd nesaf a byddai'n cael ei gylllio fel y gellir ei wella yn y dyfodol, pe bai angen gwneud hynny.

Er enghraifft, erbyn 2068...

- ◆ byddai disgwyli i ddigwyddiadau tebyg i lifogydd 2014 ddigwydd yn amlach nag unwaith y flwyddyn
- ◆ byddai disgwyli i'r digwyddiad eithafol presennol ddi-gwydd gydag amlder o 1 mewn 5 mlynedd
- ◆ byddai'r lefel llifogydd yn y digwyddiad 1 mewn 200 mlynedd yn uwch na wal gardd ffrynt lawer o'r tai ar Glan y Môr



Glan y Môr—1990

Beach Road—1990

For example, by 2068...

- ◆ it would be expected that events similar to the 2014 flood would occur more frequently than once a year
- ◆ the current day extreme event would be expected to occur with a frequency of 1 in 5 years
- ◆ the flood level in the 1 in 200 year event would be higher than the garden wall of many of the properties on Beach Road

What are your proposals regarding car parking?

Our proposal is for a flood alleviation scheme, not specifically to create additional car parking spaces. However, as the scheme will require construction of a wall on the land between Beach Road and the Menai Strait, there may be an opportunity to extend the existing parking provision. This is an optional aspect of the scheme; it is not our intention to impose a solution against the wishes of the community.

The public consultation event on 9th July 2018 suggested that opinions are split on the need for additional car parking spaces. We therefore intend to undertake further consultation with the community council before deciding whether or not to proceed with this option.



Lifogydd Tachwedd 2017

November 2017 floods

Will the scheme increase the flood risk from surface water?

We are aware that flooding from surface water and culverted watercourses has affected parts of Felinheli including Beach Road. Most recently, we're aware of the flooding which occurred in November 2017 which resulted in flood water flowing down Snowdon Street and affecting Beach



ydd mewn cylfat wedi effeithio ar rannau o Felinheli gan gynnwys Glan y Môr. Yn fwyaf diweddar, rydym yn ymwybodol o'r llifogydd a ddigwyddodd ym mis Tachwedd 2017 ac a arweiniodd at i lifogydd lifo i lawr Pen Ceunant gan effeithio ar Glan y Môr. Er mwyn sicrhau nad yw'r cynllun arfaethedig yn ei gwneud yn anoddach i ddŵr wyneb lifo i mewn i'r Afon Menai, byddwn yn edrych ar sut y gallwn ni wella'r system draenio priffyrrd - yn enwedig ar waelod Pen Ceunant. Bydd arolwg o'r system draenio priffyrrd bresennol yn cael ei gyn-

Road. In order to ensure that the proposed scheme does not make it more difficult for surface water to discharge to the Menai Strait, we will be looking at improvements to the highway drainage system – particularly at the bottom of Snowdon Street. A survey of the existing highway drainage system will be undertaken in the near future. There may also be opportunities to reconfigure the access to the slipway nearest the Gardd Fôn Inn so that water can more easily discharge in this direction.



Sut gallai'r cynllun edrych o ben deheuol Glan y Môr

How the scheme might look at the southern end of Beach Rd

nal yn y dyfodol agos. Efallai y bydd cyfleoedd hefyd i ailffurfio'r fynedfa i'r llithrfa agosaf at y Gardd Fôn fel y gall dŵr lifo i'r Fenai yn haws.

Oes yna beryg y bydd y wal yn hyll ac yn cuddio'r olygfa o'r Fenai?

Rydym wedi paratoi darluniau i ddangos sut y gallai'r wal edrych. Byddai ei uchder o tua 0.9m (3 troedfedd) tua'r un uchder â llawer o'r waliau gardd ffrynt presennol ar Glan y Môr. Bydd unrhyw gerddwyr ar Glan y Môr yn gallu gweld dros y wal tua'r Fenai.

Y bwriad ydy i godi wal goncrid wedi'i atgyfnerthu ond i guddio'r concrit gyda wal gerrig. Opsiynau posib ar gyfer y garreg fyddai llechen neu galchfaen. Rydym hefyd wedi gwrandio ar eich sylwadau ynglŷn â gwneud y wal edrych yn harddach; yn y dyluniad terfynol byddwn yn edrych i gynnwys nodweddion fel borderi ar gyfer blodau.

Won't the wall obscure my view of the Menai Strait and won't it be ugly?

We have produced visualisations to try to demonstrate how the wall would look. The proposed height of approximately 0.9m (3 foot) is roughly the same height as many of the existing garden walls on Beach Road. Any pedestrian on Beach Road will be able to see over the wall to the green and the Menai Strait.

We are proposing a reinforced concrete wall which would then be clad in stone. Possible options for cladding include slate or limestone. We have also listened to your comments relating to making the wall look more aesthetically pleasing; we will look to include features such as planting bays for flowers in the final design.





Dyma sut gallai'r cynllun edrych o ganol Glan y Môr.

This is how the scheme could look from mid way along Beach Road.



Dyma safbwyt arall o sut gallai'r cynllun edrych.

This is another perspective of how the scheme could look.



Pryd ydych yn bwriadu adeiladu'r cynllun?

Ar hyn o bryd, rydym yn ymgynghori gyda'r cyhoedd cyn i ni orffen dyluniad manwl o'r cynllun. Mae'r cynllun yn ddibynol ar gael ei ariannu gan Lywodraeth Cymru ac rydym yn gobeithio trafod opsiynau ariannu rhyw dro yn ystod 2019.

Sut i gysylltu efo ni

Os oes gennych unrhyw gwestiynau gallwch gysylltu â ni:

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(01286) 679419

When do you intend building the scheme?

At the moment, we are engaging with the public before we complete the scheme's detailed design. The scheme is dependent on funding from the Welsh Government and we hope to discuss funding options with them some time during 2019.

How to contact us

If you have any questions, you can contact at:

fcrmu@gwynedd.llyw.cymru

(01286) 679419

