

NAME OF SCRUTINY COMMITTEE	Communities Scrutiny Committee
DATE OF MEETING	23 September 2021
TITLE	Climate Change - Gwynedd Flood Prevention Assets
AUTHOR	Rob Williams
CABINET MEMBER	Cllr Catrin Wager
PURPOSE	Update on: Arrangements to monitor the condition of Gwynedd assets in order to mitigate risks.

1. BACKGROUND

The Water Unit has 310 Assets flood and coastal erosion prevention on its register. Of the 310, 30 of them are not inspected by the Unit as they are private assets or assets that do not protect against flooding/coastal erosion. As a result, only 280 assets come under the responsibility of the department. The inspection programme is split to 225 coastal assets and 55 land drainage assets.

2. UPDATE

The service undertakes periodic audit of our flood and coastal risk assets. The frequency at which we audit assets varies from every three months to every two years. Frequency is based on risk, location and level applicable against sea level.

It is nice to be able to report on our assets. This information will be recognised as the Local Flood Strategy is formulated, which needs to be completed by October 2022, recognising that climate change will put more strain on the condition of our assets in future.

2.1 Coastal Assets

There is a total of 225 Coastal assets, which protect approximately 21km of the Gwynedd coast including the following communities:

Aberdyfi	Pwllheli	Trefor
Tywyn	Abersoch	Caernarfon
Barmouth	Aberdaron	Felinheli
Porthmadog	Morfa Nefyn	Bangor
	Nefyn	

A breakdown of the 225 assets can be seen below:

Type of Asset	Number	Percentage of Total
Structure of the Shore - Breakwater	9	4
Structure of the Shore - Groyne	63	28
Protection - Cliff	48	21.3
Protection - Dune	5	2.2
Protection - Flood Gate	4	1.8
Protection - Upland	6	2.7
Protection - Promenade	14	6.2

Protection - Quay	12	5.3
Protection - Wall	25	11.1
Structure - Discharge	10	4.4
Structure - "Spillway / Slipway"	29	13
Total	225	100%

Of the above:

- 167 (74%) of assets have been inspected this year.
- 29 assets left to be inspected during 2021/2022 (and programmed to be completed by the end of September 2021. These assets are part of three main defenses at Nefyn, Trefor and Felinheli.)
- 29 assets have been earmarked as assets that will not need to be inspected until 2022/2023.

The condition of all assets has been recorded below (1 – very good condition to 5 - very poor condition):

Condition	Number of assets	Percentage of total	
5 - Very poor	3	1.3%	74.2% completed
4 – Poor	20	8.9%	
3 - Fair	102	45.3%	
2 – Good	38	16.9%	
1- Very good	4	1.8%	
Inspection required	29	12.9%	12.9%
Inspection programme 2022/2023	29	12.9%	12.9%
Total	225	100%	

I am pleased to report that our assets do not require urgent work and of the three assets that received the 5 grading (Very Poor), they are included in the department's work programme (Viaduct Garden Wall, Barmouth and 2 x groyne in Cricieth). Of the 20 assets that scored 4 - Poor:

- 45% of them are already being considered in the current work programme/studies
- the remaining 55% will be considered as part of our internal maintenance programme, which is funded by YGC over the autumn period / or the frequency of the inspection will increase as part of monitoring work.

2.2 Land Drainage Assets

The Council has a total of 55 Land Drainage assets. These assets protect people and properties from flood risk/damage in the following communities:

Aberdyfi	Abererch	Bethel	Bethesda
Barmouth	Abersoch	Brynrefail	Rhiwlas

Blaenau Ffestiniog	Llanaelhaearn	Llanrug	Tal-y-Bont
Cricieth	Trefor	Deiniolen	
Tremadog		Llanberis	

A breakdown of the 55 assets can be seen below:

Type of Asset	Number	Percentage of Total
Channel - Simple Culvert	3	5.6%
Channel - Complex Culvert	2	3.6%
Protection - Upland	2	3.6%
Protection - Wall	1	1.8%
Structure - Control Gate	1	1.8%
Structure - Discharge	2	3.6%
Structure - Screen	44	80%
Total	55	100%

53 assets were inspected in 2021/2022, and the remaining 2 will be inspected in September 2021.

Of the 53 assessed, their condition is noted as follows (1 – very good condition to 5 - very poor condition):

Condition	Number	Percentage of total	
5 - Very poor	1	1.8%	96.4% completed
4 – Poor	1	1.8%	
3 - Fair	18	32.7%	
2 – Good	32	58.3%	
1- Very good	1	1.8%	
Inspection required	2	3.6%	3.6%
Total	55	100%	

I am pleased to report that our assets do not require urgent work and of the two assets that received the 5 (Very Poor) and 4 (Poor) grading, they are included in the department's maintenance programme, which will be implemented over the next few months.