

A Clear Culvert reduces the risk of St Dogmaels Flooding

Gill Wislocka 14 10 2018 1st Draft

On 13 10 2018 during Storm Callum's severe weather, St Dogmaels Did Not Flood.

despite 90mm rain & a High Tide

(& Wales worst flooding in 30 years)

These photos show flow of water into & out of the culvert at High Tide 11am 13 10 2018
The culvert still had capacity despite ~ 90mm of rain falling in the previous 48 hours
High Tide was at 10.55 (4.55m, previous High Tide 4.7m), 998mb & wind Southerly



Culvert adjacent
PROW 87/55
Outflow

PCC are awaiting
appropriate
licences to
remove silt & so
increase capacity
of outflow

Stream behind David St
Culvert under B4546 at
11am 13 10 2018

Culvert outflows for the stream behind David St &
the Cwm Degwel stream at 11am 13 10 2018
Showing also the non-return valve for surface water outflow working

Historically there has been flooding of the culvert under the B4546, once perhaps twice a year, sometimes less, usually associated with a high tide.

However in the last 3 years the flooding has become progressively more frequent, 20+ occasions in 2017. The area flooded has become more extensive and deeper.

From about 2015-2017, just a couple of hours of moderate rain would regularly result in flooding.

Flood water would cover the road, the showroom forecourt, gardens upstream, Water St & threatened 2 Penally Mews. (Brooklyn Villas used to flood until a floodgate was installed)

The worst affected property has been 2 Penally Mews, affected by flood water & sewage.

What has changed?

In November 2017, Wyn Rees thankfully repaired a damaged section of culvert & removed a traffic cone, 2 half bags of cement, a fence post, sandbags & other debris trapped in the downstream end of the culvert. There has been one flood since 21 Jan 2018. This was caused by a fine mesh grill at the mouth of the culvert. The grill blocked with debris e.g. leaves stopped water flow into the culvert causing water backup/flooding. This grill now been removed and the stream water flows freely at present.

For the Future

The stream needs to be kept clear of debris & loose stone that could cause blockage in the culvert



21 January 2018
Floodwater across B4546

30 March 2017
View from Brooklyn Villa kitchen

21 November 2017
View of David St back gardens