Carmarthenshire County Council

Flood Risk Management Plan

May 2019

Carmarthenshire County Council
Flood Risk Management Plan

Part 1 –Description of the Plan, its Purpose, our Approach and Community Ward Level Analysis

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Glossary & Abbreviations

AEP	Annual Exceedance Probability
CaRR	Communities at Risk Register
CCC	Carmarthenshire County Council
LLFA	Lead Local Flood Authority
NRW	Natural Resources Wales
LFRMP or FRMP	(Local) Flood Risk Management Plan
LFRMS	Local Flood Risk Management Strategy
PFRA	Preliminary Flood Risk Assessment
RMA	Risk Management Authorities
WFD	Water Framework Directive
RBMP	River Basin Management Plan
DCWW	Dwr Cymru Welsh Water
OWC	Ordinary water course
FRP	Flood response plan
mAOD	Metres Above Ordnance Datum
PPW	Planning Policy Wales
TAN	Technical Advice Note
LDP	Local Development Plan
LPA	Local Planning Authority

Synopsis

Flood Risk Management Plans (FRMPs) highlight the hazards and risks of flooding from rivers, the sea, surface water, groundwater and reservoirs, and set out how Risk Management Authorities (RMAs) work together with communities to manage flood risk.

As a Lead Local Flood Authority (LLFA) under the Flood and Water Management Act 2010, Carmarthenshire County Council (CCC) has a duty to coordinate and lead the management of flood risk arising from local sources within Carmarthenshire. We have developed the plan to address that duty by identifying the areas at risk of flooding from local sources within the county. We have identified how we will manage the risks in different areas; seeking to ensure that those communities most at risk benefit the most. The underlying assessment is based on the currently available information and the measures we have put in place can be adapted as new information becomes available.

1 Introduction

Flooding resulting from extreme events has become an increasing global concern in recent years. The risk to life, and the built and the natural environment from flooding is further exacerbated by climate change. Approximately 6 million properties in the United Kingdom are at risk of flooding[1]. Here in Wales one in six properties are at risk of flooding and approximately 23% of the 1,500km long Welsh coastline is eroding[2].

The predicted increase in intensity and frequency of rainfall, and the rise in sea levels, is likely to increase the risk of flooding and coastal erosion. Consequently, the risk to life, economy and the environment is also expected to rise. The extreme floods experienced in the UK during the summer of 2007 and across Europe during the summer of 2005 highlight these risks. Most recently flooding has been experienced across Carmarthenshire in October 2018 as a result of Storm Callum. During this event more than 170 residential dwellings and 60 business were flooded across 40 communities.

Flooding and coastal erosion are natural phenomena and therefore it is not possible to prevent them from occurring. However, the risks associated with these phenomena and the resulting consequences are reasonably well understood. Therefore, steps can be taken to manage those risks and minimise their impact.

1.1 What are Flood Risk Management Plans?

Flood Risk Management Plans (FRMPs) highlight the hazards and risks of flooding from rivers, the sea, surface water, groundwater and reservoirs, and set out how Risk Management Authorities (RMAs) work together with communities to manage flood risk.

RMAs are:

- Natural Resources Wales,
- Lead Local Flood Authorities (in Wales this is the 22 unitary authorities),
- internal drainage boards (IDB), since April 2015, responsibility for IDB duties has transferred to NRW,
- water companies, and
- highway authorities (which includes responsibilities of the local authorities).

Further detail as to the content and purpose of this plan is provided in Section 2.1 below.

1.2 Who is responsible for preparing FRMPs?

In Wales, Natural Resources Wales (NRW) is responsible for leading the management of flood risk arising from the sea and the Main Rivers, and the water

[1] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69487/pb13698-climate-risk-assessment.pdf
[2] http://gov.wales/docs/desh/publications/111114floodingstrategyen.pdf

company (Dwr Cymru in the context of Carmarthenshire) is responsible for addressing flood risk arising from sewers.

Leading the management of flood risk arising from all other sources and the management of coastal erosion risk is the responsibility of the Lead Local Flood Authorities (LLFAs). Although responsibilities are allocated based on the source of flooding, it is acknowledged that when flooding occurs, those affected by it do not distinguish between the source or type of flooding. Therefore, greater emphasis is now being placed on all authorities to work in close collaboration to minimise the risk of flooding and manage the consequences.

As a LLFA, Carmarthenshire County Council (CCC) has a duty to coordinate and lead the management of flood risk arising from local sources within Carmarthenshire. These sources include surface water, ordinary watercourses and groundwater. This report seeks to address our duty by identifying areas entitled 'policy units' at risk of surface water and ordinary watercourse flooding, such that we can prioritise further actions to reduce flood risk within the county.

Ground water flood risk has not been evaluated as a part of this report, due to the lack of good quality data available. Carmarthenshire County Council's Flood Risk Engineers acknowledge that groundwater flooding is an issue in parts of the county, predominately as a result of historical mining. More recently however, post the extremely wet period in 2014 and 2015, groundwater flooding at residential developments has become more prominent. Data will continue to be gathered which will feed into any future assessments.

1.3 Our approach in preparing this plan

Using best available information, we have sought to collate and update our understanding of the current and potential future level of flood risk from local flood sources for which we are responsible.

For this plan we have reviewed the impact and where practicable identified activities (measures) which we will look to carry out to manage flood risk to an acceptable level within the authority's area.

The Plan has been divided into two parts:

Part 1 describes our overall approach to the Plan and summarises the flood risks from local sources identified within each Community Ward. The measures which we will put in place to seek to manage the risks in each Ward are also described. The areas which we have identified to be most at risk from local flood sources are identified, these are termed Policy Units.

Part 2 describes the risk at the level of the Policy Units identified through the analysis described in Part 1.

2 The Purpose of Flood Risk Management Plans

2.1 What is a Flood Risk Management Plan?

Flooding remains a key threat to communities across Wales and managing this risk through careful planning is important to minimise the risk to communities. Flood risk management planning allows RMAs to develop a better understanding of risk from all sources of flooding and agree priorities to manage that risk.

This FRMP has been developed with this in mind and sets out how CCC will manage flooding in those communities most at risk. In doing so, this FRMP takes forward the objectives and actions set out in our Local Flood Risk Management Strategy (LFRMS):

https://www.carmarthenshire.gov.wales/home/council-services/emergencies-and-community-safety/flooding/flood-risk-strategy/#.W-QFgMJLE2w

This FRMP also aims to achieve some of the objectives set out in the Welsh Government's National Flood and Coastal Erosion Risk Management Strategy[3] which provides the national framework for flood and coastal erosion risk management in Wales through four overarching objectives:

- **Reducing the consequences** for individuals, communities, businesses and the environment from flooding and coastal erosion.
- **Raising awareness** of and engaging people in the response to flood and coastal erosion risk.
- Providing an **effective and sustained response** to flood and coastal erosion events.
- **Prioritising investment** in the most at risk communities

2.2 What is included in this FRMP?

The information included in CCC's FRMP includes the components set out in the EU Flood Directive and the Flood Risk Regulations 2009. Most of this information has been gathered and updated through this first cycle of the FRMP, having been drawn from the findings of our PFRA[4] and the measures we identified and set out in our LFRMS.

This FRMP sets out appropriate objectives for the management of flood risk within the areas covered by the plan. The objectives focus on reducing the adverse consequences of flooding.

[3] http://wales.gov.uk/topics/environmentcountryside/epq/flooding/nationalstrategy/strategy/?lang=en

[4] Preliminary Flood Risk Assessment – Initial assessment prepared as required by the Flood Risk Regulations

To do so, this FRMP highlights the areas most at risk from surface water and ordinary watercourse flooding. The plan evaluates the risks and sets out the measures to mitigate these risks and so make these communities more resilient.

We have also looked at measures to reduce the likelihood of flooding covering all aspects of flood risk management. These measures comprise both structural and non-structural responses, including raising awareness of flooding and better understanding of local flooding issues.

All the measures identified in this plan have been classed in the 4 categories presented in Figure 1:

Figure 1 – Classification of Measures in the Flood Risk Management Plan

The measures within each of these four categories are described in Section 9.1.

2.3 Legislative Context

2.3.1 Flood Risk Regulations 2009

Under the Flood Risk Regulations 2009, LLFAs are responsible for producing FRMPs for Indicative Flood Risk Areas that were identified in the Preliminary Flood Risk Assessments (PFRAs)[5].

Whilst NRW is responsible for producing FRMPs at a river basin district level for communities at risk of flooding from Main Rivers and the sea, LLFAs are only required to produce local FRMPs to manage flooding from surface water and ordinary watercourse (and groundwater where applicable).

The Regulations set out a six year cycle with timescales for reporting to the European Commission and the publication of 3 key outputs as detailed below and in Figure 2, - Flood Risk Regulations (2009) Timescale.

Preliminary Flood Risk Assessment

[5] Indicative Flood Risk Areas have been identified where more than 5,000 people are at risk of flooding

The Preliminary Flood Risk Assessment (PRFA) was a high level screening exercise that compiled information on significant local flood risk from past and future floods, based on readily available information. The scope of the PFRA was to consider flooding from surface runoff, ground water and ordinary watercourses, and any interaction these sources have with Main Rivers with the aim of identifying Flood Risk Areas as set out under the European Flood Directives.

No areas of 'significant' flood risk were identified in Carmarthenshire through this process.

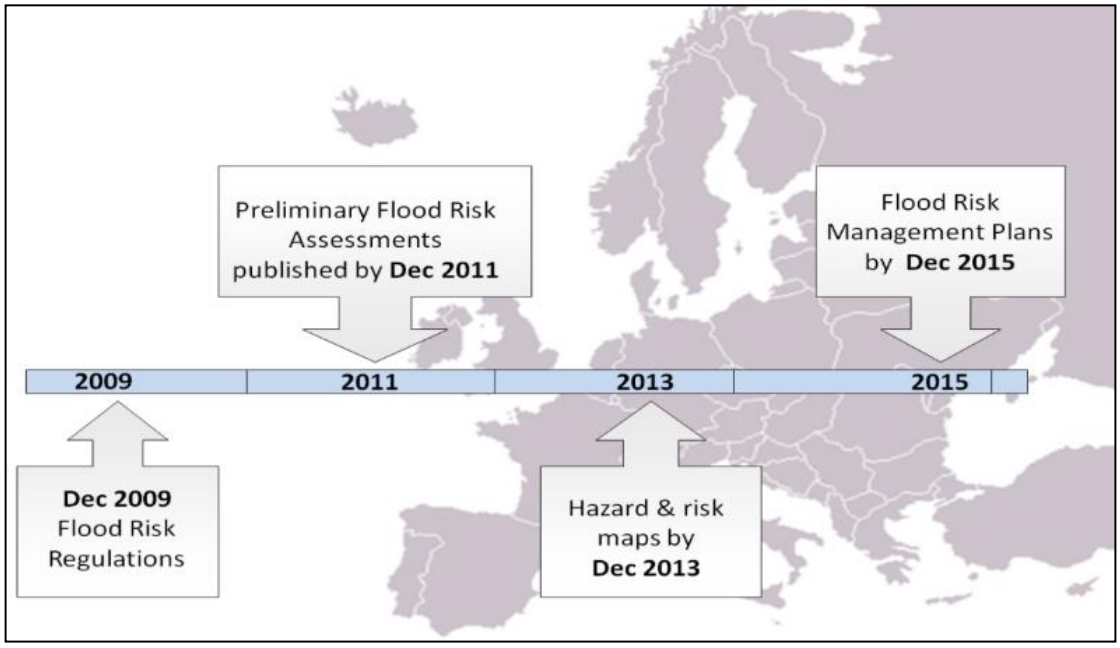


Figure 2 - Flood Risk Regulations (2009) Timescale

Production of flood hazard and flood risk maps for Flood Risk Areas
In 2013 the EA, working with NRW and LLFAs, produced the Updated Flood Map for Surface Water (uFMfSW).

The updated map represents a significant improvement on the previous surface water flood maps (2008 and 2010), both in terms of method and representation of the risk of flooding. The uFMfSW assesses flooding scenarios as a result of rainfall with the following chance of occurring in any given year:

- 1 in 30 year (3% AEP),
- 1 in 100 year (1% AEP),
- 1 in 1000 year (0.1% AEP).

The updated map also provides the following data for each flooding scenario:

- Extent,
- Depth,
- Velocity (including flow direction at maximum velocity), and
- Hazard (as a function of depth and velocity).

2.3.2 Flood and Water Management Act 2010

The Flood and Water Management Act was introduced in April 2010 in England and Wales. It was intended to implement Sir Michael Pitt's recommendations following the widespread flooding of 2007. The act was also intended to clarify roles and responsibilities between RMAs.

Under the Act, the Welsh Government was required to produce a National Strategy for Flood and Coastal Erosion Risk Management, and CCC as the LLFA is required to produce a Local Flood Risk Management Strategy.

Flood Risk Management Strategy

In May 2013 CCC published its LFRMS. The LFRMS is a high level strategy document that provides a framework for the development of specific measures and decision making associated with managing local flood risk.

2.4 Water Framework Directive

The Water Framework Directive 2000 (WFD) is a European Union directive that requires member states to achieve good qualities and quantities status of all their water bodies by 2015. A requirement of the WFD is that NRW produce and update River Basin Management Plans (RBMP) for each river basin district. CCC lies within the Western Wales RBMP. In 2015, NRW updated the RBMP for the Western Wales River Basin Districts. The plan describes the pressures facing the water environment and sets out objectives for our rivers, lakes, estuaries, coastal and ground waters from 2015 – 2021.

Specific measures, particularly structural measures, associated with managing local flood risk and coastal erosion will have to comply with the requirements of the Directive.

Objectives of the WFD

The WFD aims to have all water bodies at 'good status'. The ecological and chemical status is assessed on the criteria shown below in Figure 3.

Figure 3 - The WFD Criteria used for assessment of Water Body status

3 Study Area

3.1 Administrative Area

The study area for the preparation of the FRMP is defined by the administrative boundary of CCC as shown in Figure 4. Carmarthenshire is located in south west Wales and has an area of approximately 2,400km^2.

CCC forms part of the Western Wales River Basin District as identified by NRW. It is bounded to the north by Ceredigion, to the east by Powys, Neath Port Talbot and Swansea, to the south by the Bristol Channel and to the west by Pembrokeshire. Carmarthen, Ammanford and Llanelli are some of the most populous areas of Carmarthenshire.

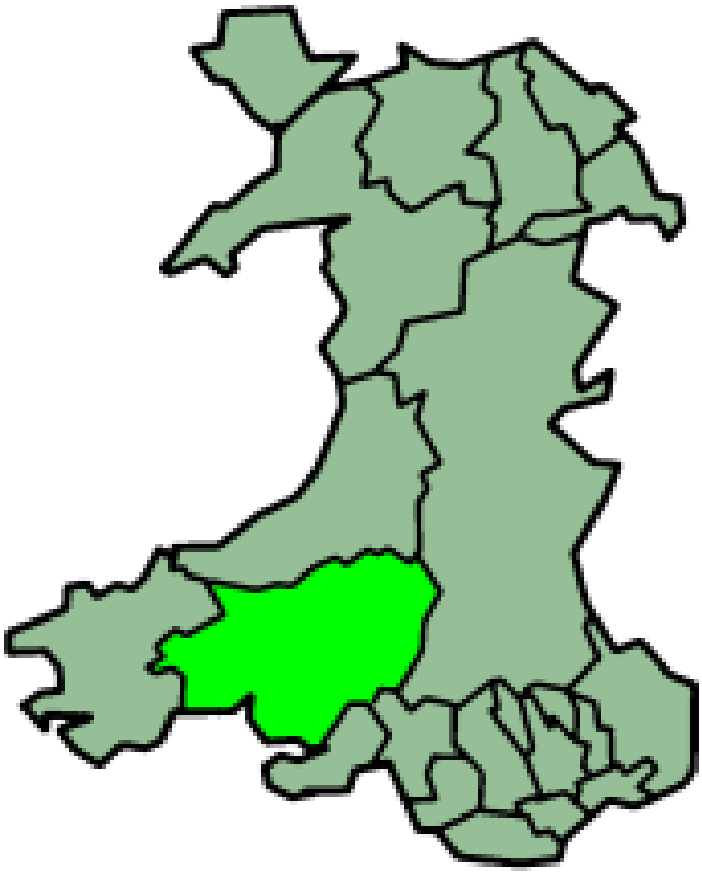


Figure 4 - Location of CCC in Wales[6].

3.1.1 River Catchments in CCC

Carmarthenshire is dominated by the 121km long River Towy. Originating from surface water on the Cambrian Mountain, it flows through the steep hills of the Towy Forest before entering the man made Llyn Brianne reservoir at the border of Powys and Ceredigion. From its discharge from the reservoir the river enters Carmarthenshire and begins its 100km journey to Carmarthen Bay passing through the towns of Llandovery, Llandeilo and Carmarthen.

Other Main Rivers in Carmarthenshire include the Afon Taf, Cynin and Cynnen in the west, the Gwendraeth Fach and Fawr in the south and the River Loughor to the east. The Loughor forms the boundary between CCC and the City and County of Swansea to the south east and the River Teifi denotes the boundary between CCC and Ceredigion County Council to the north.

[6] "Wales Carmarthenshire". Licensed under CC BY-SA 3.0 via Commons - https://commons.wikimedia.org/wiki/File:WalesCarmarthenshire.png#/media/File:WalesCarmarthenshire.png

3.2 An overview of the flood risk duties in Carmarthenshire

Under the Flood and Water Management Act 2010, the LLFA is responsible for leading the management of local flood risk. However, the responsibility for exercising the functions associated with local flood risk management rests with the relevant RMA.

The Act identifies the various RMAs and describes their statutory duties. Within Carmarthenshire, the following bodies are designated as the RMAs under the Act.

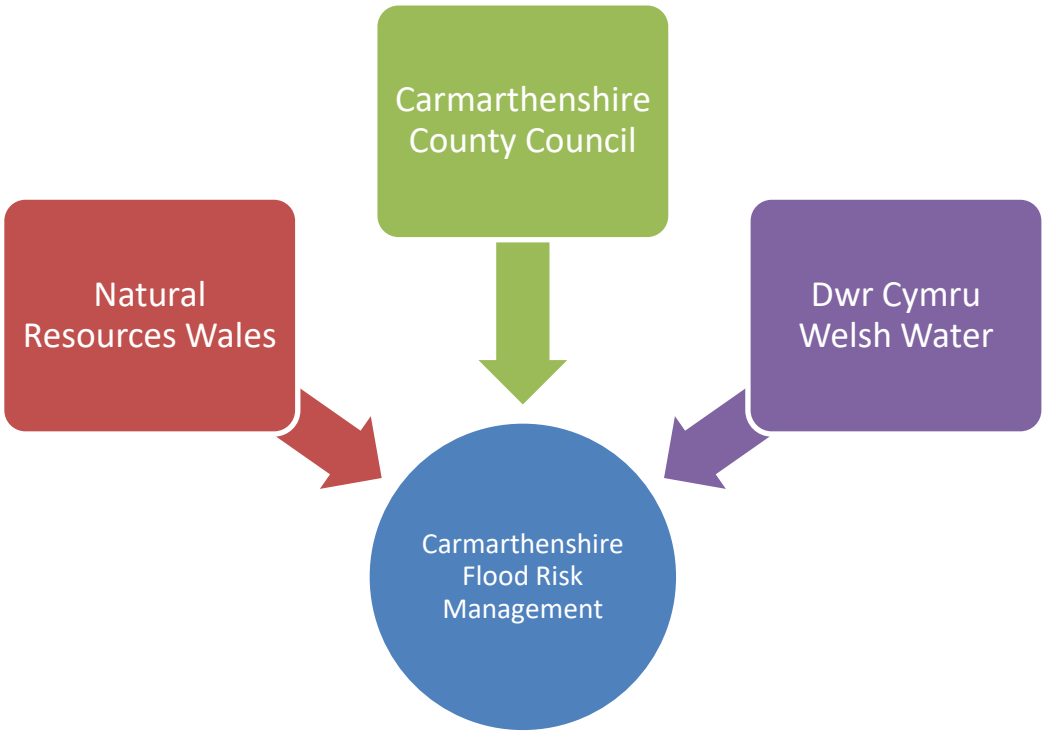


Figure 5 – Risk Management Authorities in Carmarthenshire

The statutory duties of these Authorities are noted in this section of this report. In addition to the statutory duties, the Authorities also have the following responsibilities under the provisions of the Act:

- Act in a manner consistent with the local strategy and the National Strategy; and
- Co-operate with, and provide information to, other RMAs.

Table 1 - Flooding Sources and their Management Responsibility in CCC

Type of Flooding	Description	Management Responsibility
Main River Flooding	This is flooding arising from Main Rivers or strategic watercourses that are managed by NRW.	NRW
Ordinary Watercourse Flooding	This is flooding arising from local and relatively smaller watercourses that are not managed by NRW.	CCC
Surface water flooding	This is flooding arising from surface water runoff – often in the form of overland flow – during periods of high rainfall.	CCC
Ground water flooding	This is flooding arising as a result of high water table from beneath the ground.	CCC
Coastal and Tidal Flooding	This is flooding resulting from extreme high tides and/or wave action from the sea.	NRW
Flooding of Highways	This is flooding arising from the highway drainage system.	CCC
Sewer Flooding	This is flooding arising from sewers. In areas which have combined sewers (i.e. sewers that contain both surface water and sewage) such flooding is often caused during periods of high rainfall due to the limited capacity within the sewer.	DCWW

3.2.1 Carmarthenshire County Council Duties

Under the Act, CCC are designated as the LLFA and are responsible for leading the management of flood risk arising from local sources. This responsibility is also replicated by the Regulations, under which CCC successfully submitted the Preliminary Assessment Report in June 2011 as part of the Preliminary Flood Risk Assessment process. In their role as the LLFA, CCC has the following statutory duties.

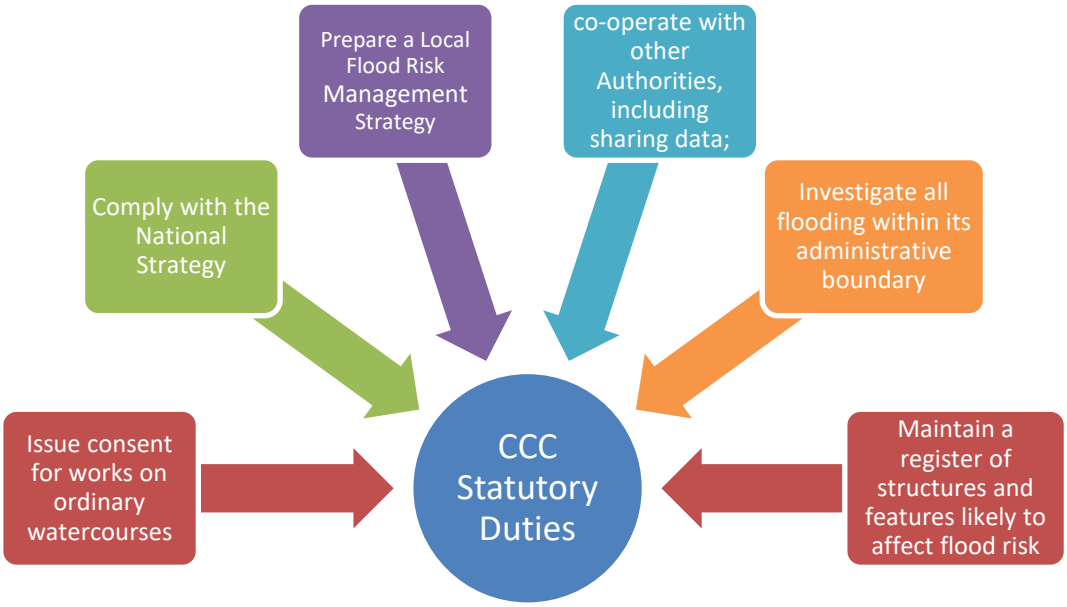


Figure 6 – Risk Management Authorities in Carmarthenshire

In addition to the statutory duties, CCC also has permissive powers to request information, designate structures that affect flood or coastal erosion and the ability to cause flooding at certain locations under certain conditions.

3.2.2 Natural Resources Wales Duties[7]

As a result of the Act, NRW has assumed a dual role. In addition to executing operational responsibility for managing flood risk arising from Main Rivers and the sea, they also have oversight responsibility in relation to all flood and coastal erosion risk management in Wales, including flood risk arising from local sources. As part of the oversight role, it is required to provide technical guidance and support to other RMAs. NRW will also be the sole RMA responsible for monitoring and reporting on the implementation of the National Strategy. In addition to the statutory duties, NRW also has the following permissive powers (Figure 7).

It should be noted that some of the permissive powers provided to NRW under the Act are the same as the permissive powers provided to CCC. The two authorities will therefore work closely to ensure that the execution of their permissive powers does not result in duplication of effort.

[7] Natural Resources Wales from its creation in 1 April 2013 took over the roles and responsibilities of Environment Agency Wales which were defined in the FWMA 2010.

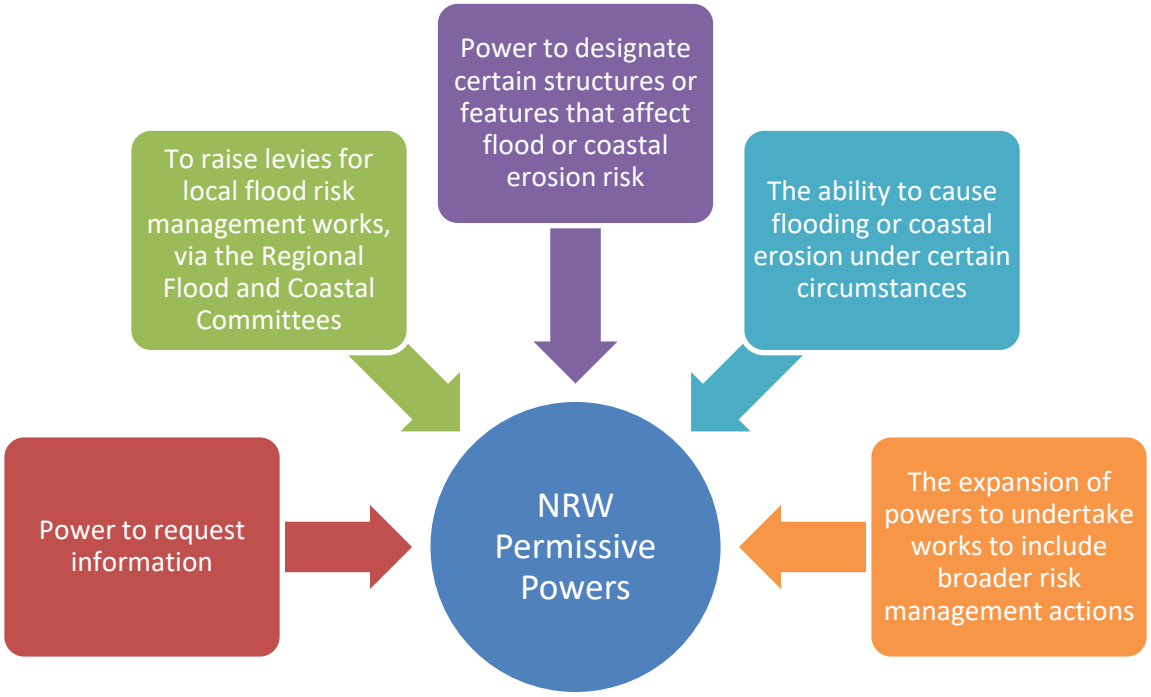


Figure 7 – NRW Permissive Powers

3.2.3 Dwr Cymru Welsh Water

Dwr Cymru Welsh Water (DCWW) is the only water and sewerage company within Carmarthenshire. Under the Act, DCWW are responsible for managing the flood risk arising from the water and sewerage systems under their management. The maintenance responsibility for the public sewers within Carmarthenshire reverted back to DCWW as of 2014. Prior to this, CCC acted as DCWW agents.

Due to CCC's previous role as DCWW agents, collaborative working arrangements exist. Today DCWW provide initial response to any sewer flooding or mains water flooding incidents. They are also responsible for addressing hydraulic performance issues, refurbishments and upgrades.

More recently CCC and DCWW has worked in partnership on RainScape projects in the towns of Llanelli and Burry Port in south Carmarthenshire. DCWW are developing and utilising sustainable drainage systems, more commonly referred to as SuDS, to manage the amount of surface water entering the sewers. They call this approach RainScape.

The RainScape Project was needed in Llanelli as it saw similar volumes of storm water entering the sewer system comparable to that of the nearby City of Swansea, despite the fact that Swansea has three times the number of properties and contributing catchment area[8]. The extra volume of storm water resulted in a greater

[8] http://www.dwrcymru.com/en/My-Wastewater/RainScape/RainScape-Llanelli.aspx

number of discharges to the environmentally sensitive and protected Burry Inlet which in turn resulted in the threat of European Commission Infraction Proceedings.

In partnership with CCC, DCWW spent £15 million between 2013 and 2015 on RainScape solutions in Llanelli[9]. In 2015 RainScape has been extended to the town of Burry Port.

[9] http://www.dwrcymru.com/en/My-Wastewater/RainScape/RainScape-Llanelli.aspx

4 Sources of flooding in CCC

As highlight above in Table 1 there are many different sources of flooding in Carmarthenshire and as such there are many strategic and tactical flood risk plans and assessments pertaining to these risks. Figure 8 below highlights some of these plans. This FRMP specifically evaluates the risk from surface water and ordinary watercourses.

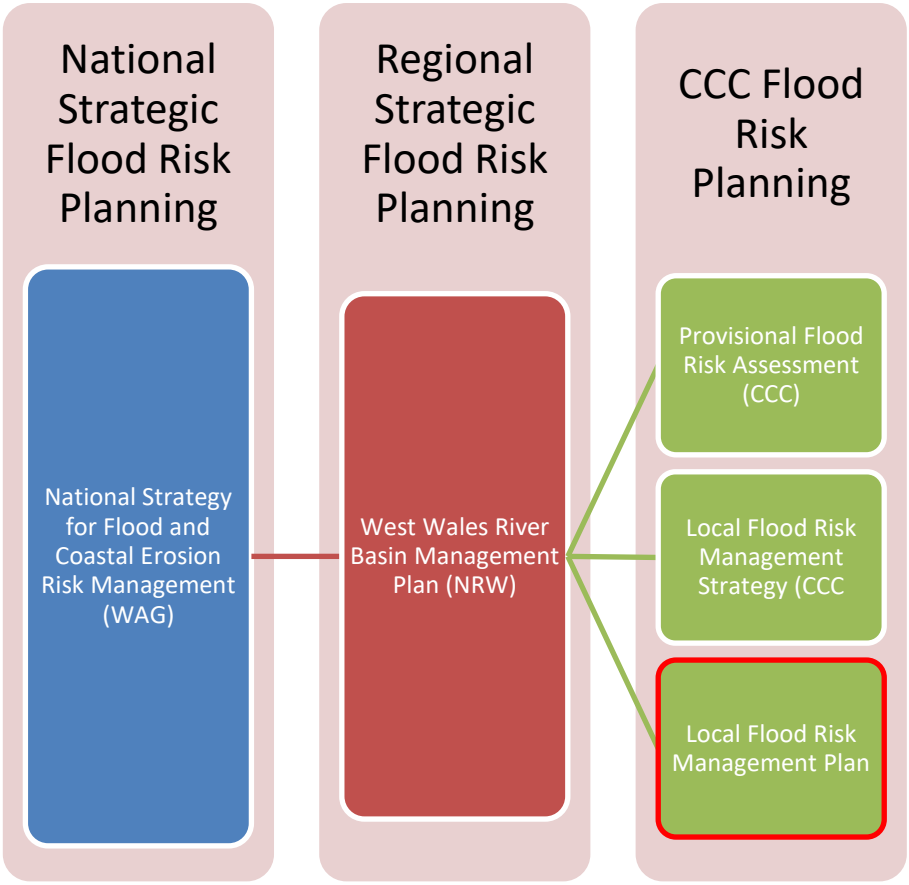


Figure 8 – Flood Risk Assessments and Plans for Carmarthenshire.

5 Flood Risks Managed by CCC

5.1 Ordinary Watercourses Flooding

Any river that is not designated as a 'Main River' is by default an ordinary watercourse (OWC). CCC has permissive powers to manage flood risk on all OWCs in Carmarthenshire.

The flooding on OWCs most frequently arises due to blockage. As these watercourses are generally smaller, they are susceptible to litter and debris being washed in by localised intense rainfall. Poor maintenance by riparian owners and illegal culverting also increases the flood risk.

Flooding may also be caused by inadequate maintenance. The capability of a watercourse to convey water effectively is dependent on its channel, be it natural or manmade or a culvert, being clear from debris. The capacity of culverts and open channels are often significantly reduced by the build up of vegetation, silt and debris. The management of the majority of OWCs in Carmarthenshire lies with the riparian land owners. Where the watercourse forms the boundary between two land owners, land ownership is to the centre of the watercourse unless stated otherwise in the title deeds. Culverted watercourses in Carmarthenshire afford a greatest risk as they are more difficult to manage and often riparian owners do not know of their existence or their responsibility pertaining to them.

An example of this is in Llandovery where the Nant Bawddwr is culverted through the centre of the town, beneath many private dwellings and businesses. In 2014 CCC spent £20,000 removing the silt and debris from the watercourse thus alleviating the flood risk to the town.

5.2 Surface Water flooding (Pluvial flooding)

Flooding from surface water runoff is usually caused by intense rainfall. In urban or developed areas, surface water flooding is caused when rain landing on impermeable areas such as roofs, roads and car parks is not captured by the drainage.

In more rural areas or on natural ground, surface water flooding can be affected by the geology, the soil type, land use and the preceding weather. After periods of persistent rainfall, the ground becomes saturated and no further rainfall can be absorbed or infiltrated into the ground. As such rain flows over the surface causing surface water flooding. Similarly, periods of dry weather can cause the ground surface to become hard and impermeable. Both scenarios result in high runoff volumes and surface water flooding.

Surface water flooding is often exacerbated by lack of cut off ditches and drains. In some scenarios, ditches have been filled in or piped, or simply not maintained by the riparian land owners.

Land changes also play a key role in altering the runoff characteristics of the catchments. This can be caused by farmers ploughing at right angles to contours rather than parallel to them. The removal of top soil and vegetation or hedges also increases the risk of surface water flooding.

Runoff will also be altered if an area is subject to a development. Although the total runoff is not permitted to increase, the drainage characteristics will be altered and as such will need to be managed accordingly. Section 7 highlights how CCC manages this risk.

5.3 Ground Water Flooding

Ground water flooding occurs when water within the ground breaks out onto the surface. In 2013, following many months of wet weather; CCC did receive a peak in reported groundwater flooding incidents. Many of these involved ground water breaking out in domestic gardens. This was attributed to the unprecedented saturation of the ground which was reported nationally not only in Carmarthenshire.

Despite the above incidents, ground water incidents are few and far between and as such is not currently perceived to be a major problem in Carmarthenshire.

5.4 Highway Flooding

Highway flooding occurs when the highway drainage fails to manage the volume of rainfall and runoff. Similar to surface water flooding, highway flooding is predominately associated with short duration storms of high intensity and like OWC flooding, blockage is a key factor.

Flooding often commences due to the inability of gullies to convey the volume of water. This is usually as a result of gullies being blocked by debris washed off the roads filling the gullies. During the autumn, when the trees shed their leaves, this risk is at its greatest.

In more rural areas the highway drainage consists of drainage ditches alongside the roads. In these areas it is the blockage, poor maintenance and illegal culverting or these ditches that increases the flood risk.

6 Flood Risks Managed by Other Risk Management Authorities

6.1 Main River Flooding

The river network and their catchments across CCC typically comprises of steep hill sides with fast flowing watercourses feeding a river on the valley floor. This typical geography leads to very 'flashy' watercourses, meaning that water landing as rainfall is quickly conveyed into the watercourse. As such the majority of the Main Rivers rise and fall very quickly, over periods on minutes and hours. This is a key characteristic of the Main Rivers in CCC

Flooding of these Main Rivers principally occurs when rainfall and runoff exceeds the capacity of the river channel. Blockages causing flooding are less likely. Main river flooding is also influenced by the state of the tide. In addition to the high tides flooding the estuary and low laying coastal areas they prevent the rivers discharging to the sea. As such fluvial waters can back up and cause flooding. The lower reaches of the Loughor, Towy, Gwendraeth and Taf are susceptible to flooding in this way. The Main Rivers in CCC are listed in Appendix A.

6.2 Sewer Flooding

The effects of climate change, development and a growing population together with the paving over of green space which provides natural drainage, are putting increased pressure on the sewerage network. It is being made worse by people putting unsuitable products down the sink and toilet increasing the risk of blockage and flooding[10].

Most new developments have separate sewers to take foul and rain water but in Carmarthenshire the majority of the sewer network is combined. This means that the foul and the rain water all enter the same system. As such, during period of heavy and prolonged rainfall there are capacity issues that result in flooding[11].

[10] http://www.dwrcymru.com/en/My-Wastewater/Sewer-Flooding.aspx
[11] http://www.dwrcymru.com/en/My-Wastewater/Sewer-Flooding.aspx

7 How We Currently Manage Flood Risk

While section 4 identified the sources of flooding in Carmarthenshire, this section details how these risks are managed within CCC. There is not one single department managing flood risk in CCC. The roles are divided amongst various departments as highlighted in Figure 9 below.

Figure 9 – Flood Risk Management in CCC

7.1 Flood Defence and Coastal Protection Team.

The Flood Defence and Coastal Protection Team manages the majority of the statutory duties pertaining to flood risk flood and CCC. They also operate as advisors or 'technical expects' and assist other departments on matters pertaining to drainage and flood risk. The team consists of two Technicians, a Drainage Consent Engineer and a Senior Engineer with a Flood Defence and Strategy Manager having an overarching role.

As identified in section 3.2.1, CCC has a number of statutory duties in addition to permissive powers to manage and mitigate flood risk. Operationally the team investigates flooding incidents and proposes and advises on mitigation measures. In specific instances, where the finances are available and the cost benefit analysis is positive, the Flood Defence and Coastal Protection Team design flood risk management projects.

The Flood Defence and Coastal Protection Team also manage 105 flood risk assets across the county, ensuring their maintenance and repair in perpetuity. These structures are primarily grids or trash screens but the list does include flood bunds, flood banks and similar structures. All assets are recorded on a database, as is the

statutory duty, and there is a programme of routine inspection, maintenance and modernisation.

A high priority has been given to bringing trash screens up to current design standards since these structures pose the highest flood risk due to the possibility of screen blockage.

The team also manage the OWC flood defence consenting duties and sustainable drainage adoptions in preparation for the implementation of schedule 3 of the Flood and Water Management Act 2010.

7.2 Highways Team

The Highways Team work predominately at an area level, based out of five local depots across the county. They have a large but diminishing work force that inspect, maintain and repair the highway system, including its drainage.

CCC mitigate the effects of gullies blocking by having an operational procedure that aims to ensure that gullies are cleaned typically on an annual basis, subject to available resources. The gully cleansing frequencies are currently under review and will increase or decrease these frequencies using a road hierarchy and risk based prioritisation. In addition to planned maintenance, blockages that are identified during inspections or reported by members of the public are dealt with on a priority basis.

Highway ditches are managed on a cyclical basis with annual ditch clearing programmes for those ditches identified during inspections. Carmarthenshire has 20 cyclic maintenance gangs that routinely carry out manual clearing of ditches, grips, bank boxes, manholes and outfalls. The cyclic gangs generally have good local knowledge and are able to respond to priority locations during adverse weather.

7.3 Emergency Planning Team

The Emergency Planning Team is responsible for CCC's statutory duties under the Civil Contingencies Act 2004. As such they have compiled and manage 'The Response Plan', a specific hazard plan required under the Act. It outlines CCC's response to a flood event and is supported by individual service procedures and other generic corporate plans.

The Flood Response Plan (FRP) describes the management structures and procedures used by CCC in response to a flooding event in Carmarthenshire, focusing upon the roles within the coordinated response of a number of agencies.

The aim of the FRP is to outline CCC's procedures in response to the flood risk within the boundary of Carmarthenshire. The objectives of this plan are to:

- Highlight the activation and escalation triggers
- Identify the flood risk from all source
- Outline the council procedures to a flood event
- Minimise the impact and consequences of a flood event to people, infrastructure and the environment.

This plan is intended to cover response to flooding from surface water, fluvial and tidal flooding. It does not cover flooding from the sewers or main water, ground water or contained water e.g. reservoirs.

When flooding becomes severe or the council is in receipt of a severe flood warning from NRW, then the plan would be activated.

7.4 The Planning Department

The land use planning policies in Wales are set out in Planning Policy Wales (PPW) which is supplemented by a series of Technical Advice Notes (TANs). These national planning policy documents provide the framework for the preparation of the Local Development Plan (LDP).

The LDP in Carmarthenshire was adopted in December 2014 and sets out the spatial vision for the future of Carmarthenshire (excluding that area within the Brecon Beacons National Park) and a framework for the distribution and delivery of growth and development. It sets out land-use planning policies and proposals which are used in the determination of planning applications and in guiding future opportunities for investment and growth. These policies include land-use allocations for different types of development (i.e. housing, employment, retailing, education, open space etc.) as well as criteria for assessing individual proposals.

Through our identification of the areas at greatest risk of surface water flooding in CCC, which are termed '*Policy Units*', we note that 15 No. LDP allocations lie within the boundary of a Policy Unit. As such a recommendation of this plan is that further flood risk analysis is undertaken in these areas and that the LPA and CCC's Drainage Engineers should liaise closely on this matter. A list of LDP allocations can be found in Appendix D.

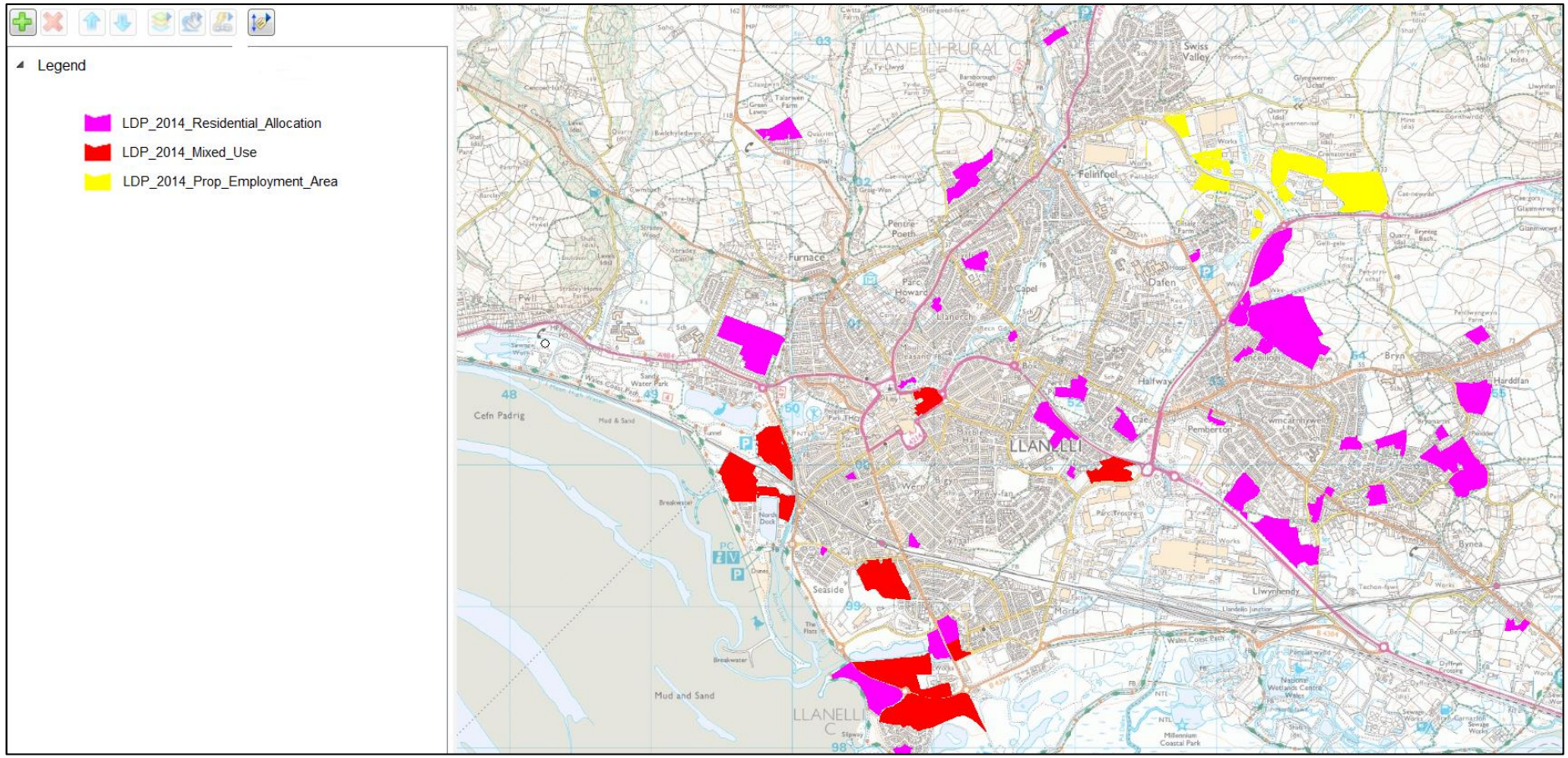


Figure 10 – LDP land allocations in Llanelli

The national planning policies also highlight the importance of flood risk as a material consideration when determining individual planning applications. TAN15 *Development and Flood Risk* provides both the NRW and CCC Flood Defence and Coastal Protection Engineers the guidance and policies to assess flood risk in Carmarthenshire. The TAN promotes the Welsh Assembly Government's objectives for sustainable development and encourages a move away from flood defences and mitigation of the consequences of flooding for new development, towards avoiding developing in flood plains. Planning authorities must take the precautionary approach and utilise the flood maps provided by NRW.

As such the LPA works closely with developers, NRW and the Flood Defence and Coastal Protection Team within CCC. NRW provide advice on the flooding from Main Rivers, they undertake hydraulic mapping and publish these flood risk maps. They also critically analysis information submitted in support of any application thus ensuring that the flood risk has been evaluated correctly and advise the LPA accordingly.

The CCC Flood Defence and Coastal Protection Team also advises the LPA on flood risk. As highlighted in section 3.2.1, this is primarily OWC, surface water and ground water flood risk information, gathered from their own analysis and supplemented with their local knowledge and experience. Local Authority Engineers also advise on sustainable drainage systems which manage surface water at new developments. In CCC the engineers also critically evaluate the designs and hydrology for the LPA.

8 Technical Assessment

Within this section we have set out the approach and data sources used to review the understanding of flood risk across CCC.

8.1 Data sources

The following section details the risk counts that have been generated to assist in identifying people and economic activity in areas at risk from surface water flooding.

The methodology used has been derived from the three datasets below:

1. **Updated Flood Map for Surface Water –uFMfSW Property Point dataset**

   Document source: The Environment Agency – July 2013.

This dataset, which is intended primarily for use with Geographic Information System (GIS), contains information on property points for return periods of 1 in 30, 1 in 100 and 1 in 1000.

2. **The updated Flood Map for Surface Water uFMfSW** (The Environment Agency, July 2013).

This is a map of surface water produced by a computer simulation of rainfall applied to a digital terrain model. Further details of uFMfSW are available on the following link:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/297432/LIT_8988_0bf634.pdf

3. **Communities at Risk Register (CaRR)**

This is a GIS dataset published by Natural Resources Wales in 2016. It identifies property at risk of flooding from pluvial, fluvial, tidal and coastal flooding and groups them into community units for comparison; the community units are then ranked across Wales. The dataset allows for single and a combination of flood risk sources to be ranked and therefore communities can rank differently depending on the flood risk being evaluated. For the purpose of this report the surface water dataset has been used. However, where the fluvial dataset, in the opinion of the CCC Senior Engineer, gives more realistic figures of the property at risk, then these have been utilised. The CaRR dataset follows the Welsh Government directive to be citizen and community focused and is the primary dataset on which Welsh Government compare flood risk Nationally.

8.2 Analysing the Data and Property Counts

8.2.1 Risk to Properties

Criteria used for selection of properties at risk of flooding:

- Primary dataset used is the uFMfSW Property point data set.

In order to identify those properties that are likely to suffer from internal flooding a depth of flooding criteria of at least 150mm with a wetted boundary of 20% or greater

has been used to filter the dataset. i.e. those properties with flood depths <150mm are not included in the counts.

In general, most properties have a threshold (inside building level) of 150mm or greater above the surrounding ground. Properties with less than 20% of the perimeter within the flood outline are less likely to suffer from internal flooding since this generally indicates only a corner is affected but the greater than 20% captures properties such as terraced properties where flooding in only present at the front or rear.

Calculation methodology

Counts have been taken of the number of properties within the extents of the uFMfSW. The risk of flooding ascribed to each property is related to the chance of the rainfall event affecting the property in any given year. The property counts based on the following criteria have been used to identify areas predicted to be at risk of surface water flooding.

- **Total** N**umber of properties** within a Ward – all properties within and outside the flood map (uFMfSW) extents.
- N**umber of property points** at risk of flooding for the following rainfall events where flood depth of at least 150mm and extends over at least 20% of the property boundary.
    - **Total Property Points** within the three rainfall annual probabilities flood extents, categorised by risk of flooding (Counts All Properties)
        - 1 in 30 (High Risk)
        - 1 in 100 (Medium Risk)
        - 1 in 1000 (Low Risk)
    - **Property points designated as Dwellings** at risk of flooding for the three rainfall events categorised by risk of flooding (Counts Dwellings only)
        - 1 in 30 (High Risk)
        - 1 in 100 (Med Risk)
        - 1 in 1000 (Low Risk)

To avoid double counting of properties that are at-risk of flooding, properties that are within NRW Flood Zone 2 & 3, and thus at-risk from Main River flooding have been excluded from the property counts.

Areas known to be at risk from OWC flooding based on CCC Engineer's knowledge and/ or records have also informed the identification of Policy Units.

8.2.2 Risk to Services

- Primary dataset: uFMfSW Property point data set.

Process overview: Counts for Services were conducted. Services can be defined as the following;

- Police stations, Fire stations, Ambulance stations, Residential/Care homes, Education establishments and Community Centres.

Total number of services within the defined area. Number of services in areas at risk of flooding for, 1 in 30 (HIGH), 1 in 100 (MED) and 1 in 1000 (LOW) rainfall events, at a flood depth >150mm and covering at least 20% of the property boundary.

9 How will we manage flood risk

The following sections provide a breakdown by Community Ward area of the assessed risks of flooding from sources for which CCC are responsible for as set out in Section 5.

As a reminder, where properties lie within the NRW Flood Map of fluvial flood risk, these have been excluded from the analysis to avoid double counting of potential impact and benefits as flood risk will be predominately from Main River i which is the responsibility of NRW.

9.1 Proposed measures

To allow for ease of reporting we have aligned our proposed measures with those provided by the Welsh Government for those LLFAs which had a statutory requirement to prepare a LFMP. The measures, as set out below, are grouped into the four themes; Prevention, Protection, Preparedness, Recovery.

Table 2 - Proposed Measures for Local Flood Risk Management

M11 - Action no measure is proposed to reduce the flood risk in the Policy Unit or other defined area.

M21 - **Prevention**, avoidance, measure to prevent the location of new or additional receptors in flood prone areas, such as land use planning policies or regulation

M22 - **Prevention**, removal or relocation, measure to remove receptors from flood prone areas, or to relocate receptors areas of lower probability of flooding and or of lower hazard

M23- **Prevention**, reduction, measures to adapt receptors to reduce the adverse consequences in the event of a flood actions or buildings, public networks, etc...

M24 - **Prevention**, Other prevention, other measures to enhance flood risk prevention (may include, flood risk modelling and assessment, flood vulnerability assessment, maintenance programmes or policies etc...)

M31 - **Protection** Natural flood management / run off and catchment management, Measures to reduce the flow into natural or artificial drainage systems, such as overland flow interceptors and or storage, enhancement of infiltration, etc and including in- channel, flood plain works and the reforestation of banks, that restore natural systems to help slow flow and store water.

M32 - **Protection** water flow regulation, Measures involving physical intervention to regulate flows, such as construction modification or removal of water retaining structures (e.g. dams or other on-line storage areas or development of existing flow regulation rules and which have significant impact on the hydrological regime.

M33 - **Protection**, channel, coastal and floodplain works, Measures involving physical interventions to freshwater channels, mountain streams, estuaries, coastal waters and flood prone areas of land, such as construction, modification or removal of structures or the alteration of channels, sediment dynamics management, dykes etc.

M34 - **Protection**, surface water management, measures involving physical interventions to reduce surface water flooding, typically, but not exclusively, in an urban environment, such as enhancing artificial drainage capacity or through sustainable drainage systems (SuDS).

M35 - **Protection**, other protection, other measures to enhance protection against flooding, which may include flood defences asset maintenance programmes or policies.

M41 - **Preparedness**, flood forecasting and Warning, Measures to establish, or enhance a flood forecasting or warning system

M42 - **Preparedness**, Emergency Event response planning/ contingency planning, measures to establish or enhance flood event institutional emergency response planning.

M43 - **Preparedness**, public awareness and preparedness, measures to establish the public awareness or preparedness for flood events.

M44 - **Preparedness**, other preparedness, other measures to establish or enhance preparedness for flood events to reduce adverse consequences.

M51 - **Recovery and Review** (planning for recovery and review phase is in principle part of the preparedness), individual and societal recovery, clean up and restoration activities (buildings, infrastructure, etc) Health and mental health supporting actions, inc managing stress disaster financial assistance (grants, tax) inc disaster legal assistance, disaster unemployment assistance,

M52 - **Recovery and review**, Environmental recovery, clean up and restoration activities (with several sub topics as mould protection, well-water safety and securing hazardous material containers)

M53 - **Recovery and Review**, other, other recovery and review, lessons learnt from flood events insurance policies.

M61- **other**.

All the measures identified in this plan have been classed in 4 categories as given in Figure 1, Section 2.22.2 above and repeated below for ease of reference.

Figure 11 – Classification of Measures in the Flood Risk Management Plan

9.2 Policy Unit Selection Criteria

Ward areas do not offer a suitable size unit to identify measures that can be applied appropriately across the entire ward. For instance Laugharne Ward contains Laugharne, Pendine and Llanddowror. In terms of sources of flood risk these areas are very different and it would not be appropriate to bundle them together.

Therefore, where suitable, Policy Units within the Wards have been selected by visual analysis of the uFMfSW at a Ward level to identify areas that have a common source and affect identified numbers of people or areas with economic or environmental impact where it would be appropriate for specific measures to be assigned to the selected area.

The analysis at Ward Level was completed prior to the CaRR dataset becoming available. The results for the Ward summaries are presented in section 9.3 below. The CaRR dataset is also mapped for comparison for each Ward. The CaRR dataset has informed the Policy Unit level breakdown by receptor (properties and services) which is to be presented in Part 2 of the FRMP.

Analysis of the data, as described in Section 8, has resulted in the identification of 49 areas at risk of surface water flooding, termed Policy Units for the purpose of this report. A full list of these Policy Units is documented in Appendix E. Each Policy Unit is described in Part 2 of this FRMP.

The Policy Units identified range in size from areas with several hundred properties identified at risk of flooding to small areas only covering a few properties. It is recognised that at the smaller scale this is a subjective choice and it is not meant to be entirely comprehensive.

It is intended to keep identification of Policy Units under review and to add to the list of Policy Units as required, such as in the event of new information becoming available.

It is not intended that works would only be carried out in identified Policy Units where there is an identified positive benefit-cost of investment to manage flood risk (protecting 2 properties at a cost of £5k would be more cost-effective than a scheme

to defend 20 properties at a cost of £60k), although they will be used to prioritise major works.

The summaries of flood risks identified in each of the 58 Wards in Carmarthenshire are presented in the following Section 9.3.

9.3 Local Flood Risk - Area Analysis Community Ward Summaries

A summary for each of the Community Wards is provided in this section.

Each summary comprises a description of the pertinent features of the catchments, the main sources of flood risk, a breakdown by Ward of the counts of properties and services affected by surface water flooding based on the analysis of the uFMfSW and by OWC flooding based on CCC Engineers' local knowledge. Any Policy Units within each Ward are identified.

Maps of the distribution of the properties assessed to be at risk based on the uFMfSW within each Ward are presented.

Map 1 – Total Properties affected

Map 2 – Dwellings and Services affected.

The CaRR datasets for properties at risk from 1 in 100 annual chance (1% AEP) events from pluvial and fluvial sources of flooding are also mapped as Map 3 for visual comparison. The differences in the results of the two datasets are described in Part 2 of the FRMP. The fluvial CaRR dataset is presented to highlight any areas of local flood risk from OWC which are not captured by the uFMfSW.

The actions proposed to manage local flood risk to an acceptable level within the community Ward are identified.

The following notation is used to describe the different categories of flood risk referenced in the following tables.

	Table Heading	**Description**
	Total properties	Total properties in the ward
1 in 30 rainfall event	High-risk all properties	**Total Property Point Count** with >=20% of property perimeter with a depth of greater than150mm for 30 year return period
	High-risk dwellings	Property Point "**Dwellings"** Count with >=20%of property perimeter with a depth of greater than150mm for 30 year return period
	High-risk services	Total Count of Property points for 30yr return Period, ≥150mmdepth, ≥20% of perimeter flooded, **community services**
1 in 100 rainfall event	Medium-risk all properties	**Total Property Point Count** with >=20%of property perimeter with a depth of greater than150mm for 100 year return period
	Medium-risk dwellings	Property Point "**Dwellings**" Count with >=20% of property perimeter with a depth of greater than150mm for 100 year return period
	Medium-risk services	Total Count of Property points for 100yr return Period, ≥150mmdepth, ≥20% of perimeter flooded, **community services**

1 in 1000 rainfall event	Low-risk all properties	**Total Property Point Count** with >=20% of property perimeter with a depth of greater than150mm for 1000 year return period
	Low-risk dwellings	Property Point "**Dwellings**" Count with >=20% of property perimeter with a depth of greater than150mm for 1000 year return period
	Low-risk services	Total Count of Property points for 1000yr return Period, ≥150mmdepth, ≥20% of perimeter flooded, **community services**

Based on the criteria described in Section 8, the following totals of properties have been identified to be affected from flood risk sources for which CCC as the LLFA are responsible.

Table 3 - Properties affected County wide against different rainfall events

	Total all properties	High-risk all properties	High-risk dwellings	High-risk services	Medium-risk all properties	Medium-risk dwellings	Medium-risk services	Low-risk all properties	Low-risk dwellings	Low-risk services
County wide	84,115	3,252	1,523	26	5,987	3,208	50	15,508	9,468	108

9.3.1 Abergwili

Community Council(s)	Abergwili
Councillor:	Pam Palmer
Population	2,344
Area	62.6 km^2
Population Density	37 people/ km^2

Area Description

Abergwili Ward is predominantly rural, approximately 4km east of Carmarthen town and contains the settlements of Abergwili, Whitemill, Peniel.

Predominate Land Use is pastoral agriculture.

The main fluvial source is the River Towy, which is a Main River and managed by NRW. The NRW flood maps for this area show that Towy River affords a significant flood risk to this area. The Towy River is not within the scope of this report as it is managed by NRW.

Flood History

Extensive Flooding of Abergwili in 1987 when extensive flooding occurred throughout the Towy Valley Flooding has also occurred at Whitemill from surface Water and the River Annell.

Policy Units in Ward

There is one Policy Unit identified in this Ward:

- Whitemill

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	38	5	0
Medium Risk	56	12	1
Low Risk	121	37	3

Breakdown by Policy Unit refer to Appendix E.

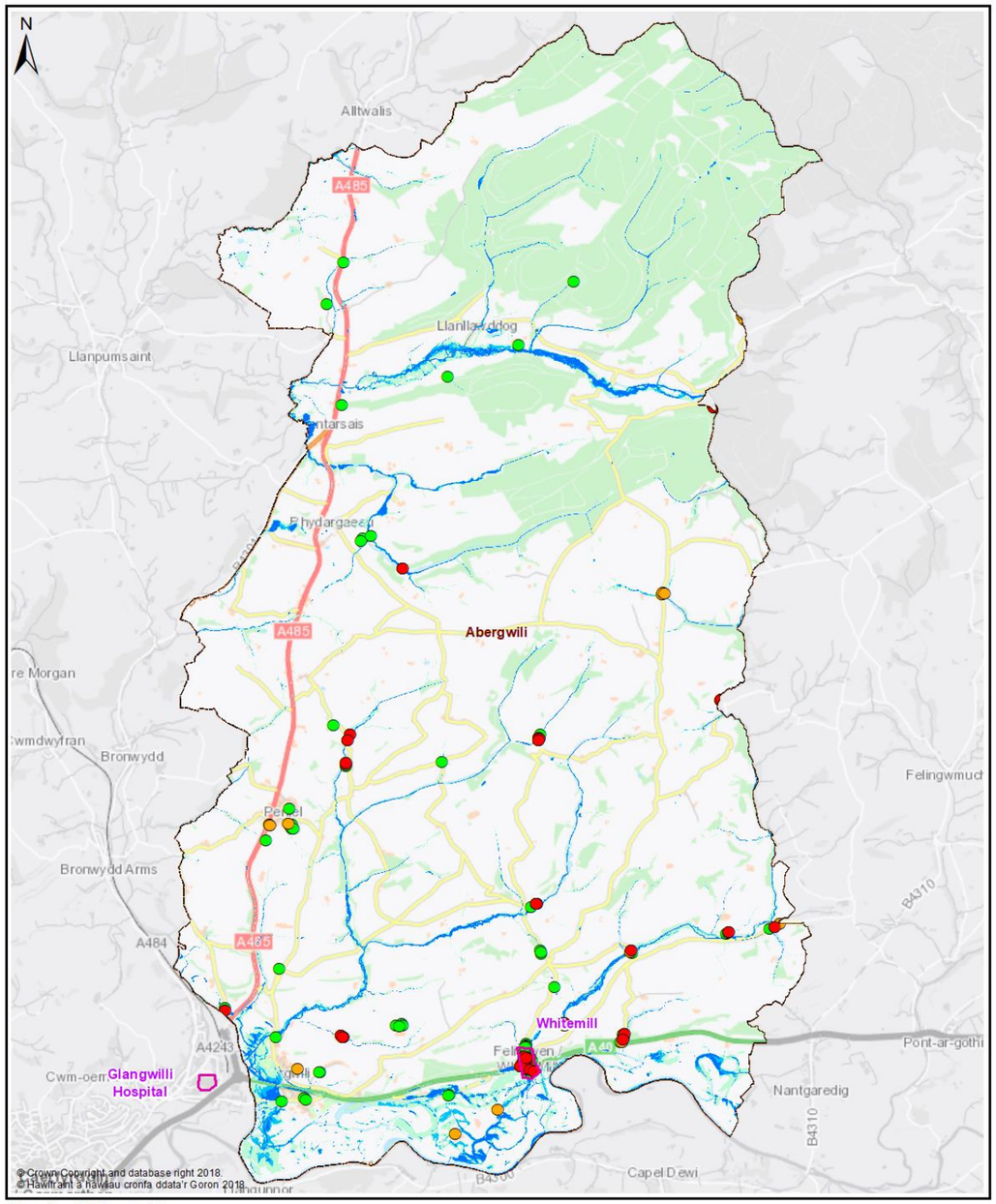
Breakdown by Policy Unit refer to Appendix E.
The CaRR dataset is mapped in Map 3 below. The analysis of breakdown is presented in Part 2 of the FRMP.

Other risk management authorities

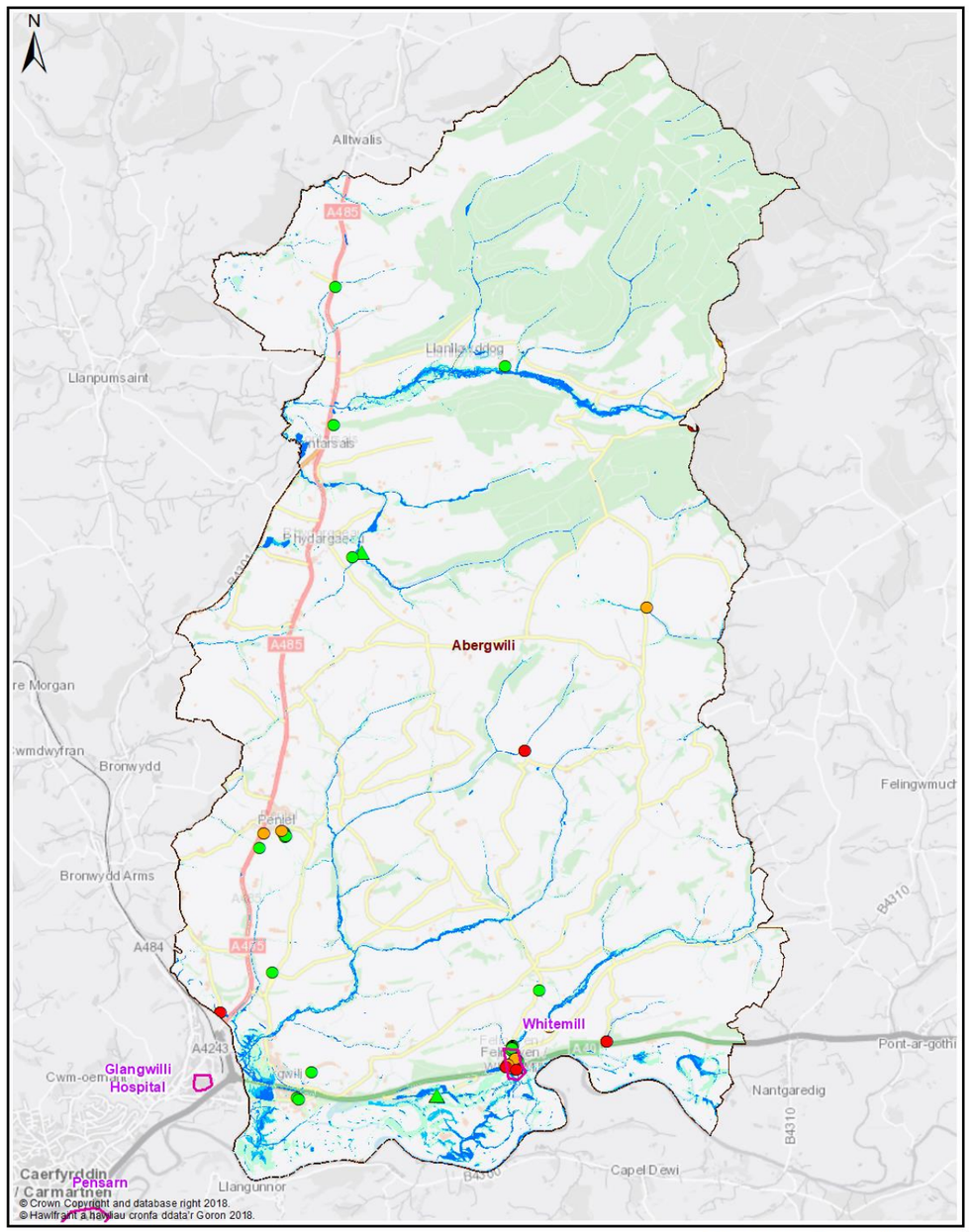
DCWW has identified Flood Risk in the following locations

- Peniel
- Rhydargaeau

NRW will continue to take the lead and manage the flood risk from the Towy River, Afon Gili and River Annell.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

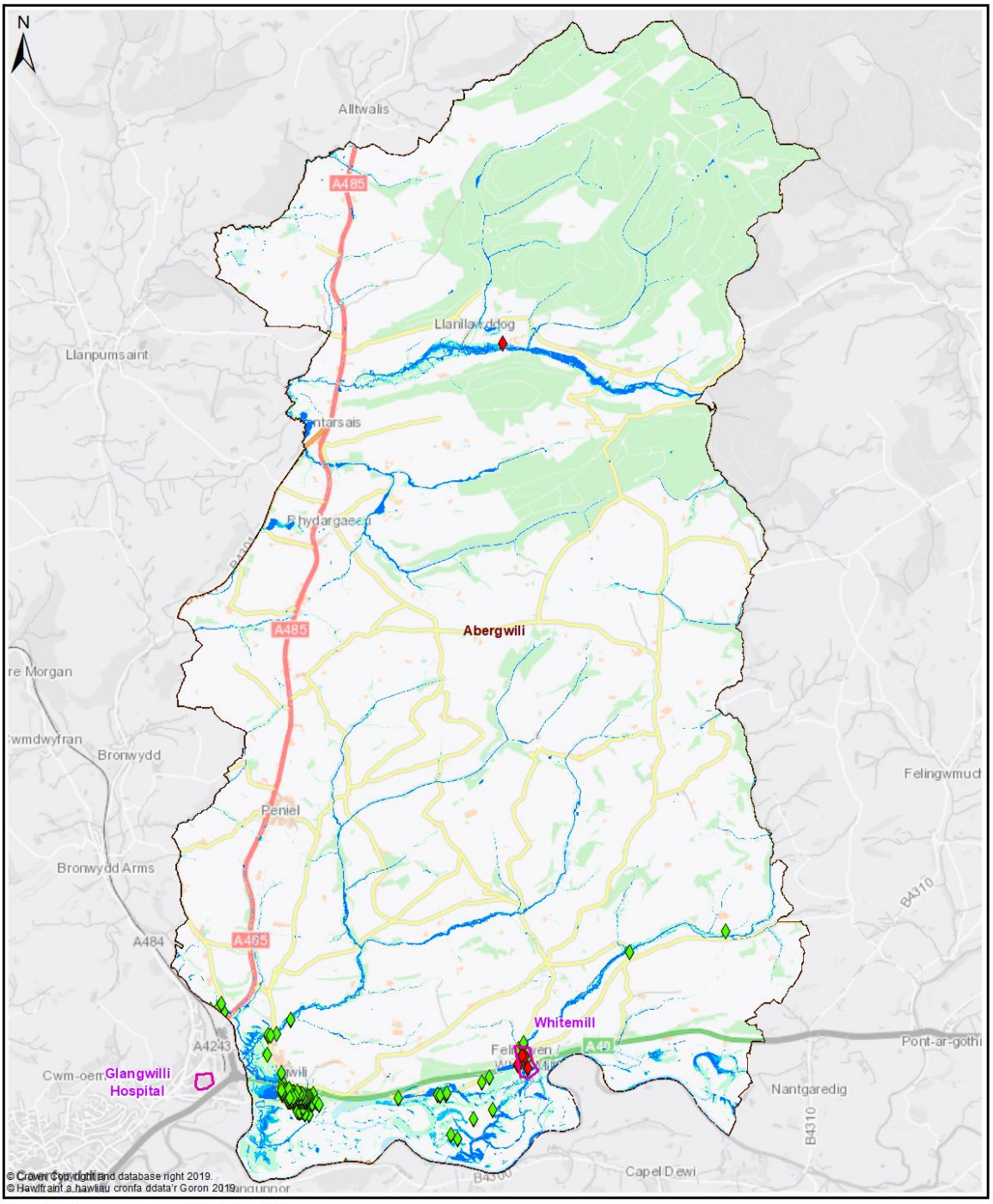
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Abergwili

0 0.5 1 2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Abergwili

0 0.5 1 2 Km

Abergwili - Delivery Plan

The following summarises actions proposed to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M33	Whitemill Policy Unit identified for further review of potential alleviation action(s)	High	Ongoing	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	County wide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.2 Ammanford

Community Council(s)	Ammanford Town
Councillor:	Deian Harries
Population:	2,672
Area	1.76 km^2
Population Density	1,510 people/ km^2

Area Description

Ammanford Town ward is an urbanised area 33km east of Carmarthen

Predominate Land Use – Urban with Town Centre Commercial use

This ward is bounded by the Main Rivers Loughor and Amman.

Flood History

The Isscennen Road/ Margaret Street Area has a history of flooding from the small watercourse with culvert blockages restriction

In 2005 the culvert at the top of Margaret Street blocked with stones and gravel causing extensive damage to several properties. Flood water was dammed by boundary walls that subsequently collapsed under the pressure.

Policy Units in Ward

There are two Policy Units identified in this Ward:

- Isscennen Road & Margaret Street
- Carregamman

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	60	33	0
Medium Risk	130	79	1
Low Risk	350	231	1

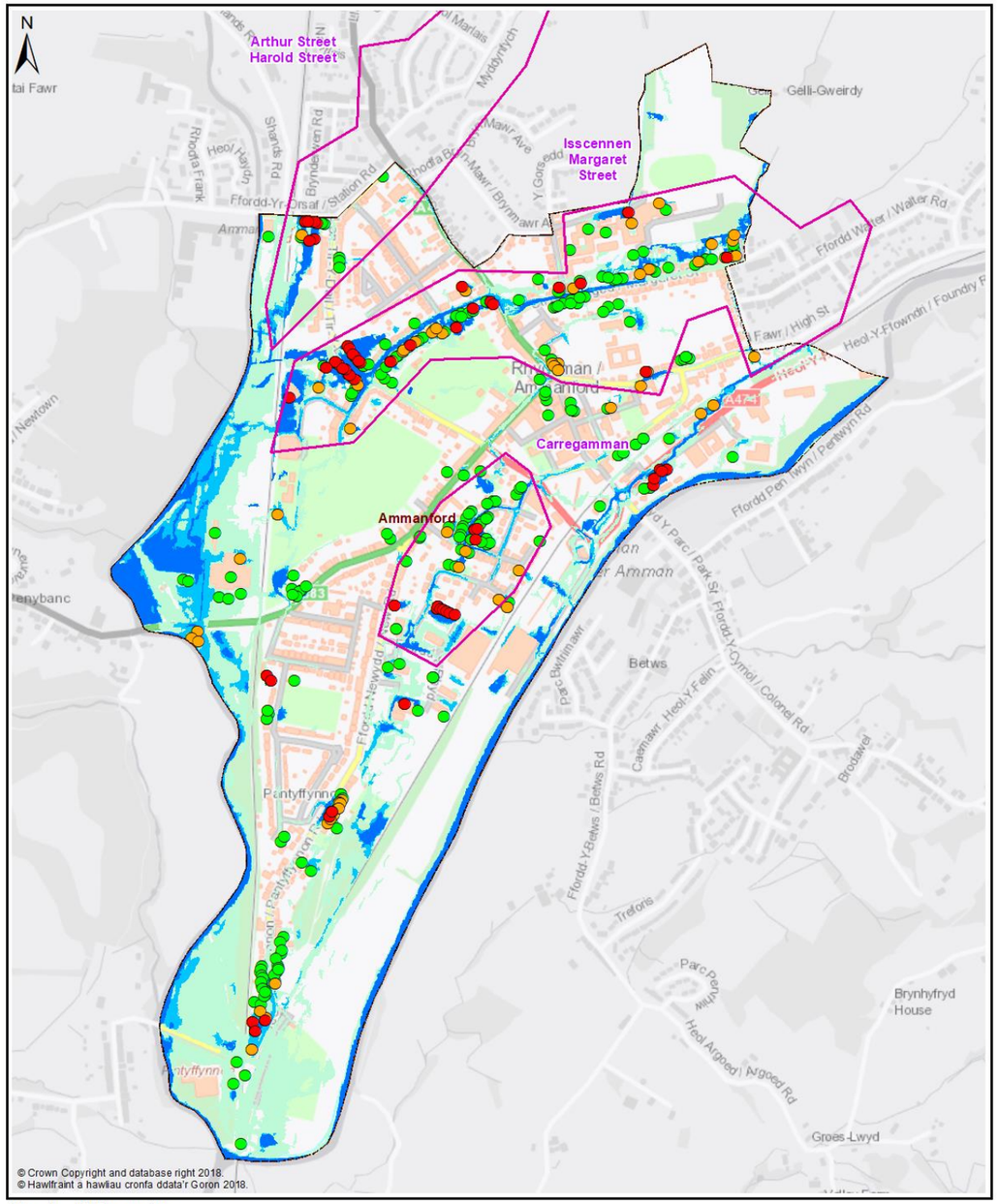
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

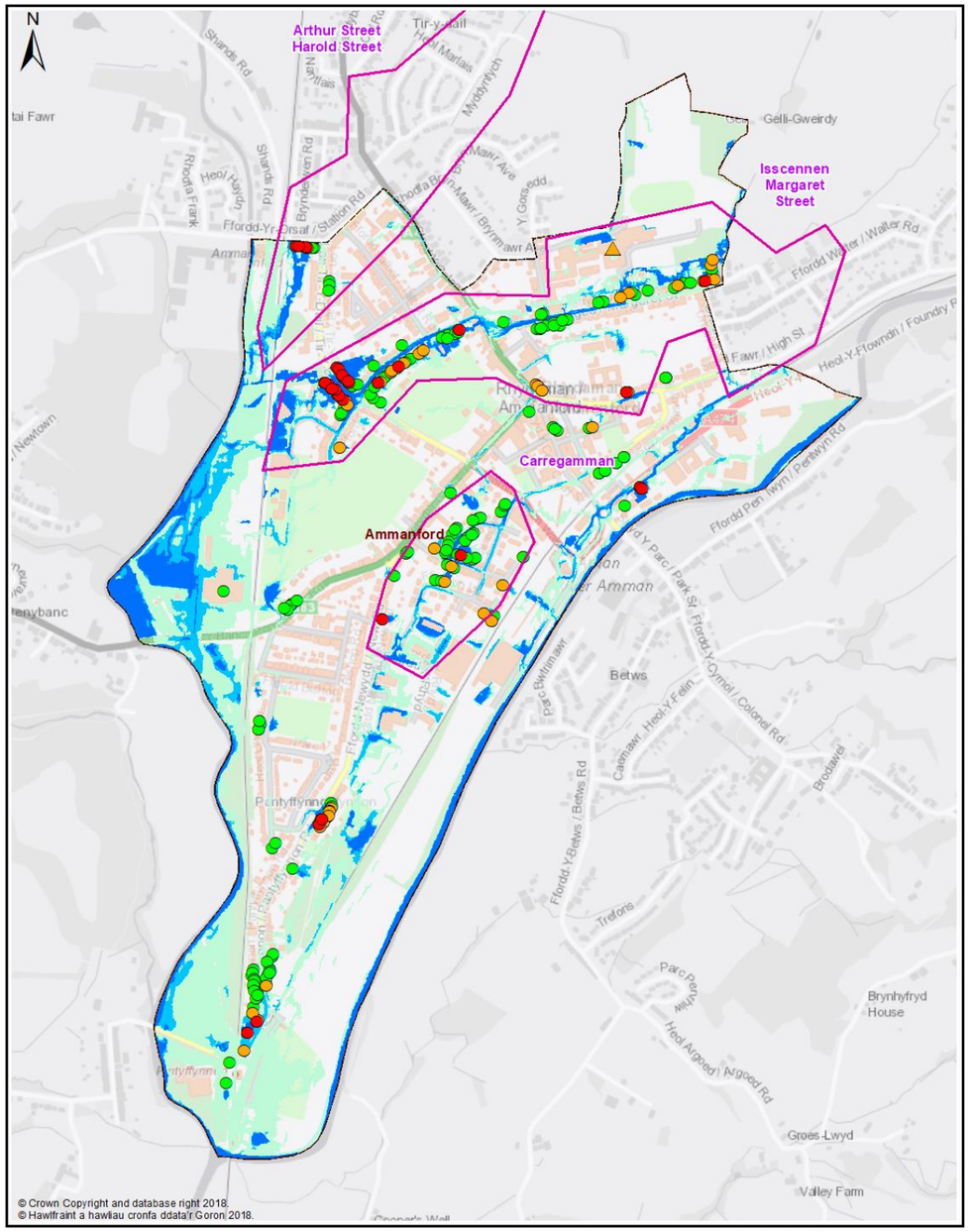
DCWW has identified flood risk at the following locations

- Pantyffynnon Road, Ammanford
- Station Road, Ammanford

NRW will continue to take the lead and manage the flood risk from The Loughor and Amman.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

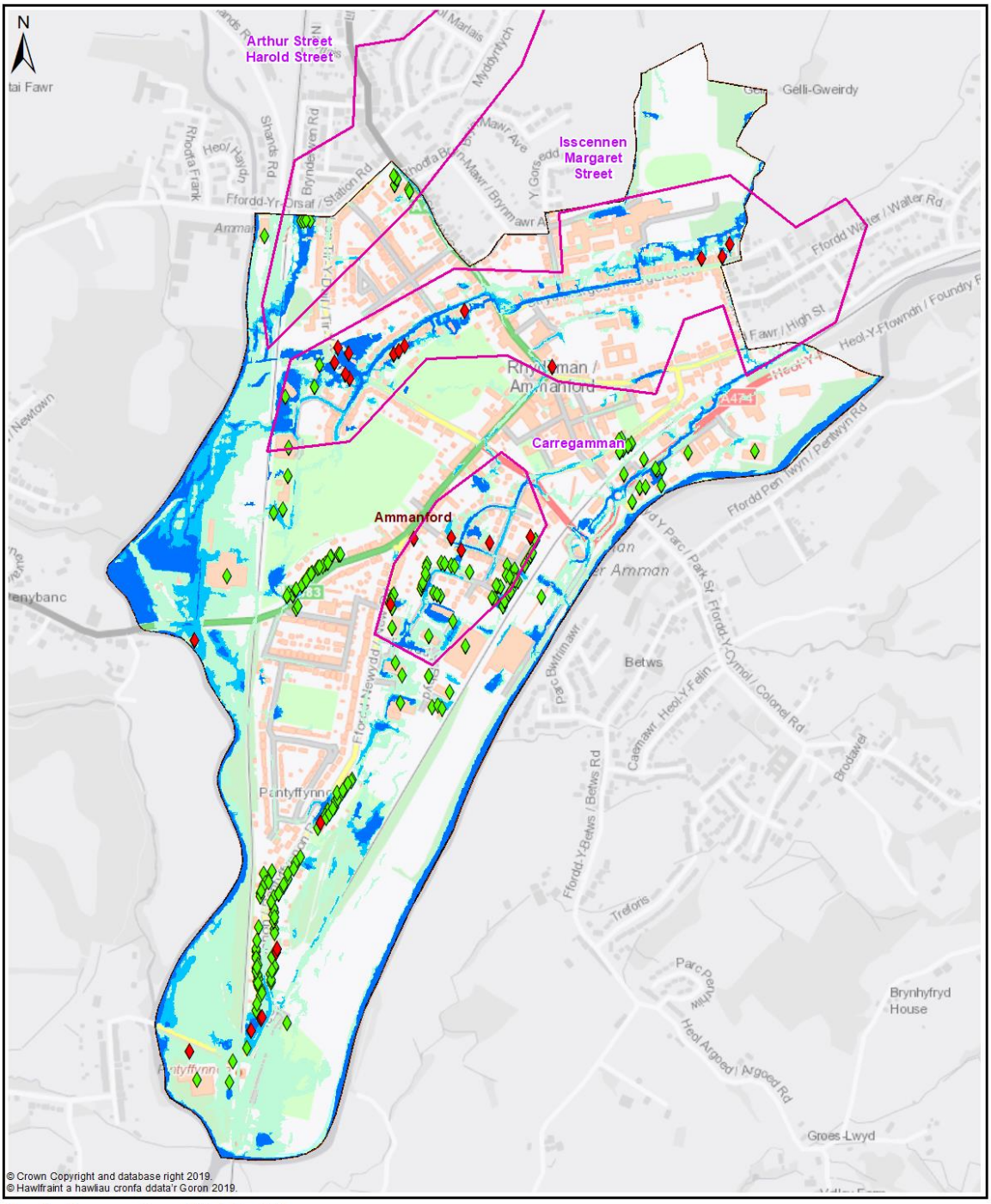
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Ammanford

0 0.15 0.3 0.6 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Ammanford

0 0.15 0.3 0.6 Km

Ammanford - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area.	High	Ongoing	Low
M22	investigate options to reduce flood risk to properties within the overall community.	Med	Med	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register.	High	Ongoing	Low
M33	2 Policy Units identified for further review of potential alleviation action(s)	High	High	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.3 Betws

Community Council(s)	Betws
Councillor:	Ryan Bartlett
Population:	2322
Area	11.12 km^2
Population Density	209 people/km^2

Area Description

Bettws Ward is the area to the south east of Ammanford Town and is separated from Ammanford town ward by the Amman River

The ward contains residential development with rough pasture and moorland rising to around 300m

Run off from the high ground is fast responding with relatively impermeable soils.

Flood History

There have been isolated surface water related incidents in this ward.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	15	4	0
Medium Risk	37	21	0
Low Risk	242	189	0

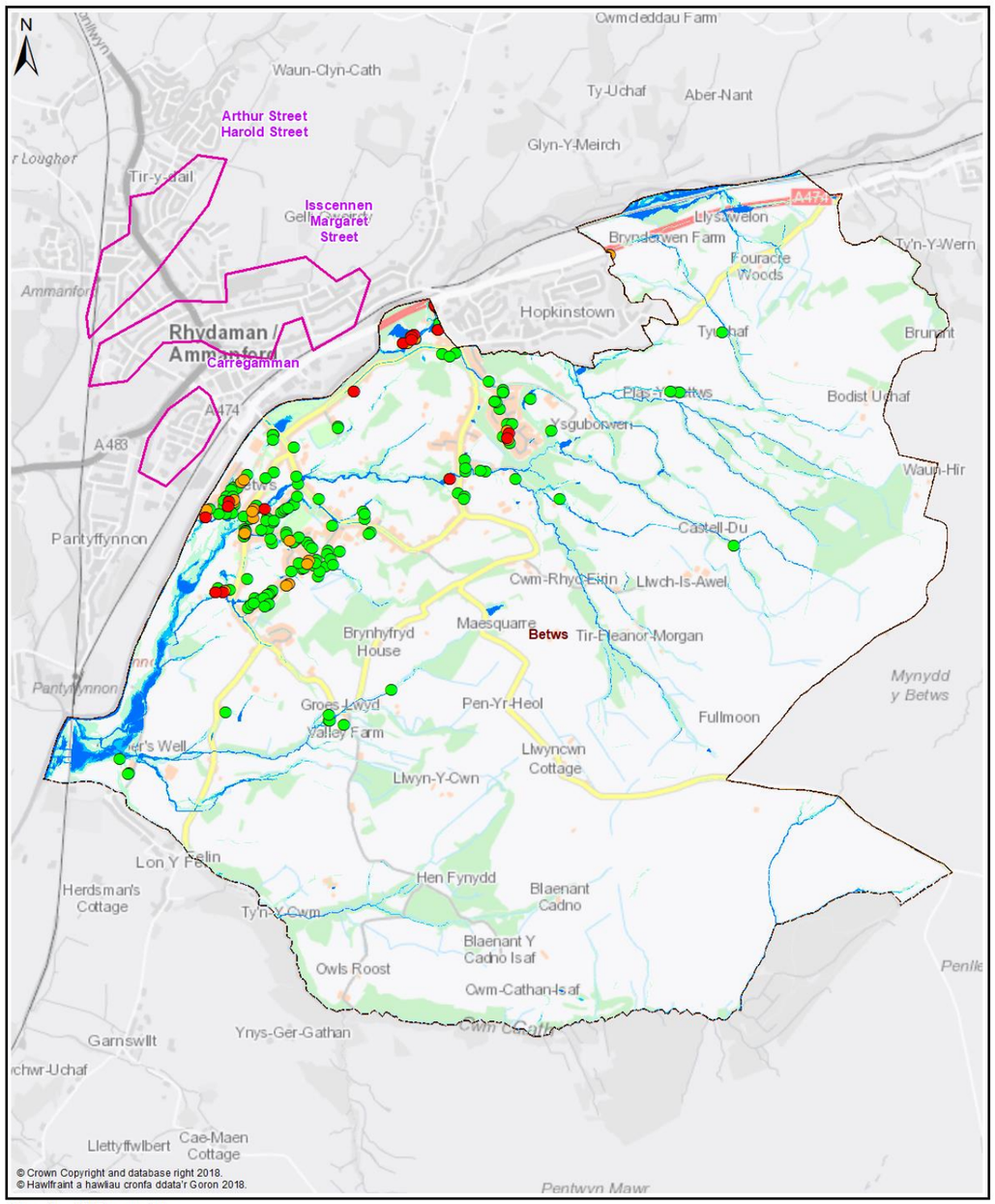
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities
DCWW

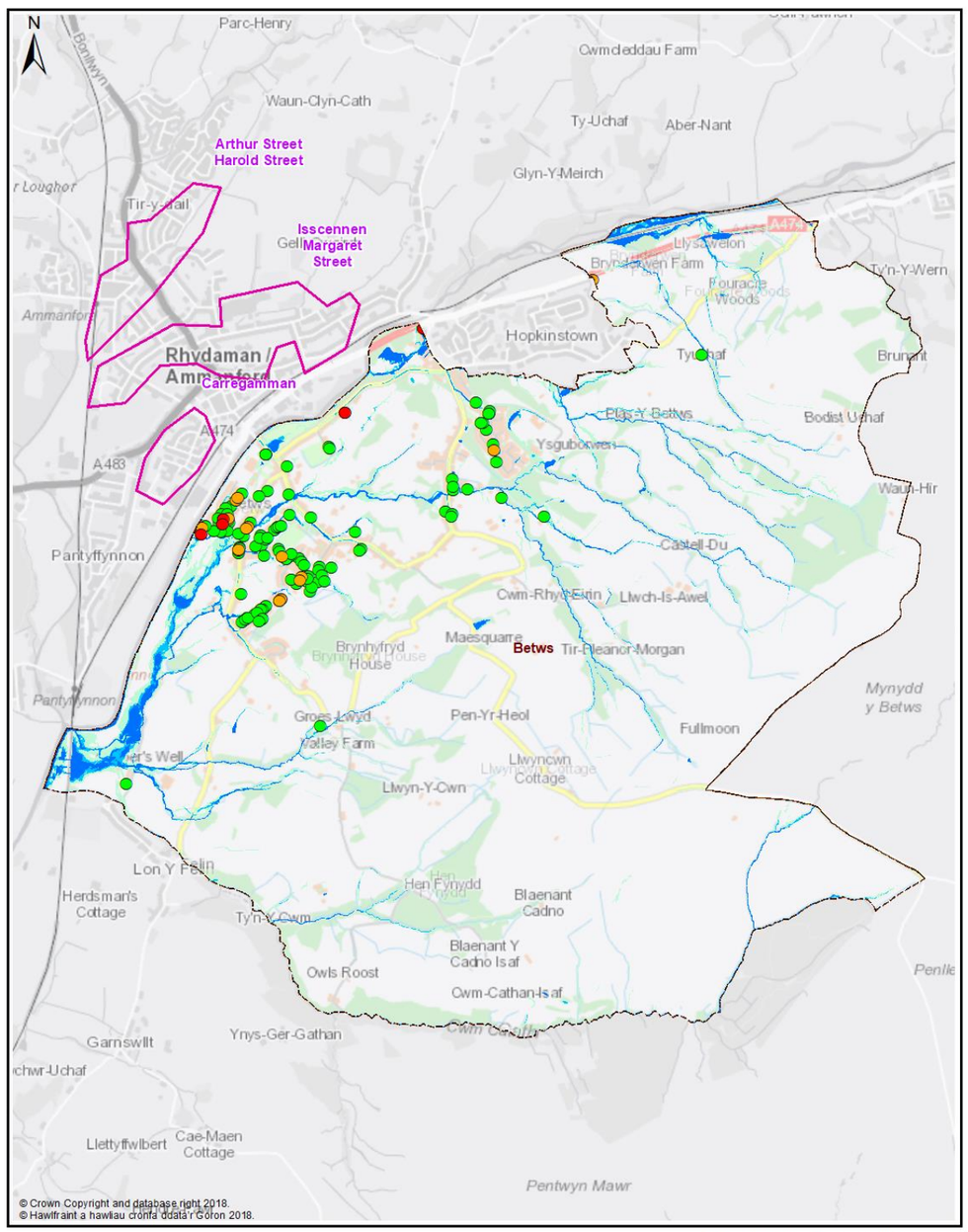
DCWW has identified flood risk at the following locations

- Parc Bwtri Mawr, Ammanford

NRW will continue to take the lead and manage the flood risk from the River Loughor.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

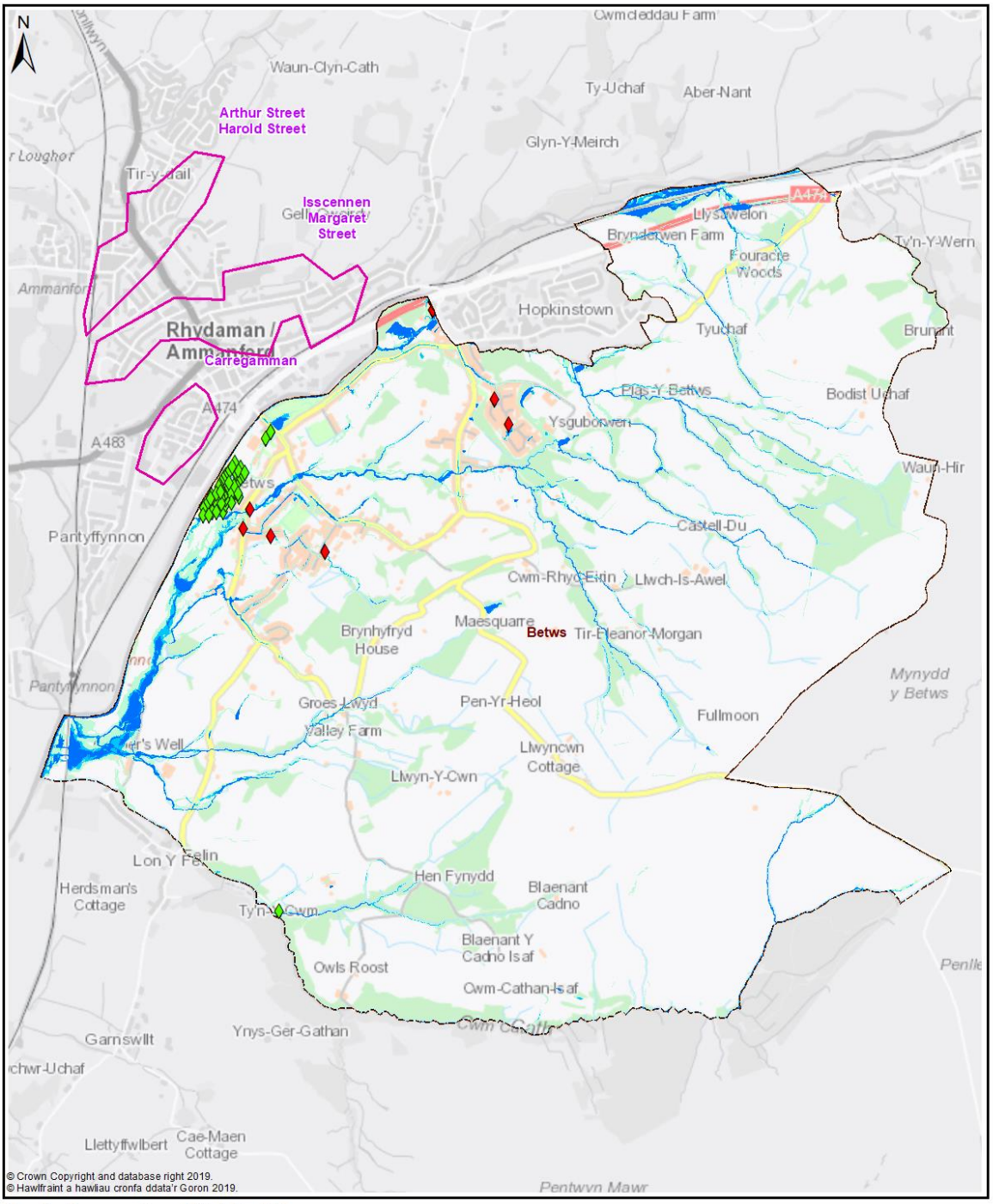
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Betws

0 0.3 0.6 1.2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Betws

0 0.3 0.6 1.2 Km

Betws - Delivery Plan

The following summarises actions proposed to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M24	Culvert inspections of existing assets & update / maintain Asset Register.	High	Ongoing	Low
M31	Investigate opportunities to reduce runoff from adjacent moorland / hillsides	Med	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.4 Bigyn

Community Council(s)	Llanelli Town
Councillor:	Jeff Edmunds
	Eryl Morgan
Population:	4,633
Area	2.33 km^2
Population Density	2,855 people/km^2

Area Description

Bygin Ward is located is located within Llanelli and contains the areas of Pen Y Fan and Trostre. Land use is urbanised large residential areas and areas of residential retail park and industrial.

Historically the area was used for intensive industry and mining.

Flood History

There is a history of flooding of the Trostre Estate area and the Pen y Fan area.

Policy Units in Ward

There is one Policy Units identified in this Ward:

- Trostre Road and Gorsedd

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	73	62	0
Medium Risk	149	119	1
Low Risk	426	330	4

Breakdown by Policy Unit refer to Appendix E.

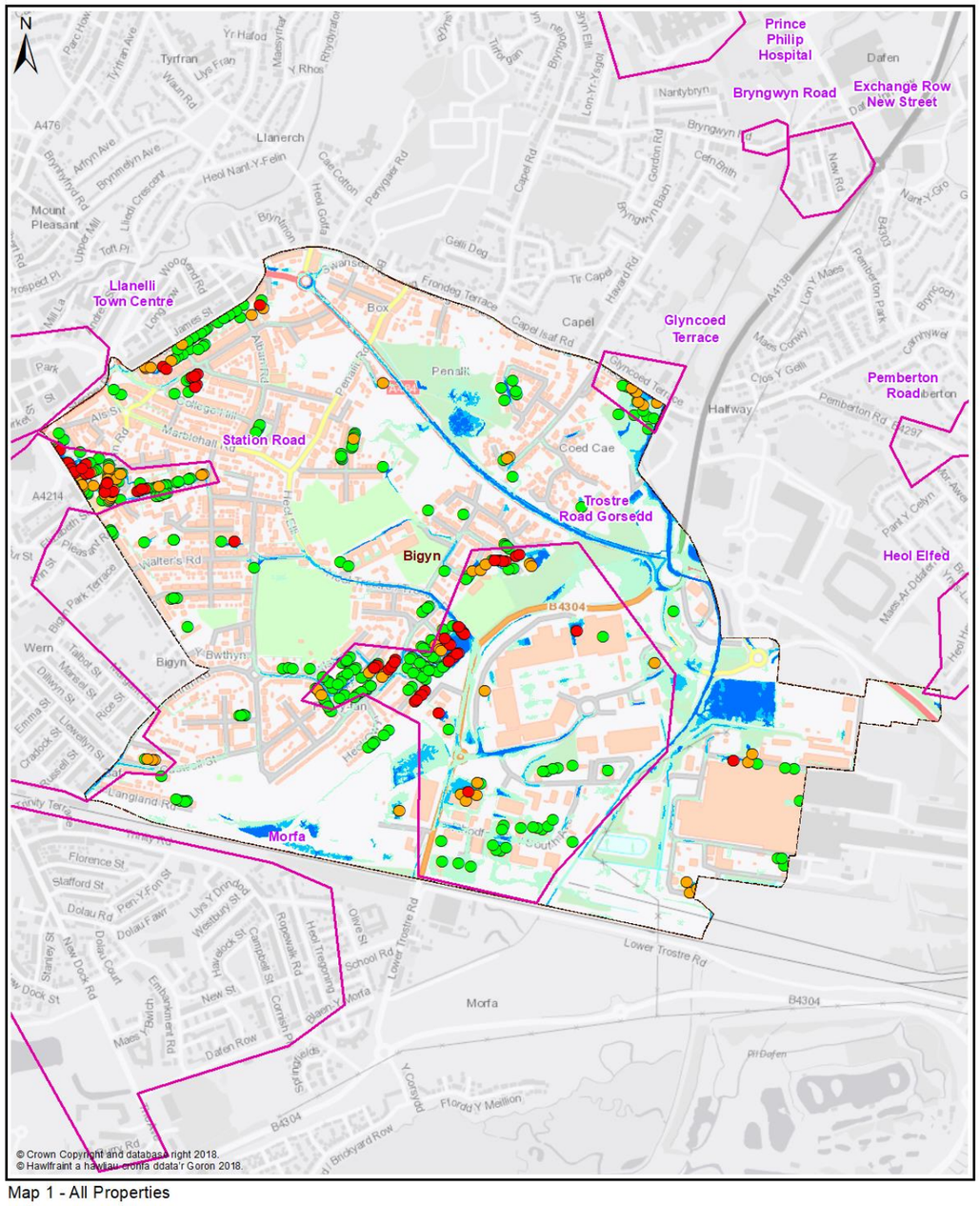
Other risk management authorities

DCWW; large areas of this ward are drained by the DCWW combined sewer system. DCWW has identified flood risk at the following locations:

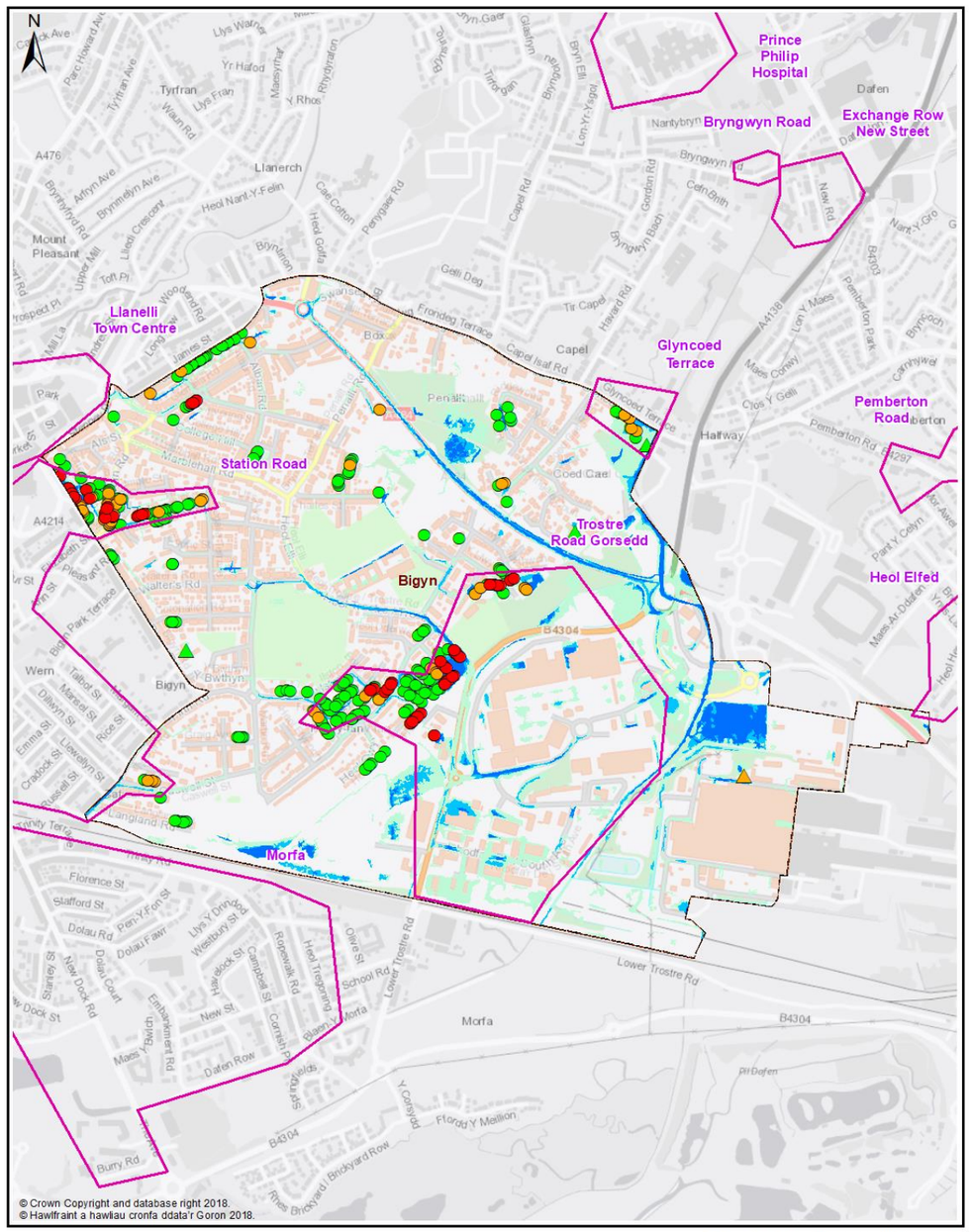
- Caswell Street, Llanelli
- Fransham Street, Llanelli
- Heol Dinbych, Llanelli
- Pencae Terrace, Llanelli
- Trostre Industrial Park, Llanelli

At the present time DCWW are investing large sums of money in Llanelli in their Rainscape Project. CCC will continue to work in partnership with DCWW on this project.

NRW will continue to take the lead and manage the flood risk from the Dafen River. NRW are currently working on a scheme to reduce flooding in this area.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

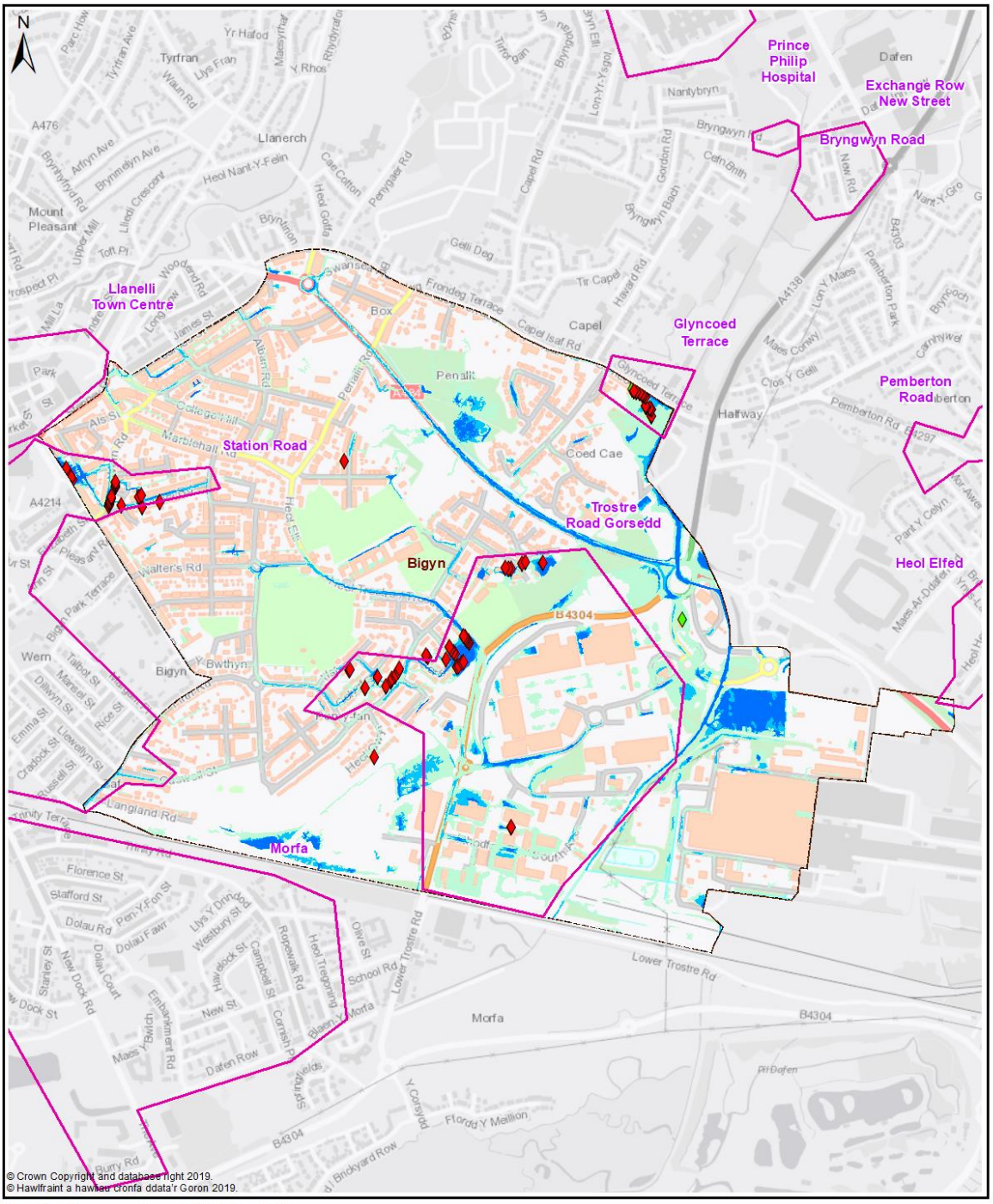
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Bigyn

0 0.15 0.3 0.6 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Bigyn

0 0.15 0.3 0.6 Km

Bigyn - Delivery Plan

The following summarises actions proposed to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area.	High	Ongoing	Low
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Low
M33	1 Policy Unit identified for further review of potential alleviation action(s)	High	High	Med
M34	Continue to collaborate / assist DCWW progressing their Rainscape initiative.	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M44	Liaison with major retail operators to raise awareness and preparedness. Work with NRW Flood Awareness team	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.5 Burry Port

Community Council(s)	Pembrey And Burry Port Town Council
Councillor:	Pat Jones
	Jack James
Population:	3,215
Area	5.15 km^2
Population Density	814 people/ km^2

Area Description

Burry Port is a Coastal town between Carmarthen and Llanelli with a harbour / Marina. There is high ground above the town with pastoral farmland and woodland.

Flood History

Burry port has had a history of severe flooding from the Nant Dyfaty

Works have been carried out over the years to manage the flows in the Nant Dyfaty and a bypass culvert has been constructed to take flows from north of Burry Port through to the harbour.

Policy Units in Ward

There are 2 No. Policy Units identified in this Ward:

- New Street this covers the area potentially affected by the Nant Dyfaty
- Gors Road

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	102	83	1
Medium Risk	153	126	1
Low Risk	439	366	2

Breakdown by Policy Unit refer to Appendix E.

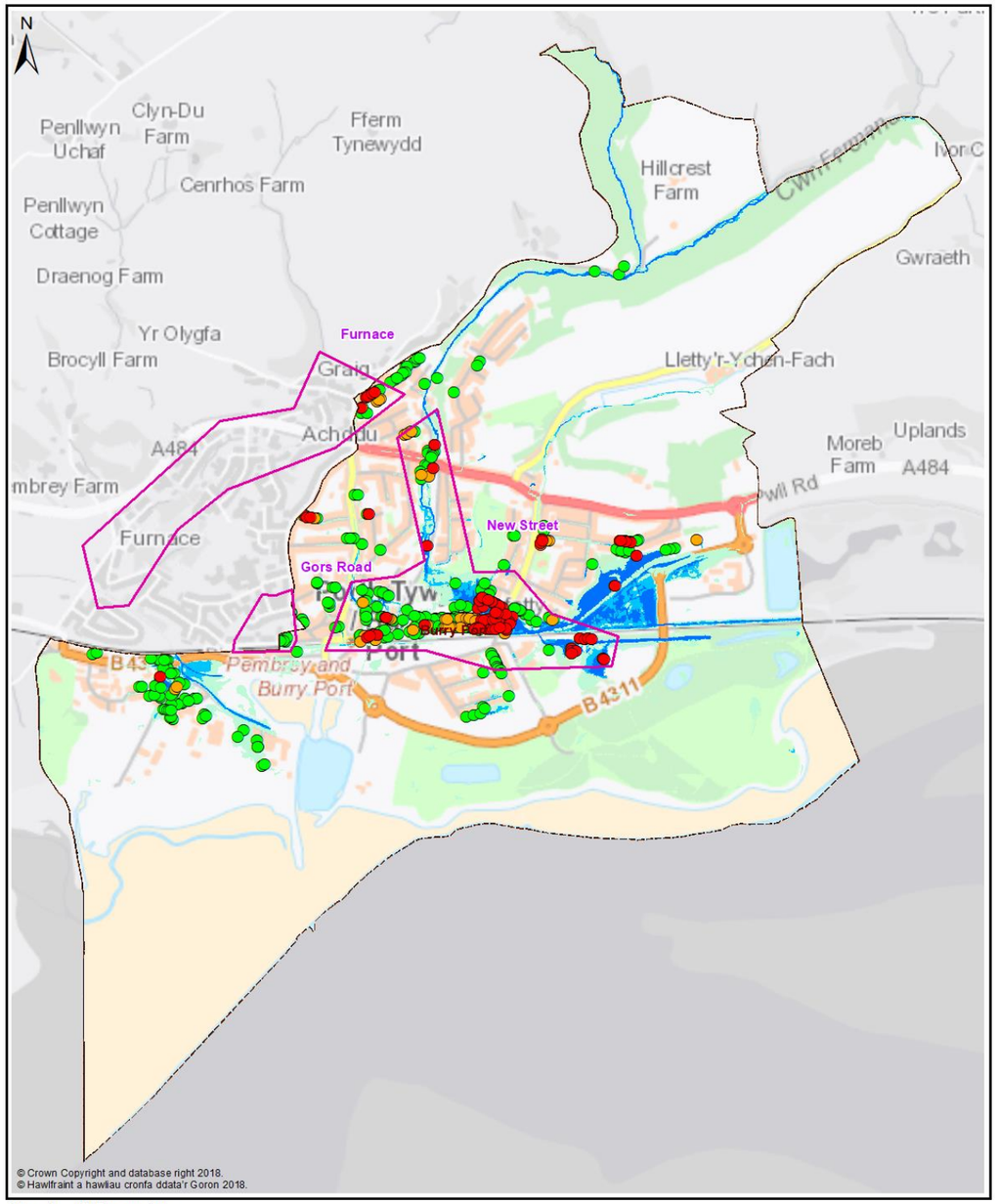
Other risk management authorities

DCWW has identified flood risk at the following locations

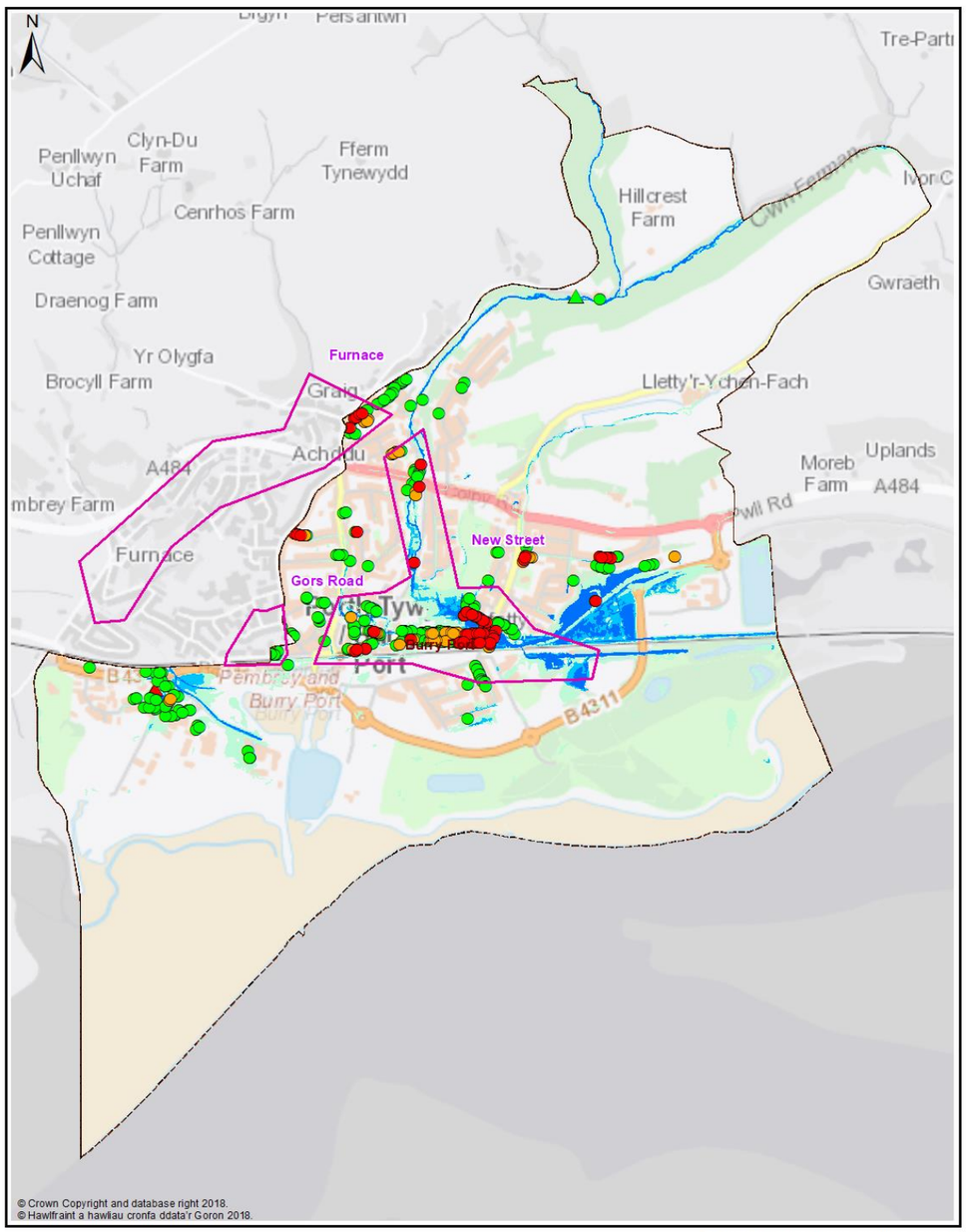
- Bryn Avenue, Burry Port
- Colby Road, Burry Port
- Gors Road, Burry Port
- Tyle Teg, Burry Port

At the present time DCWW are investing large sums of money in the Burry Port catchment in their Rainscape Project. CCC will continue to work in partnership with DCWW on this project.

NRW; there are no Main Rivers in this Ward. NRW will continue to take the lead and manage the flood risk from tidal flooding.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

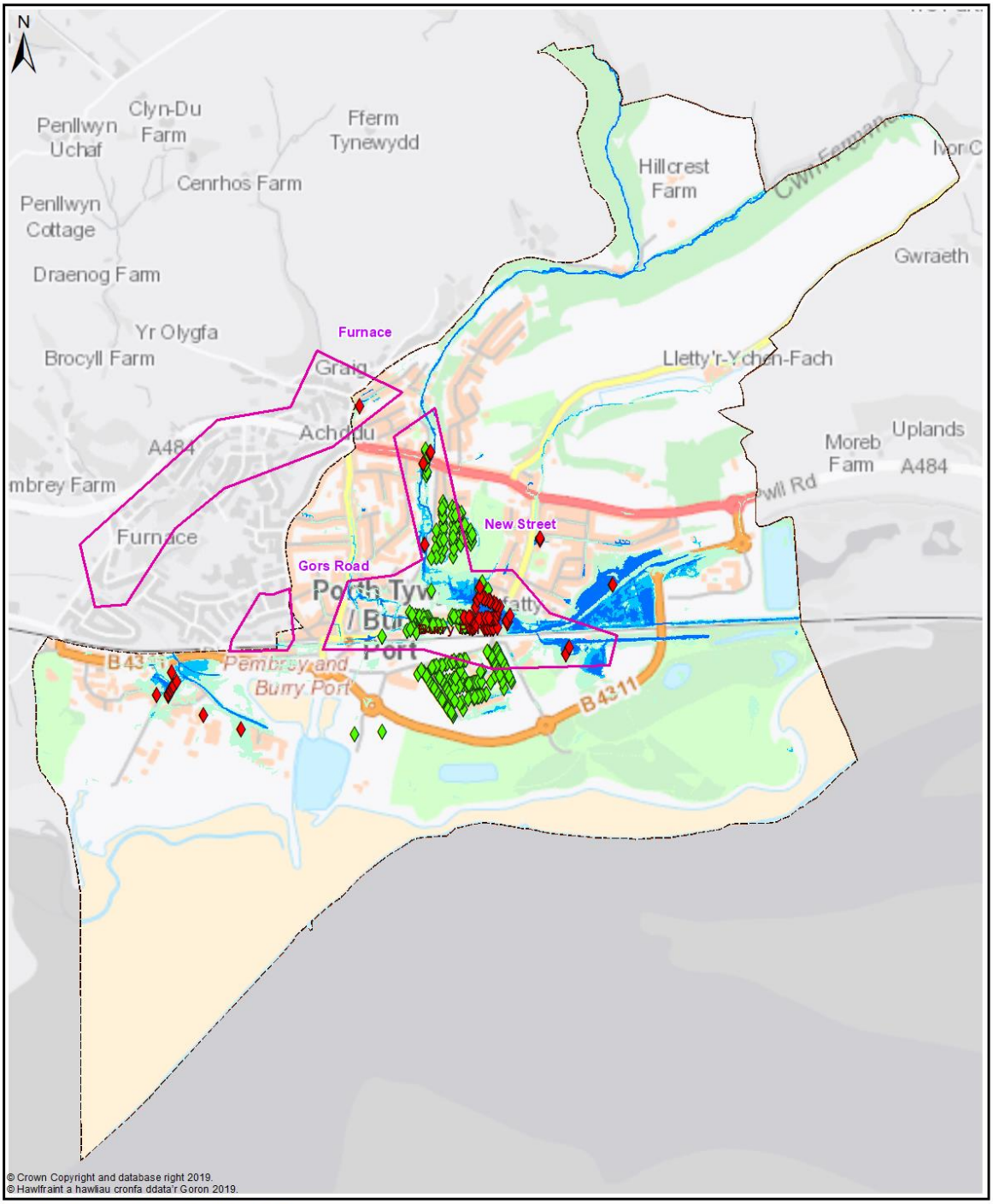
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Burry Port

0 0.225 0.45 0.9 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Burry Port

0 0.225 0.45 0.9 Km

Burry Port - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area.	High	Ongoing	Low
M22	investigate options to reduce flood risk to properties within the overall community.	Med	Med	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register.	High	Ongoing	Low
M33	2 Policy Units identified for further review of potential alleviation action(s)	High	High	Med
M34	Continue to collaborate / assist DCWW progressing their Rainscape initiative.	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from Tidal Flooding	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.6 Bynea

Community Council(s)	Llanelli Rural
Councillor:	Derek Michael Cundy
Population:	4,380
Area	7.20 km^2
Population Density	608 people/ km^2

Area Description

Bynea Ward is situated to the east of Llanelli Town Centre and contains a mix of urbanised areas predominantly residential with some industrial use and with rough grazing agricultural land. Soils are generally relatively impermeable.

This area was previously subject to extensive coal mining.

Flood History

No significant Flood History from surface water /Ordinary Watercourse.

The Dafen Pill flows through this ward and has caused flooding in the Erw Las and the Berwick Roads Roundabout areas.

Policy Units in Ward

There are 2 No. Policy Units identified in this Ward:

- Cwmfelin Road
- Berwick Road

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	44	35	0
Medium Risk	71	55	0
Low Risk	190	139	1

Breakdown by Policy Unit refer to Appendix E.

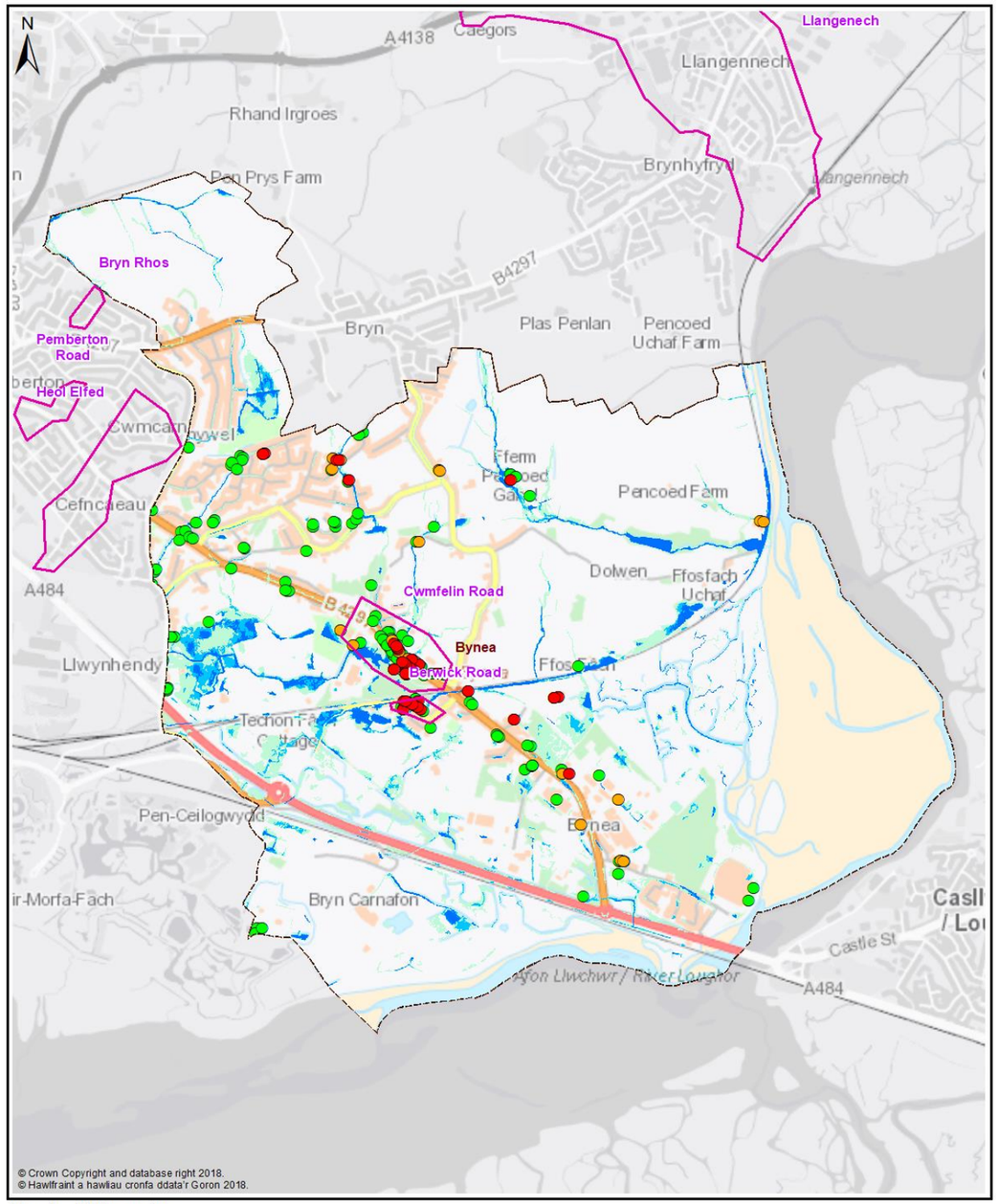
Other risk management authorities

DCWW has identified flood risk at the following locations

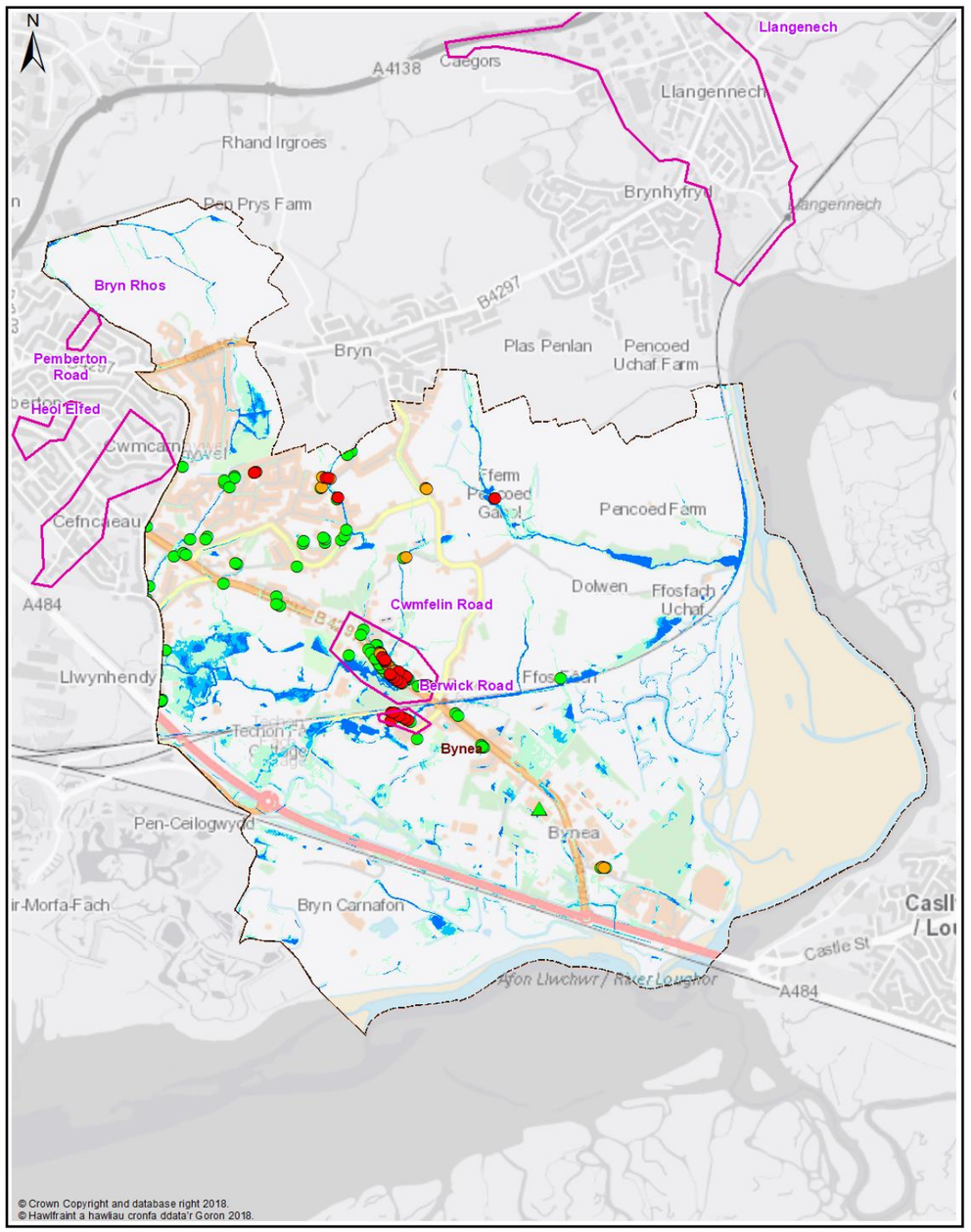
- Amanwy, Llanelli
- Clos Bryn Haul, Llwynhendy
- ClosyBerllan, Llwynhendy
- Cwmfelin Road, Llanelli

At the present time DCWW are investing large sums of money in Llanelli Project and have carried out works to improve the trunk sewer in this area. CCC will continue to work in partnership with DCWW.

NRW will continue to manage flood risk from the Dafen Pill.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

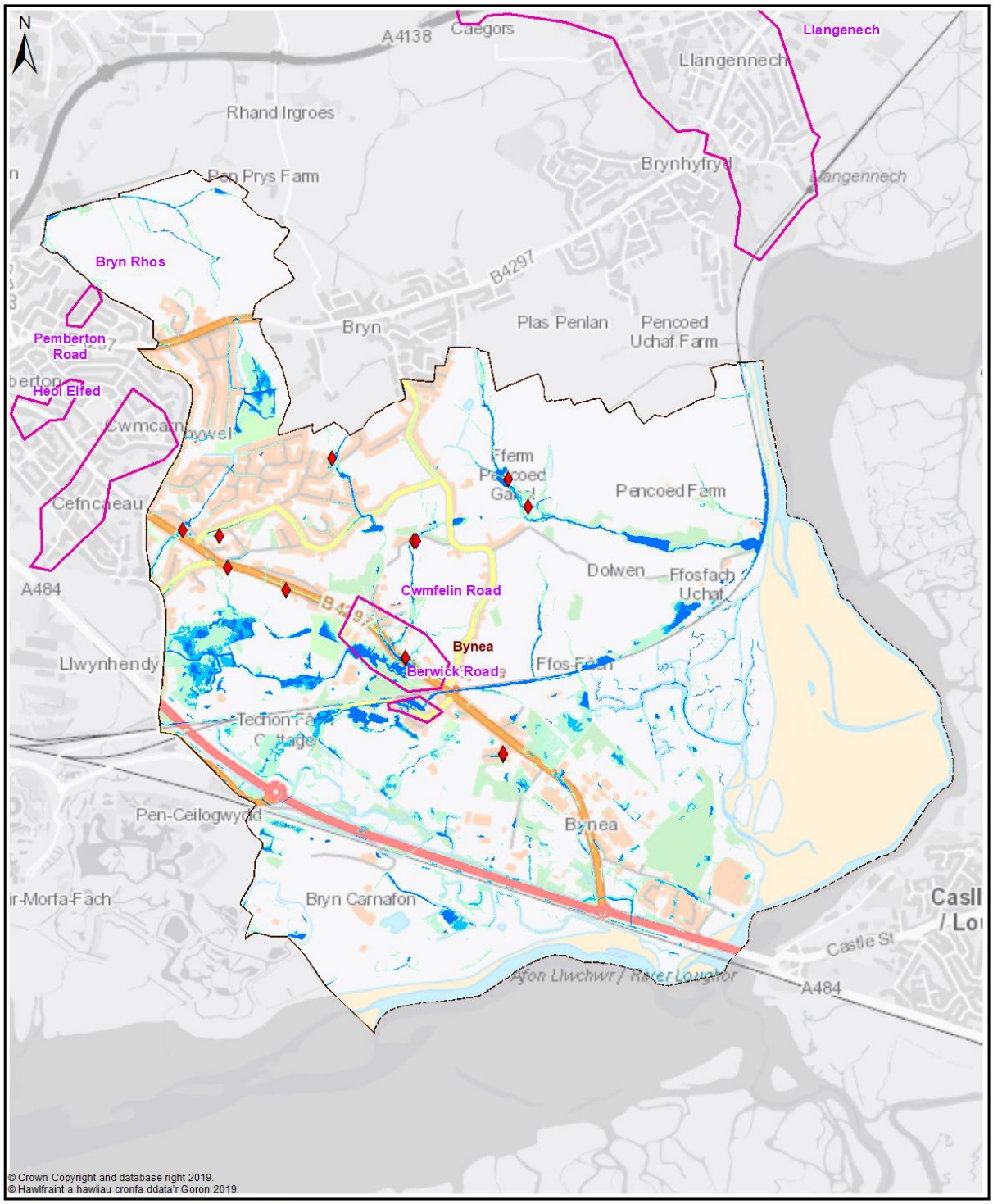
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Bynea

0 0.275 0.55 1.1 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Bynea

0 0.275 0.55 1.1 Km

Bynea - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M33	Cwmfelin Road & Berwick Road Policy Units identified for further review of potential alleviation action(s)	High	High	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.7 Carmarthen Town North

Community Council(s)	Carmarthen Town
Councillor:	Peter Hughes Griffiths Gareth Owen Jones
Population:	5,180
Area	5.59 km^2
Population Density	926 people/ km^2

Area Description

Located to the north of Carmarthen town centre, this ward comprises urban areas with large residential developments and pastoral agricultural land beyond. Glangwili Hospital is located within this ward. This has been identified as an area at-risk from surface water mapping but CCC is not aware of flooding at the hospital.

Flood History

There is no history of significant flooding in this ward

Policy Units in Ward

There is one Policy Unit identified in this Ward:

- Glangwili Hospital

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	37	28	0
Medium Risk	85	60	0
Low Risk	286	218	2

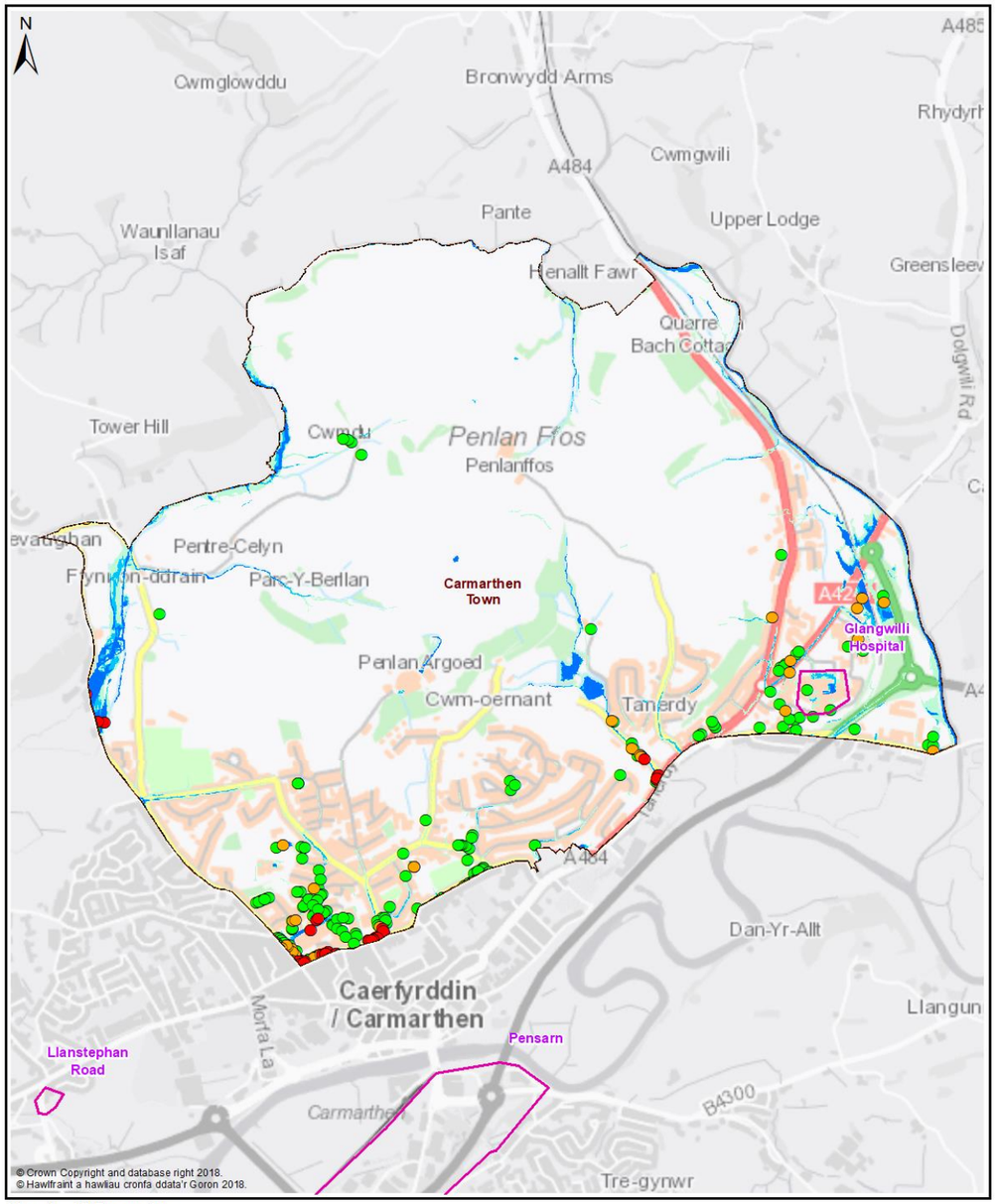
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

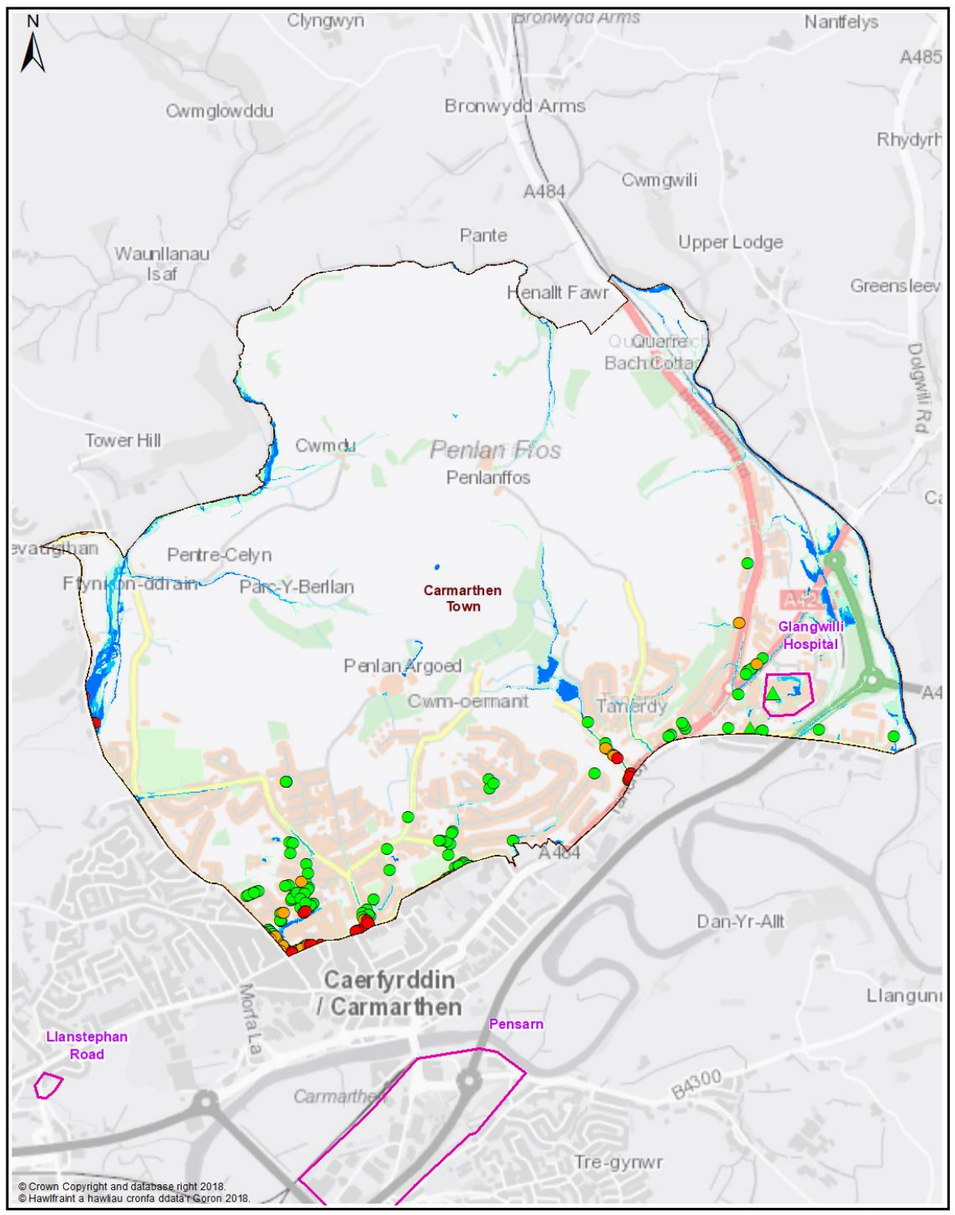
DCWW has combined sewers in this ward draining significant areas. DCWW has identified flood risk at the following locations

- Longacre Road, Carmarthen
- Trevaughan, Carmarthen
- Wellfield Road, Carmarthen

This ward is bounded by the Afon Gwili on its eastern boundary. NRW will continue to take the lead and manage the flood risk from the Afon Gwili.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

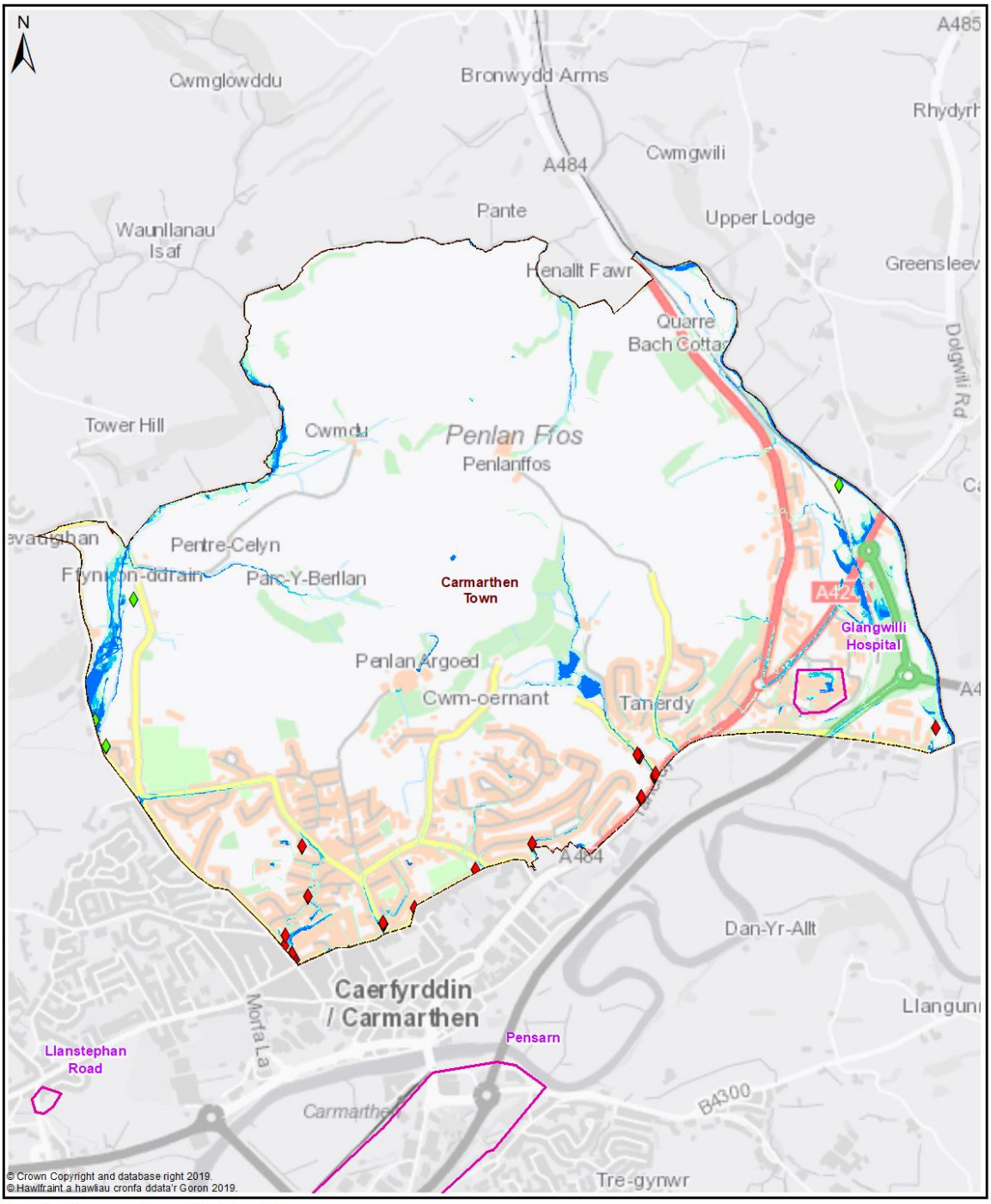
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Carmarthen Town North

0 0.25 0.5 1 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Carmarthen Town

0 0.25 0.5 1 Km

Carmarthen Town North - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Low
M33	Policy Unit identified for further review of potential alleviation action(s)	High	High	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Ensure flood risk is identified within Emergency Plans for access to Glangwili Hospital - Low Risk event	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.8 Carmarthen Town South

Community Council(s)	Carmarthen Town
Councillor:	Alun Lenny Jeffery Thomas
Population:	3,729
Area	6.79 km^2
Population Density	549 people/ km^2

Area Description

This Ward comprises the Southern part of Carmarthen town including the town centre and Johnstown. Land use in this ward comprises urban areas with retail residential developments, light industrial in Johnstown including the Mart. Outside of the urban areas land use is predominately pastoral agricultural land.

This Ward is bounded by the Tywi River and contains the Tawelan Brook, Nant y Ci and a short section of the Afon Gwili.

Flood History

There has been extensive flooding in this Area from the Tawelan Brook, Nant y Ci and Tywi River. Examination of the NRW flood maps show that the main fluvial flood risk is from Main Rivers in this area this. Such flooding is managed by NRW and is outside the scope of this report.

Policy Units in Ward

There is one Policy Unit identified in this Ward:

- Llansteffan Road

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	161	54	1
Medium Risk	267	100	2
Low Risk	587	278	3

Breakdown by Policy Unit refer to Appendix E.

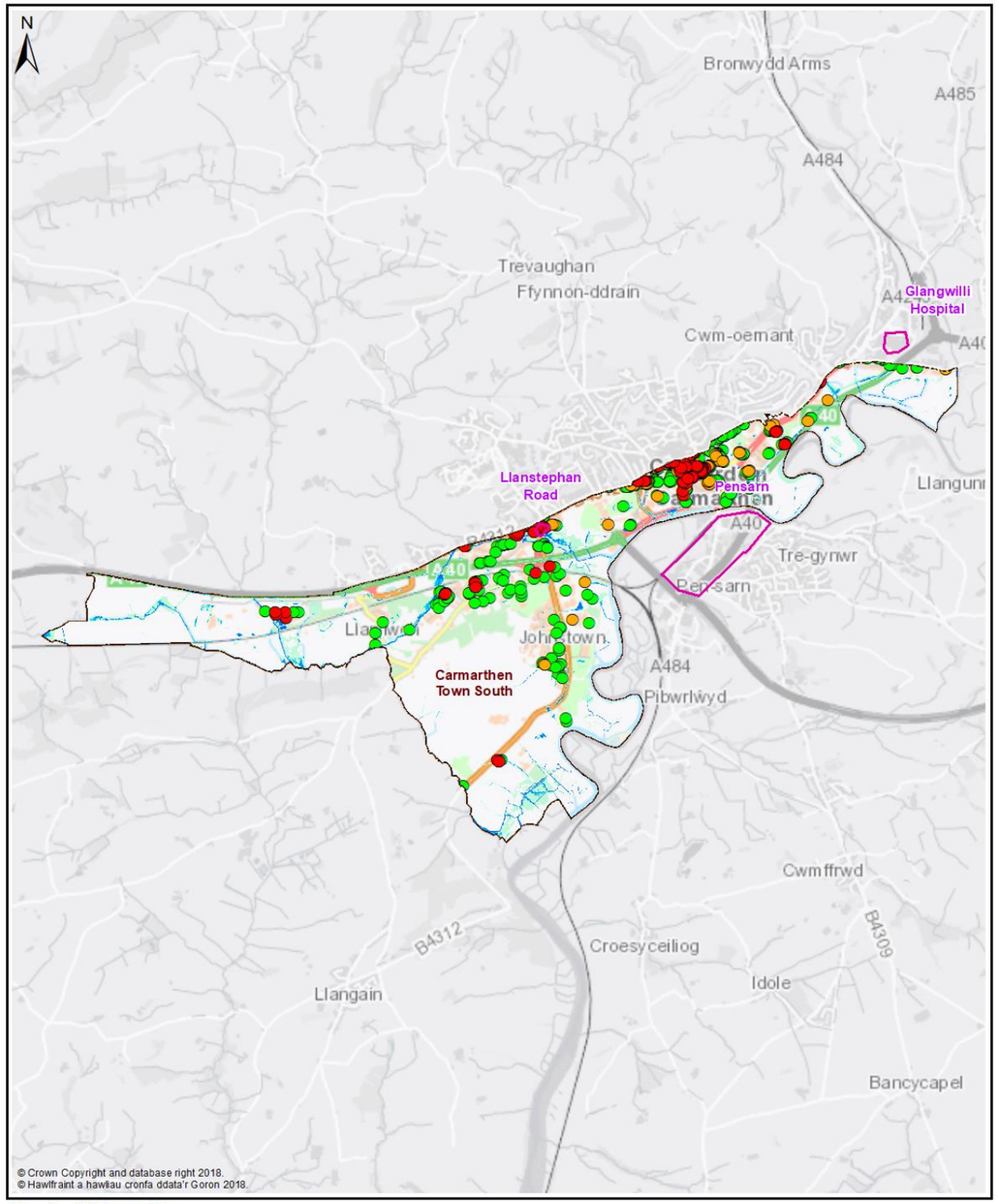
Other risk management authorities

DCWW has a number of large pumping stations, sewerage treatment works and a network of combined sewers which provide drainage for the surface water from a large proportion of this ward.

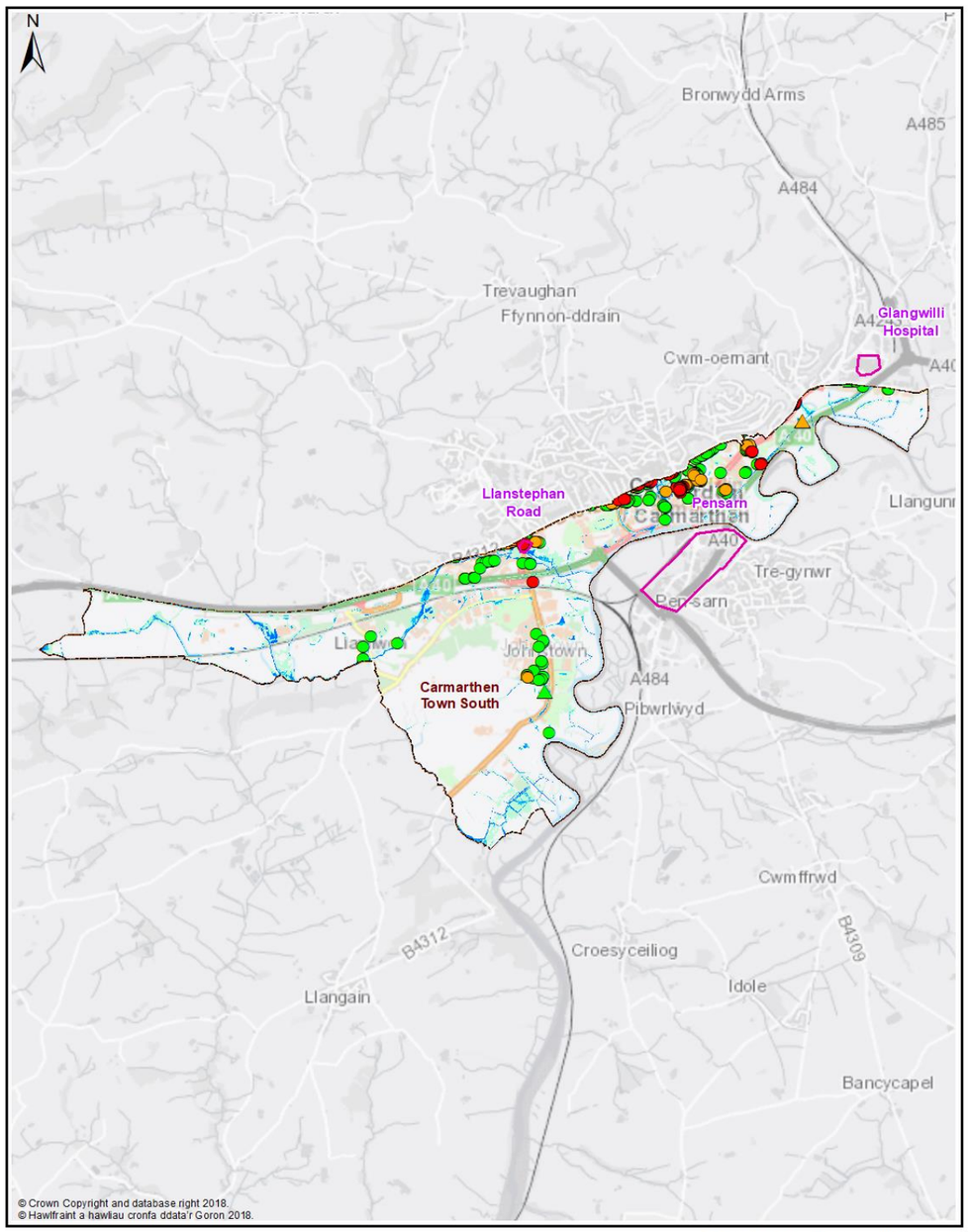
DCWW has identified flood risk at the following locations:

- Glantawelan, Johnstown
- Llansteffan Road, Johnstown
- John Street, Carmarthen
- The Quay, Carmarthen

NRW will continue to take the lead and manage the flood risk from the Towy River, Tawelan Brook, Nant y Ci and the Afon Gwili.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

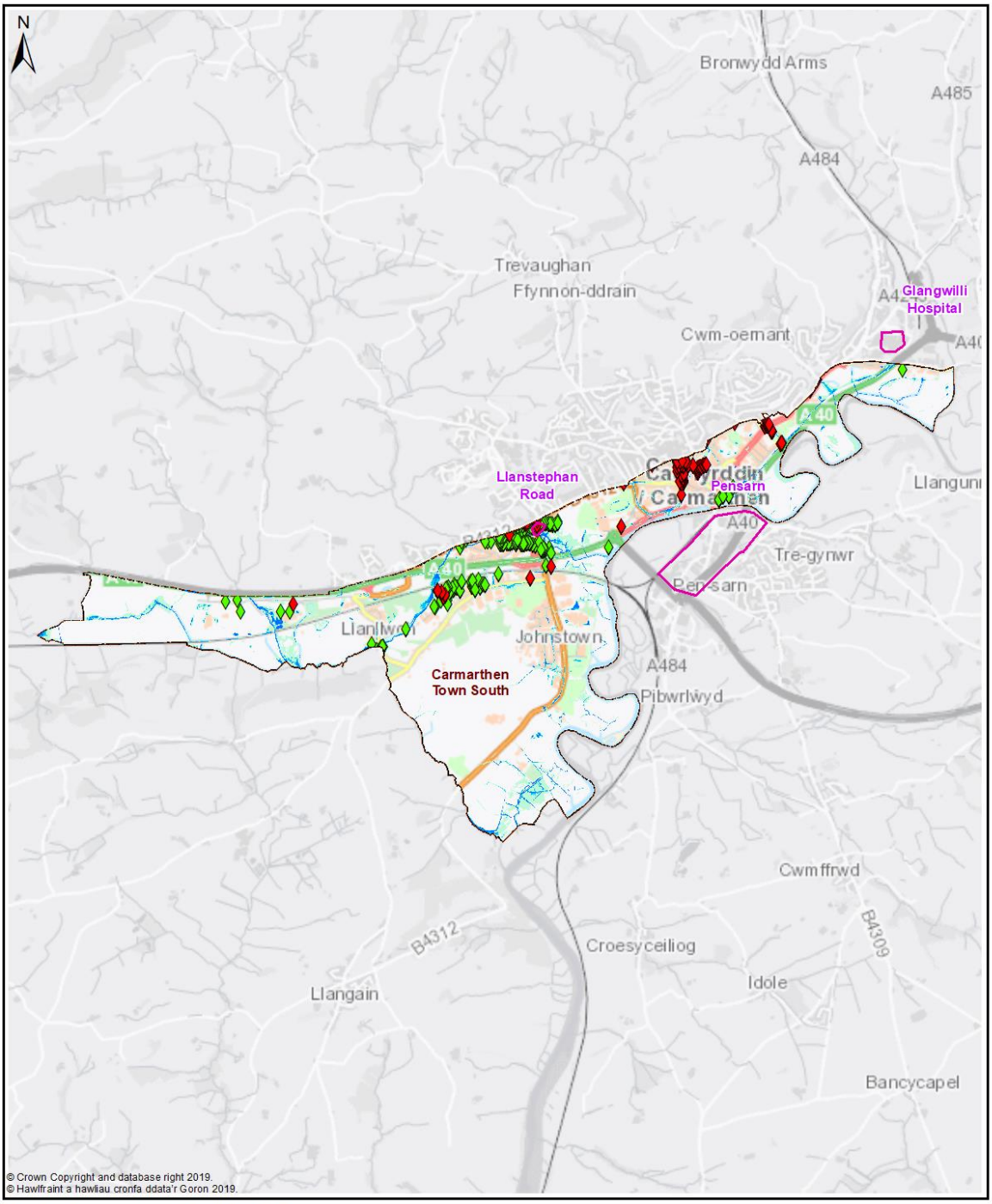
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Carmarthen Town South

0 0.5 1 2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Carmarthen Town South

0 0.5 1 2 Km

Carmarthen Town South - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M22	Investigate options to reduce flood risk to community services	Med	Med	Med
M33	1 Policy Unit identified for further review of potential alleviation action(s)	High	High	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.9 Carmarthen Town West

Community Council(s)	Carmarthen Town
Councillor:	Alan Speake Tom Defis
Population:	5,454
Area	8.64 km^2
Population Density	631 people/ km^2

Area Description

Located to the north west of Carmarthen town centre this ward comprises urban areas with large residential developments Trinity St David and the Council Offices with pastoral agricultural land beyond.

Flood History

There is no history of significant flooding in this ward.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

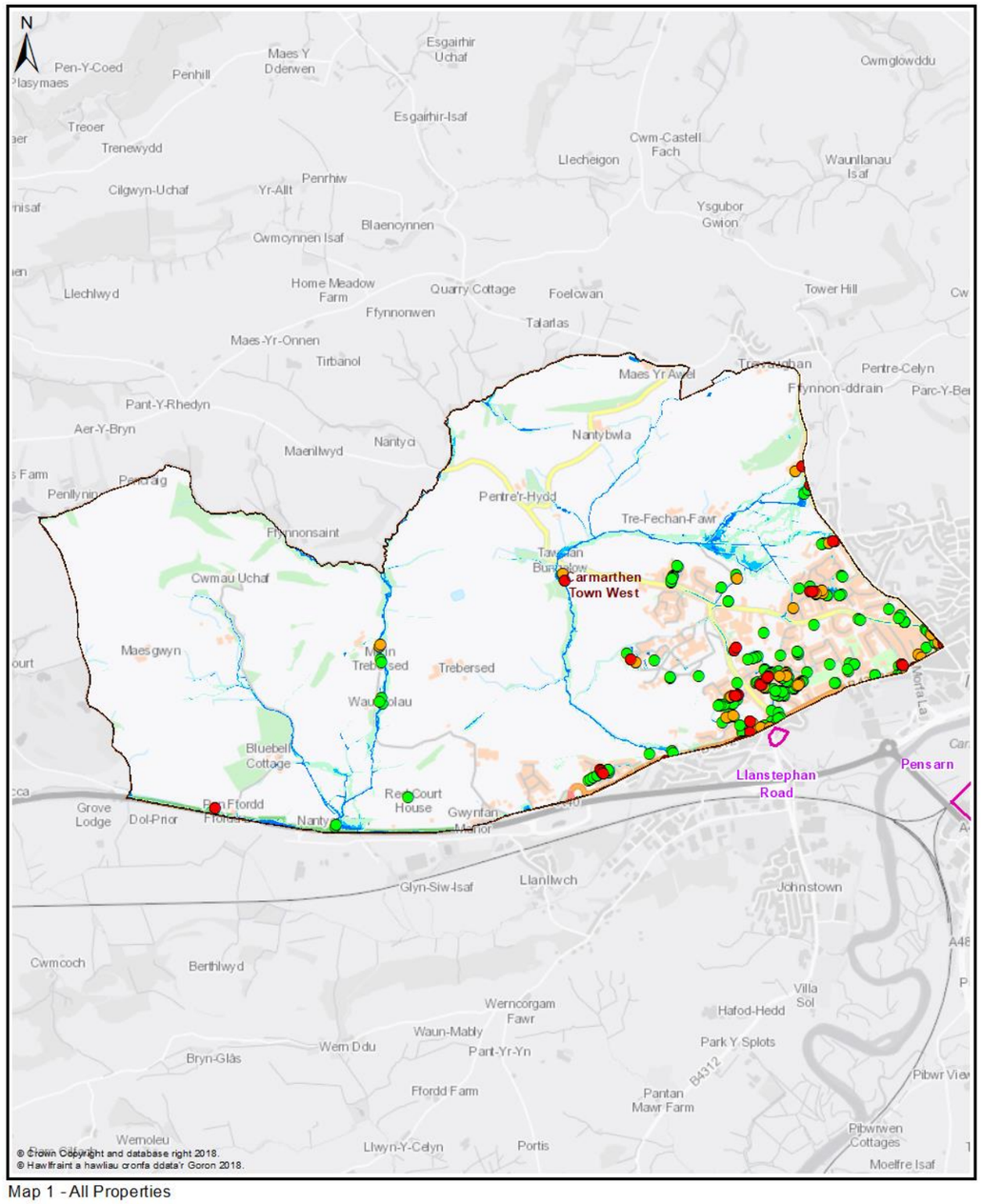
Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	31	20	0
Medium Risk	81	55	1
Low Risk	311	238	1

Breakdown by Policy Unit refer to Appendix E.

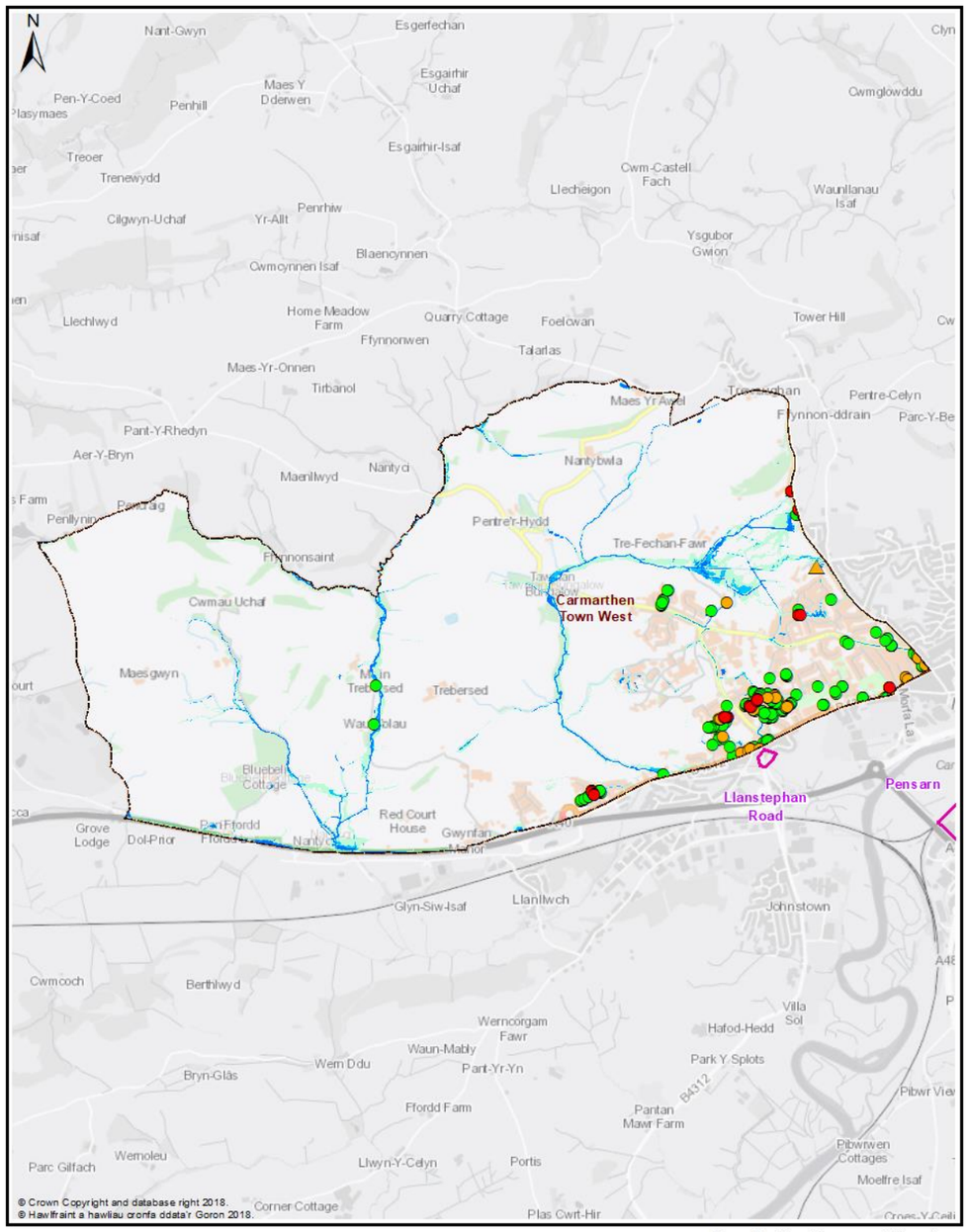
Other risk management authorities:

DCWW has combined sewers in this ward draining significant areas. DCWW has not identified any flood risk

This ward is bounded by the Afon Gwili on its eastern boundary. NRW will continue to take the lead and manage the flood risk from the Afon Gwili.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

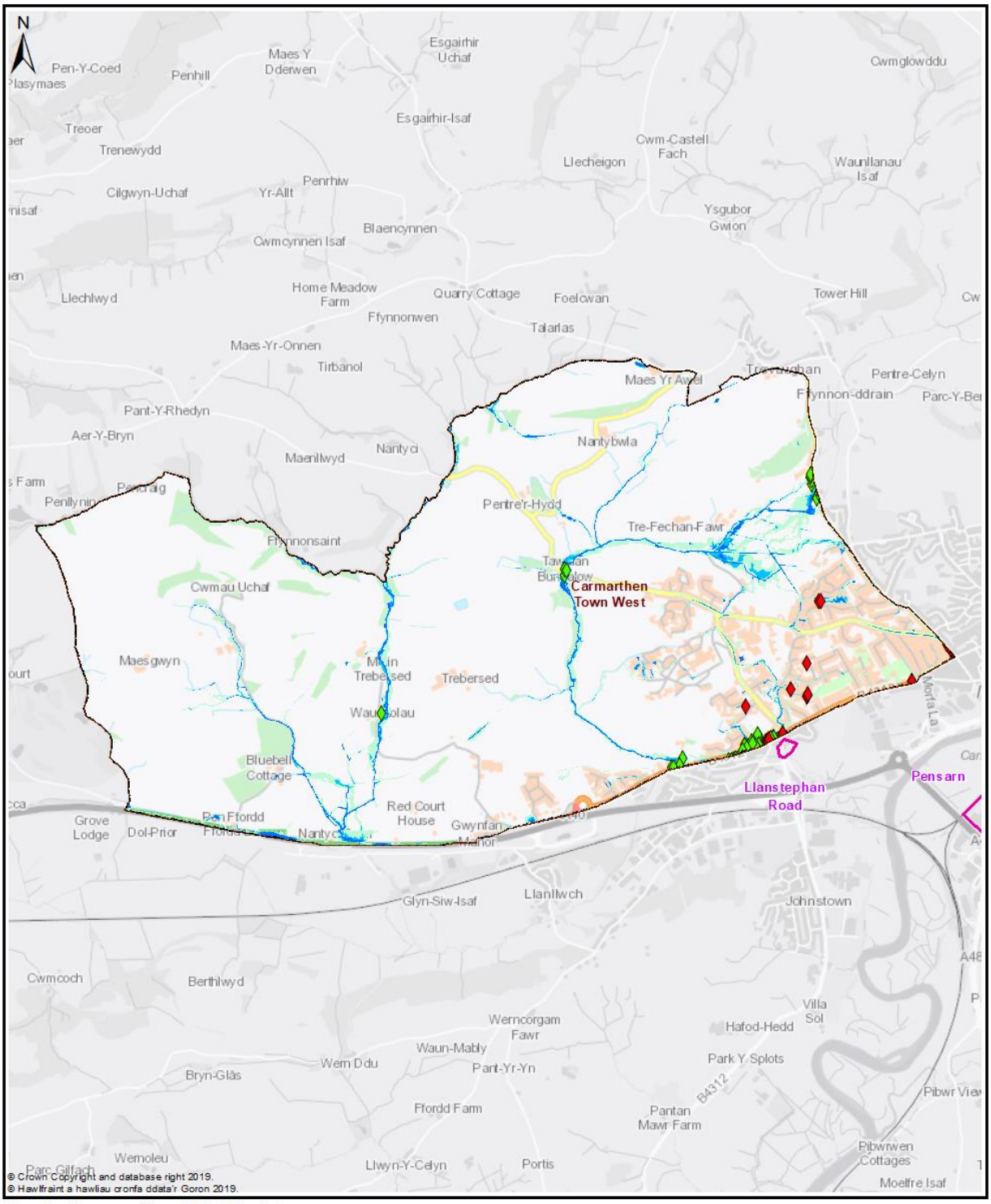
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Carmarthen Town West

0 0.375 0.75 1.5 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Carmarthen Town West

0 0.375 0.75 1.5 Km

Carmarthen Town West - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.10 Cenarth

Community Council(s)	Newcastle Emlyn Town Cenarth
Councillor:	Hazel Evans
Population:	2,178
Area	46.42km^2
Population Density	47 people/km^2

Area Description

Predominantly a rural ward in the north-west of the County containing the market town of Newcastle Emlyn.

Predominantly pastoral agricultural land use. The ward is bounded to the north by the River Tyfi and to the east by the Afon Cych.

Flood History

Newcastle Emlyn - Flooding affects the main street from the stream at Quarry Ffinant and School Road.

Cenarth - Flooding from a culverted watercourse running through the village.

Policy Units in Ward

There is one Policy Unit identified in this Ward:

- Newcastle Emlyn

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	99	37	0
Medium Risk	130	47	1
Low Risk	248	108	2

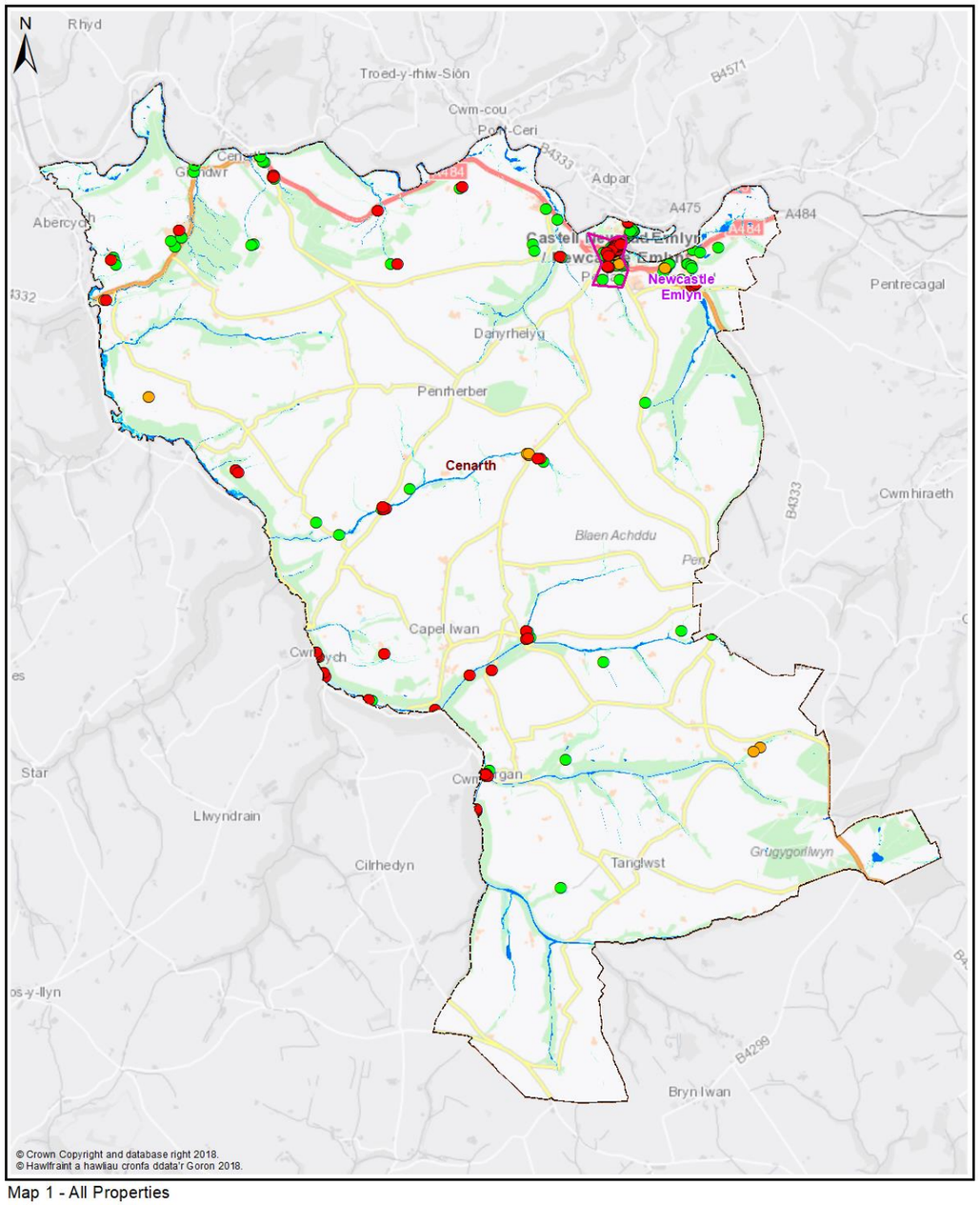
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

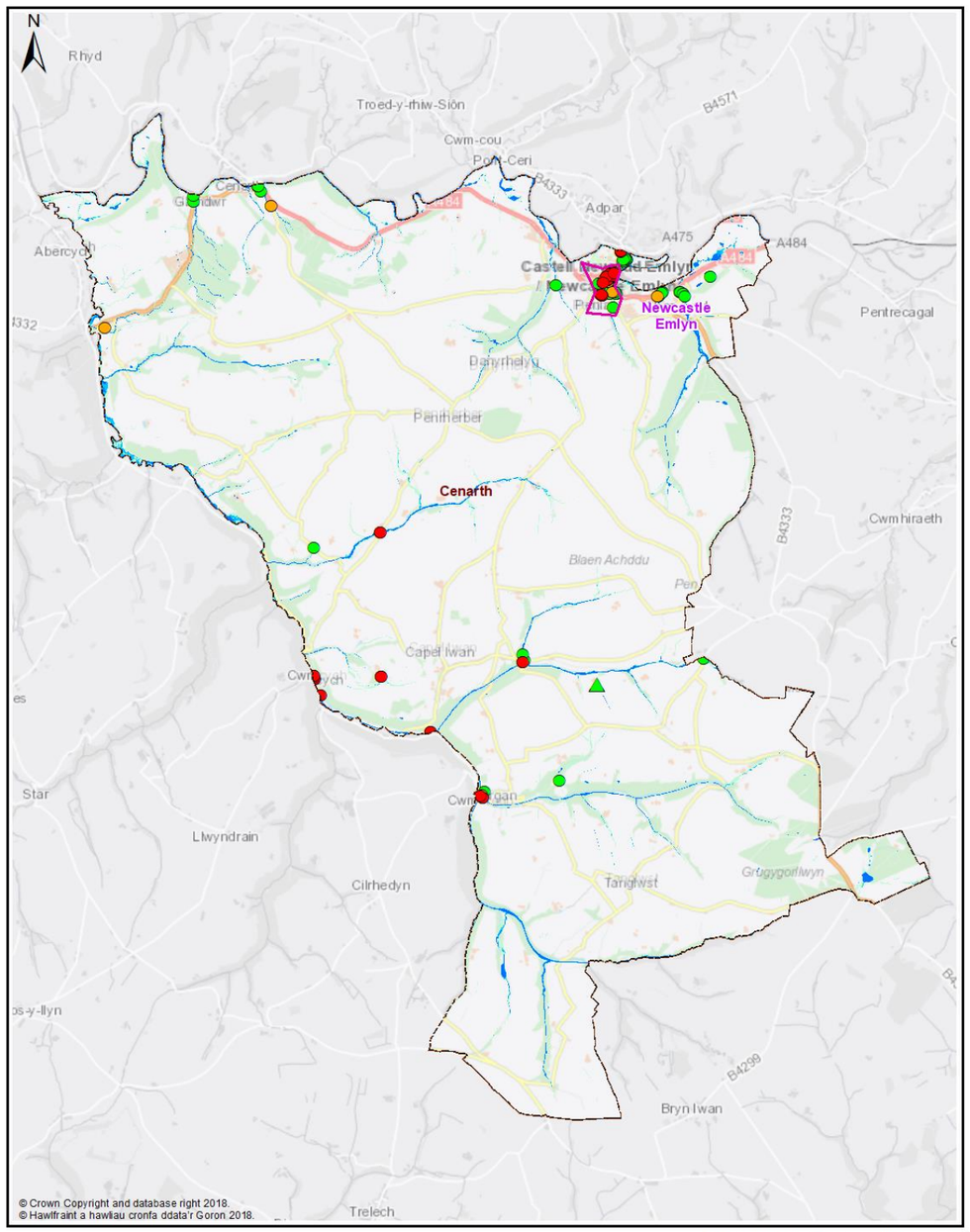
DCWW have identified flood risk at the following locations

- Bridge Street, Newcastle Emlyn
- Carmarthen Road, Newcastle Emlyn
- Ebenezer Street, Newcastle Emlyn
- Church Lane, Newcastle Emlyn
- Parc Hafan, Newcastle Emlyn

NRW will continue to take the lead and manage the flood risk from the River Towy and Afon Cych.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

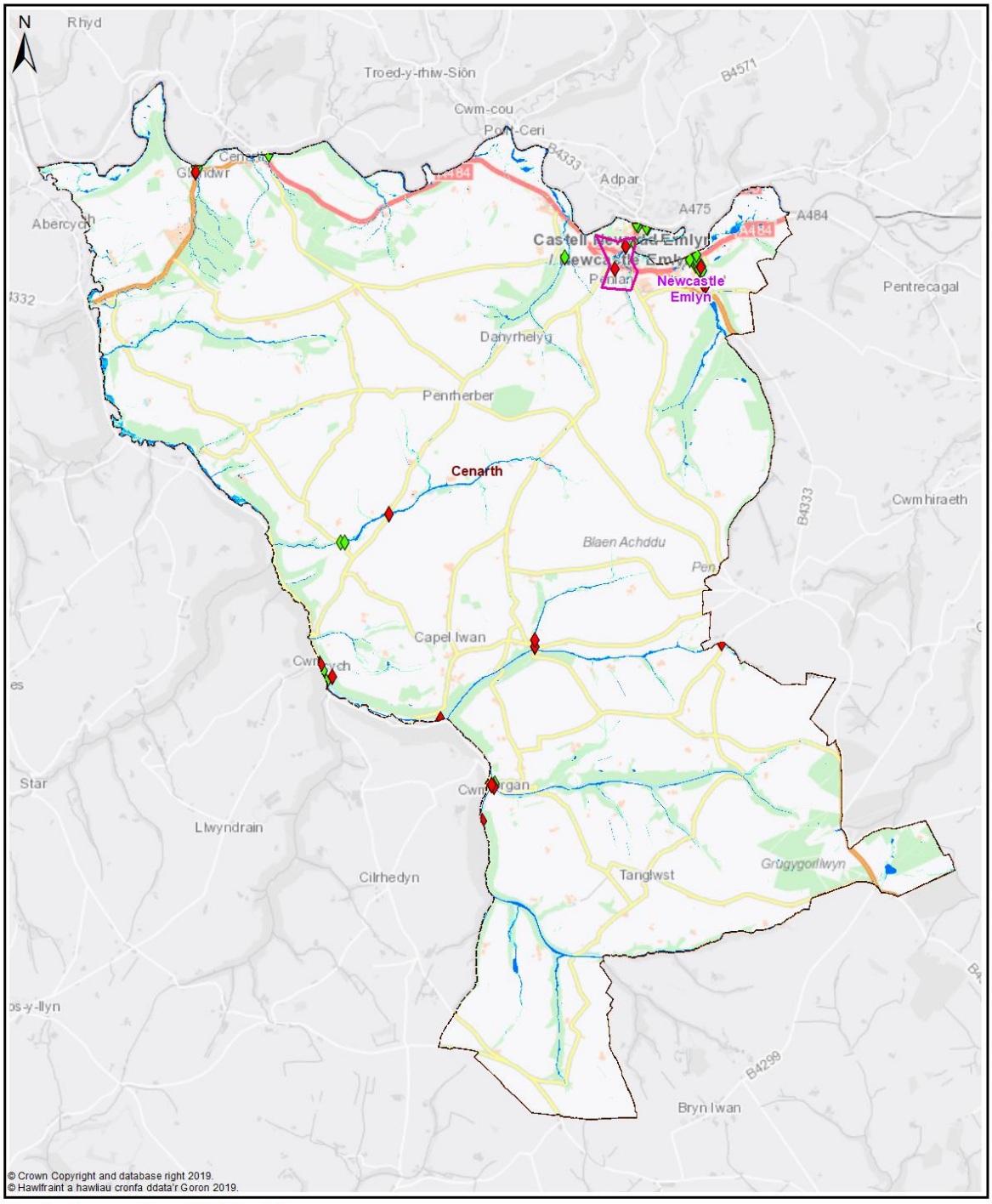
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Cenarth

0 0.5 1 2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Cenarth

0 0.5 1 2 Km

Cenarth - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area.	High	Ongoing	Low
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Low
M33	1 Policy Unit identified for further review of potential alleviation action(s)	High	Ongoing	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.11 Cilycwm Ward

Community Council(s)	Cilycwm Llanwrda Llansadwrn
Councillor:	Dafydd Owen Tomos
Population:	1,160 people
Area	127.1 km^2
Population Density	12 people/km^2

Area Description

Rural Area to the north of Llandovery containing pastoral farmland and areas of high moorland bounded on the east and south by the Towy River.

Flood History

No significant flood history from surface water/ Ordinary Watercourse.

Main river Flood risk at Llanwrda from the Dulais.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	31	3	0
Medium Risk	62	19	0
Low Risk	198	63	2

Breakdown by Policy Unit refer to Appendix E.

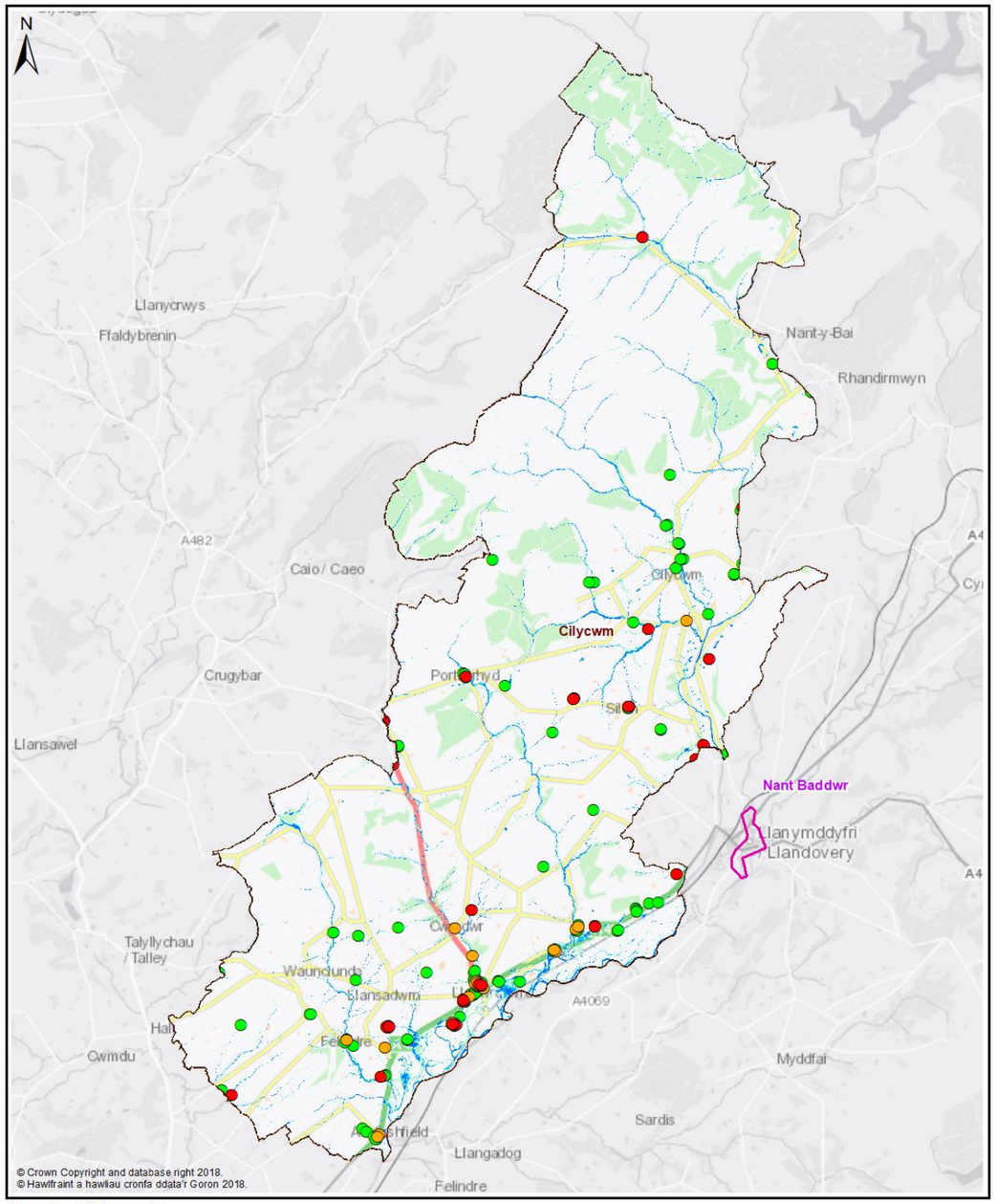
Other risk management authorities

DCWW has identified flood risk at the following locations

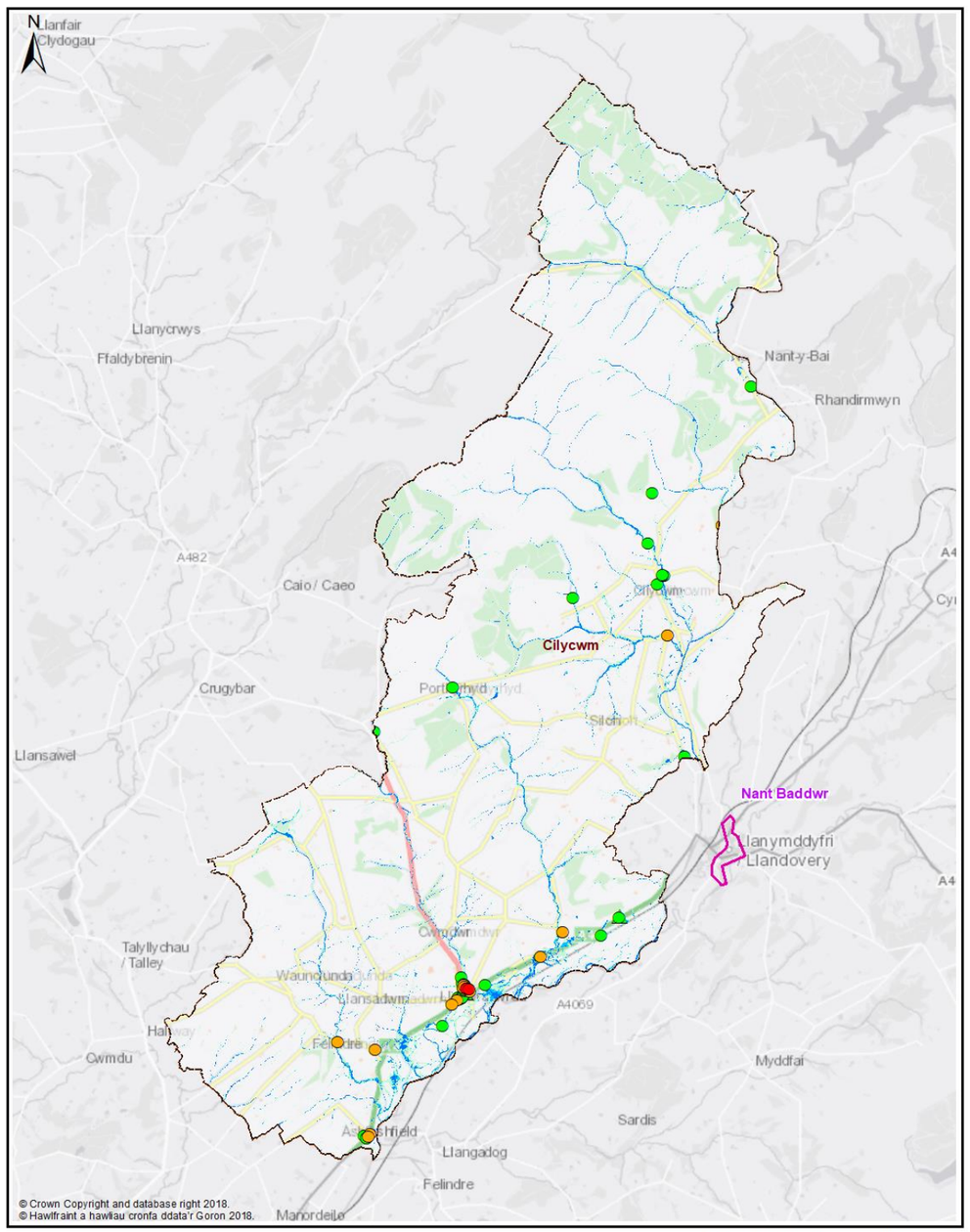
- Llanwrda

NRW

- NRW will continue to take the lead and manage the flood risk from the Towy and Dulais.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

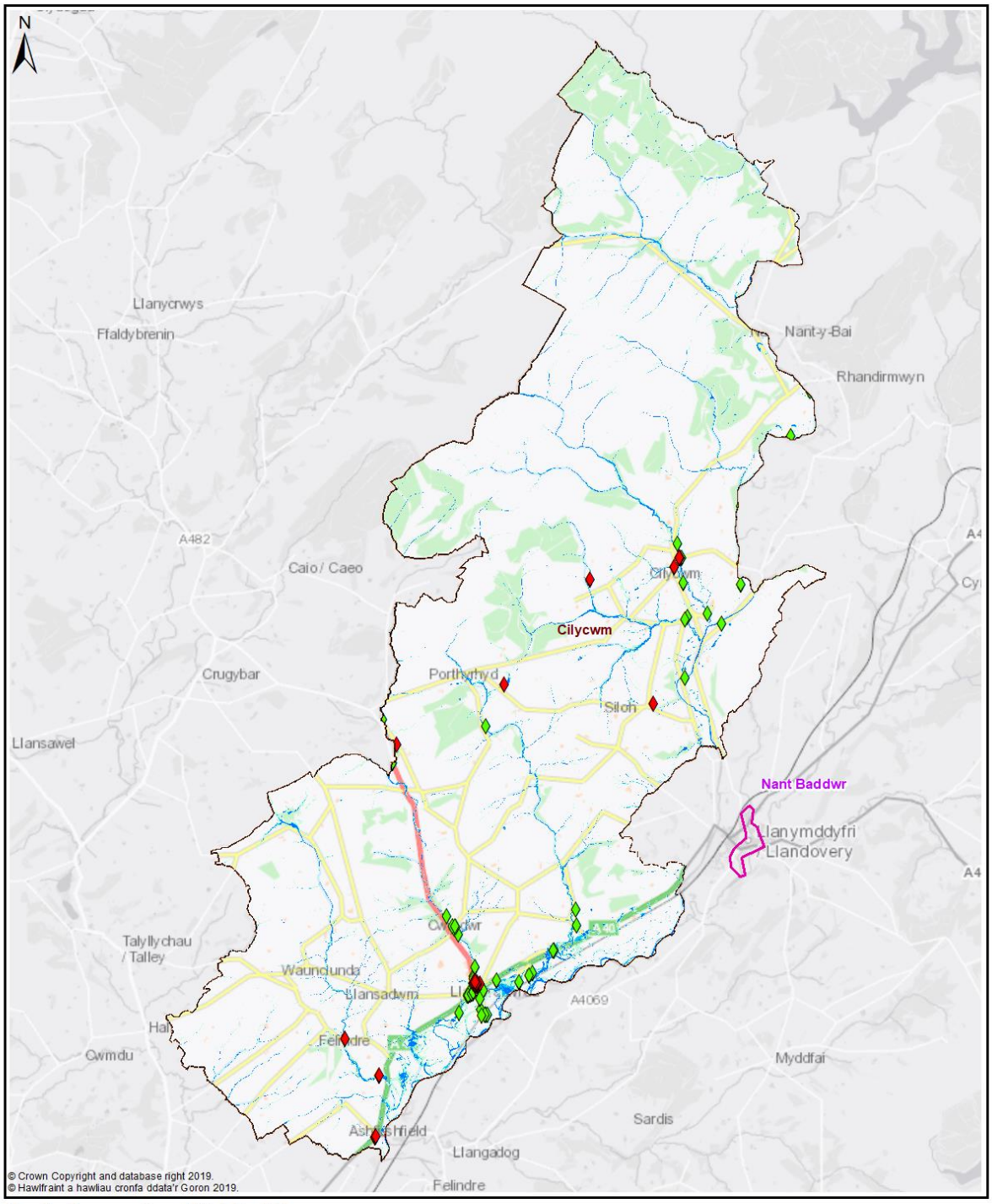
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Cilycwm

0 1.25 2.5 5 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Cilycwm

0 1.25 2.5 5 Km

Cilycwm - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.12 Cynwyl Elfed

Community Council(s):	Cynwyl Elfed Bronwydd Llanpumsaint Newchurch and Merthyr
Councillor:	Henry Irfon Jones
Population:	3,017 people
Area:	119.1 km^2
Population Density:	25 people/km^2

Area Description

Rural area to the north of Carmarthen containing the settlements of Cynwyl Elfed, Bronwydd, Llanpumsaint and Cwmduad

Land use predominately pastoral agriculture.

Flood History

No significant flood history from surface water/ Ordinary Watercourses.

Main river flood risk at Cynwyl Elfed, Bronwydd and Llanpumsaint.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	63	17	2
Medium Risk	89	26	2
Low Risk	205	81	2

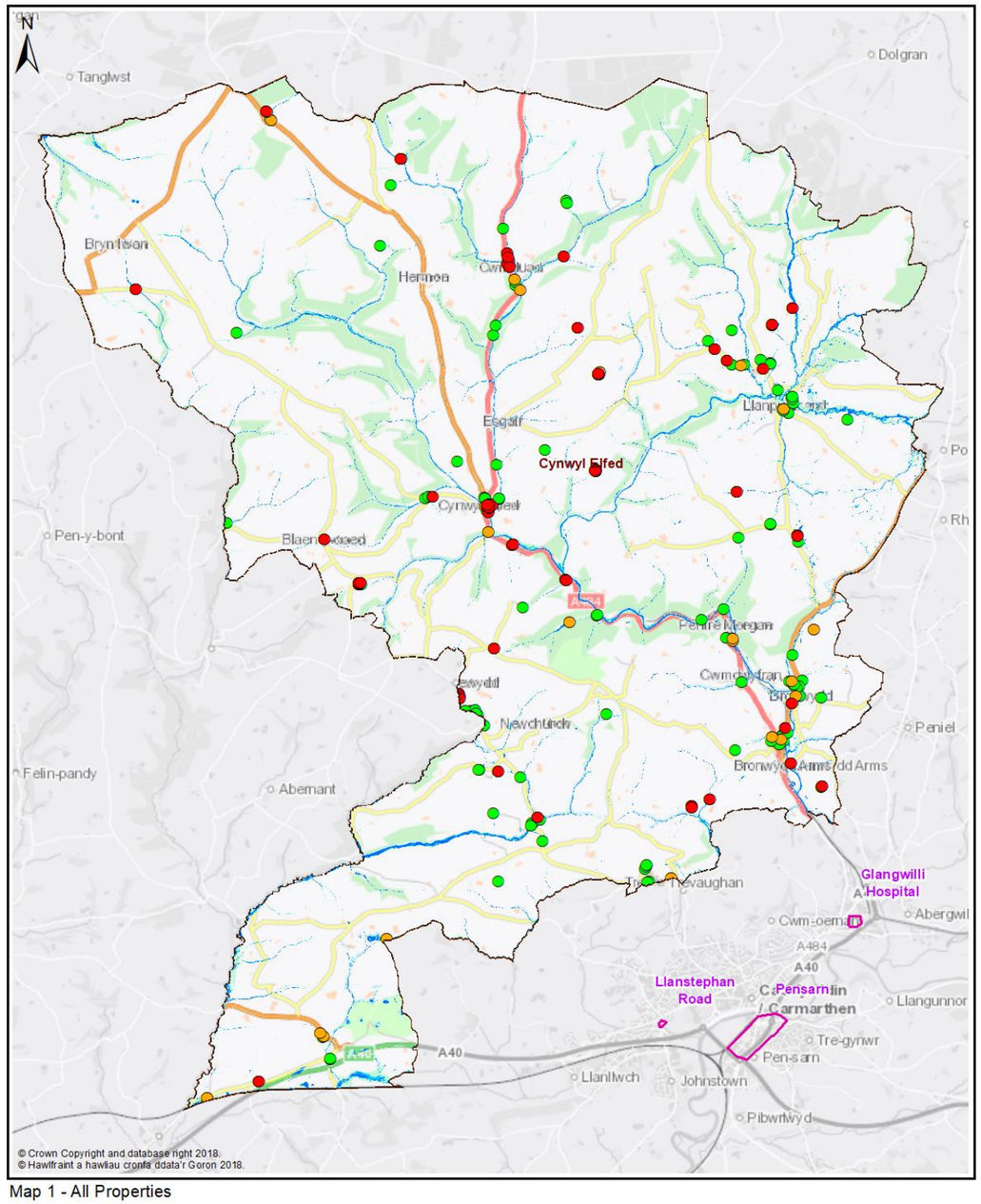
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

DCWW has identified flood risk at the following locations:

- Bronwydd Arms
- Llanpumsaint

NRW will continue to take the lead and manage the flood risk from the Rivers Gwili and Duad.



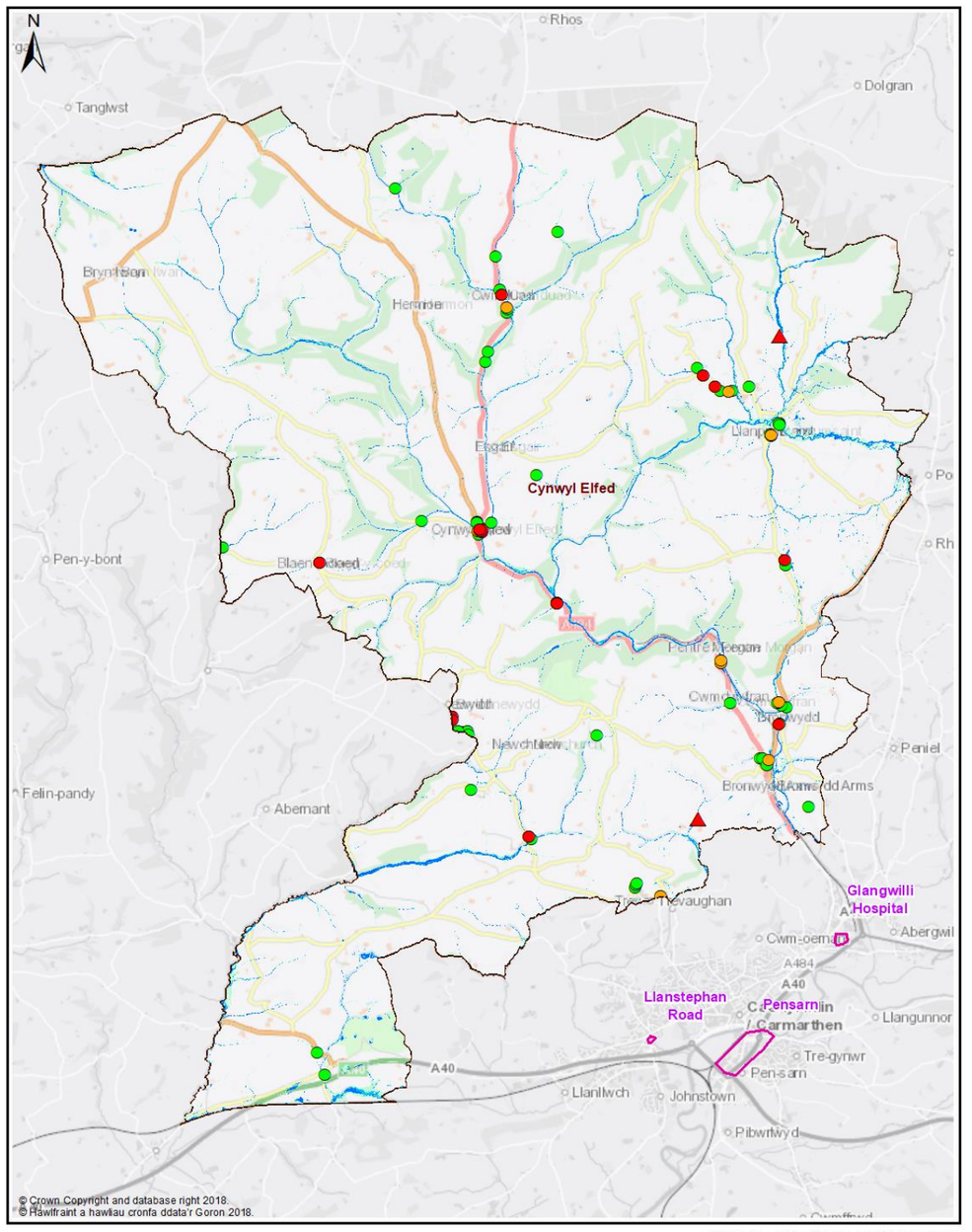
Map 1 - All Properties

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Cynwyl Elfed

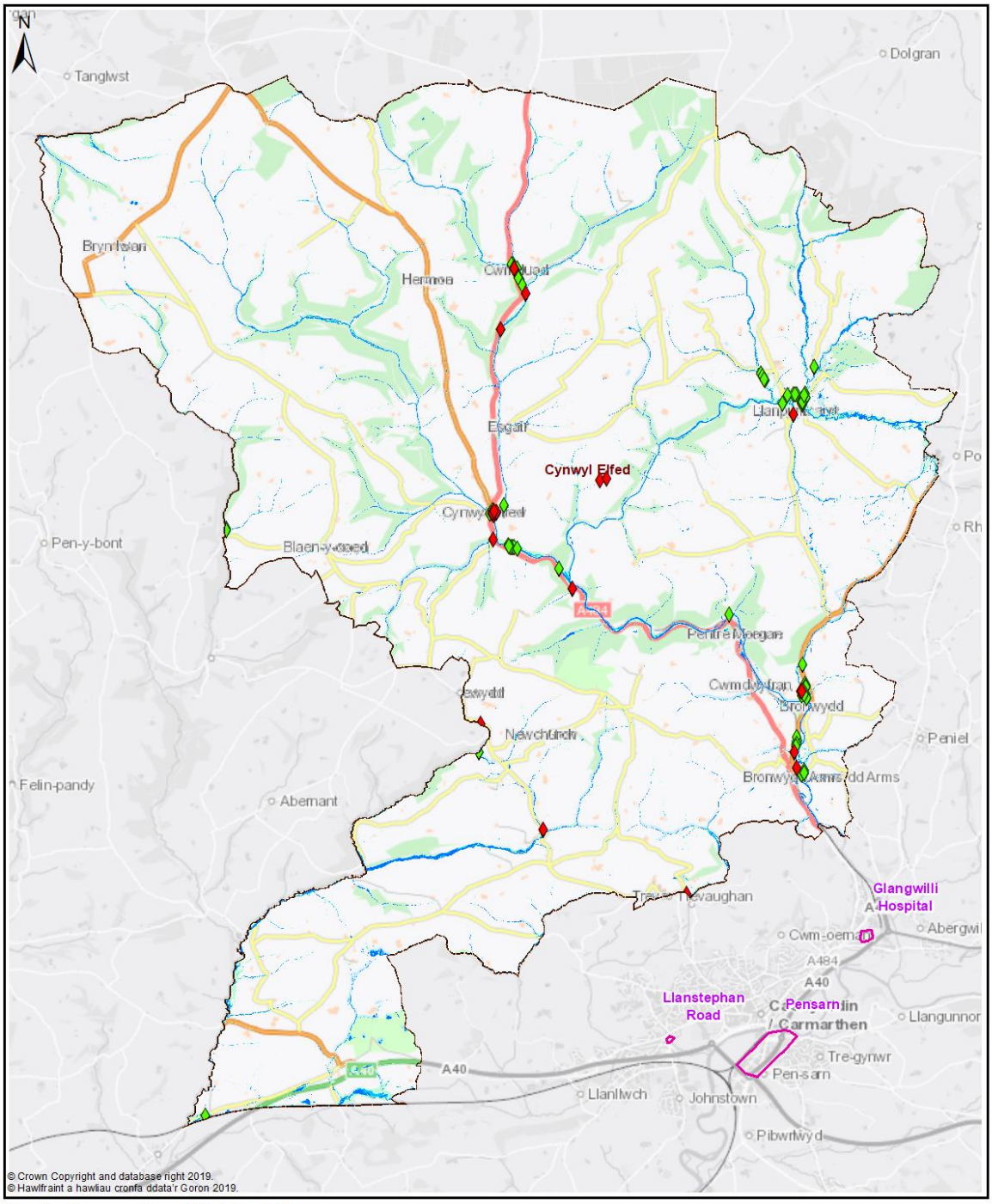
0 1 2 4 Km



Map 2 - Dwellings and Services

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Cynwyl Elfed

0 1 2 4 Km

Cynwyl Elfed - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M22	Investigate options to reduce flood risk to community services	Med	Med	Low
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.13 Cynwyl Gaeo

Community Council(s):	Ms Llinos Jenkins
Councillor:	Eirwyn Williams
Population:	1,525 people
Area	162.3 km^2
Population Density	9 people/km^2

Area Description

Rural area between Lampeter and Llandovery containing pastoral farmland, forestry and areas of high moorland.

Contains Main Rivers Cothi and Twrch.

Flood History

No significant flood history.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	36	7	0
Medium Risk	69	14	0
Low Risk	197	49	2

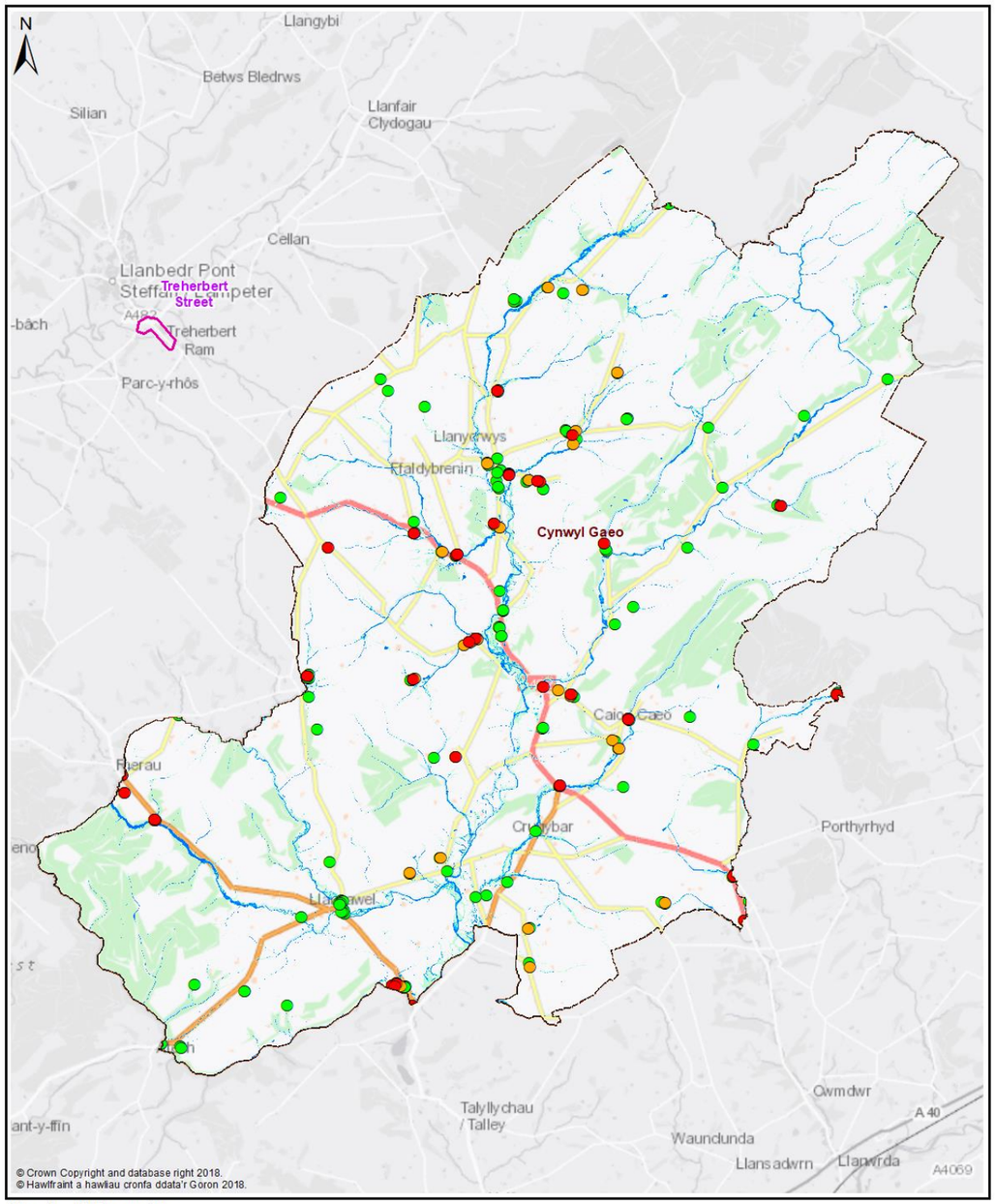
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

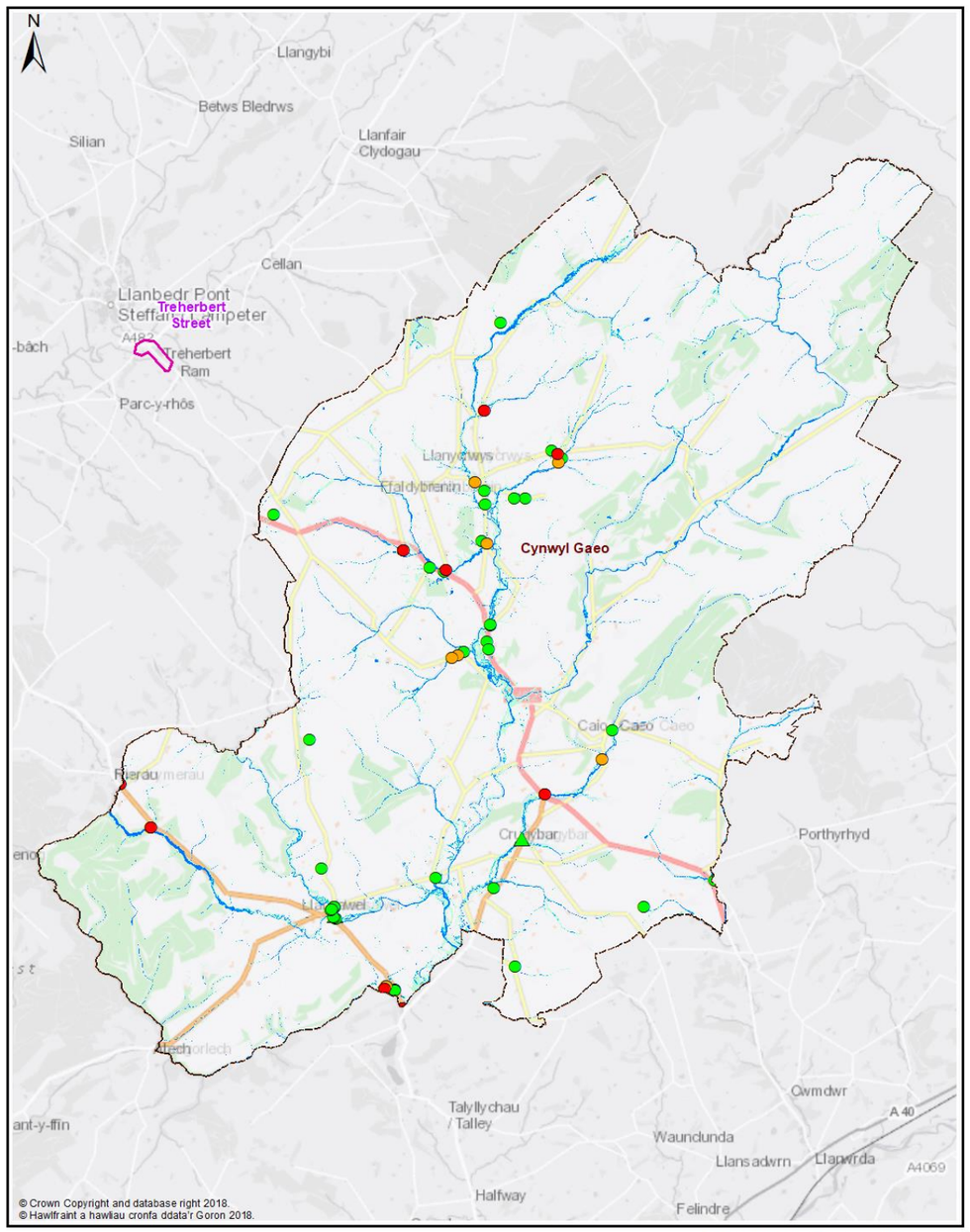
DCWW has identified flood risk at the following locations:

- Roman Road, Pumpsaint

NRW will continue to manage the flood risk from the River Cothi and Twrch.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

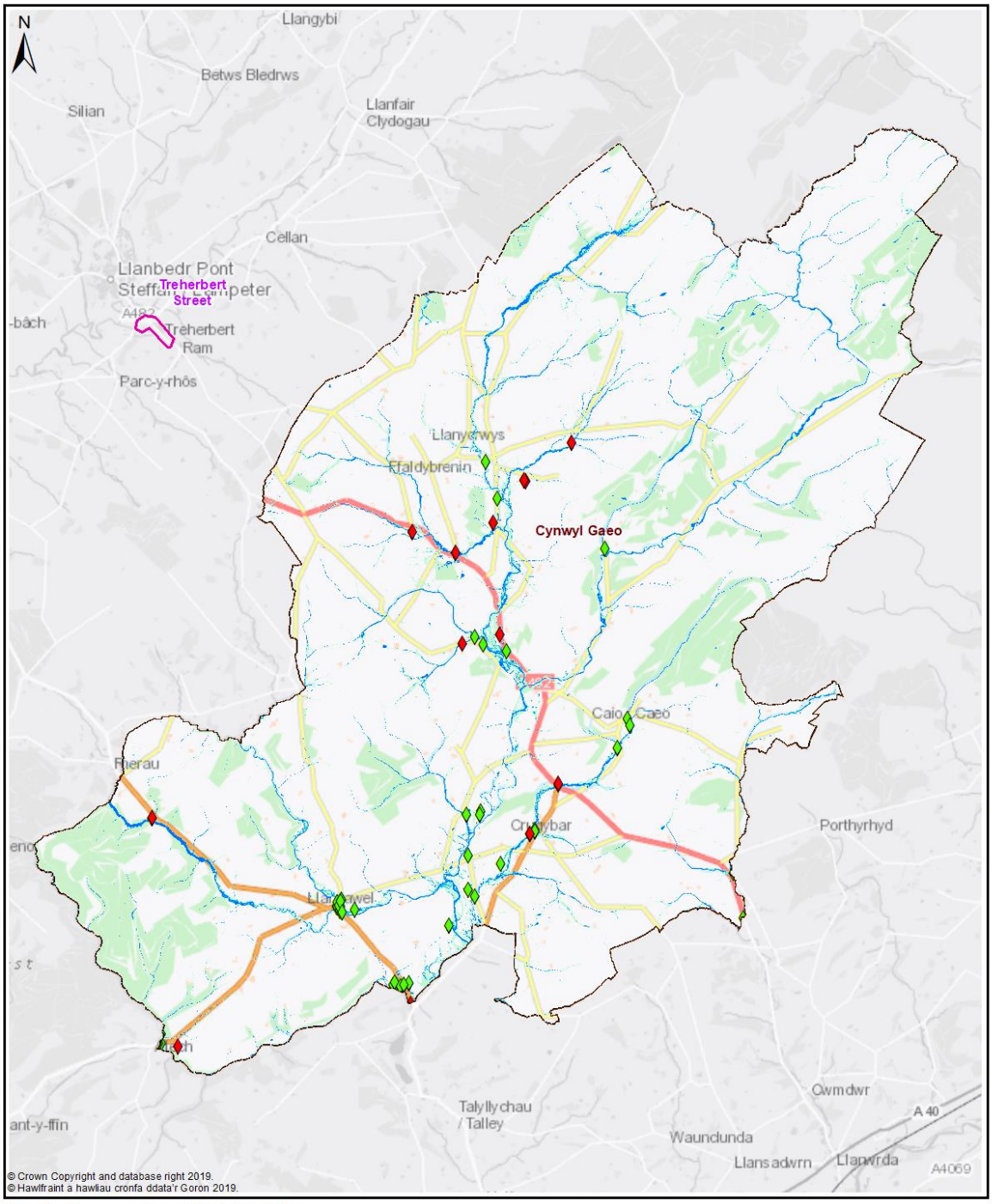
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Cynwyl Gaeo

0 1.25 2.5 5 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Cynwyl Gaeo

0 1.25 2.5 5 Km

Cynwyl Gaeo - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.14 Dafen

Community Council(s):	Llanelli Rural
Councillor:	Tegwen Devichand
Population:	3,612 people
Area	2.41 km^2
Population Density	1,505 people/km^2

Area Description

Urbanised area to the north east of Llanelli Town Centre. Contains a mix of residential and industrial land uses. This area includes Prince Philip regional Hospital.

The Main River Dafen runs through this ward.

Flood History

Exchange Row, New Street, Bryngwyn Road with extensive flooding from small local ordinary watercourses. Regular flood issues at Glyncoed Terrace that are a combination of Main River and surface water.

Policy Units in Ward

There are 4 No. Policy Units identified in this Ward:

- Exchange Row
- Prince Philip Hospital
- Bryngwyn Road
- Glyncoed Terrace

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	73	53	2
Medium Risk	120	79	7
Low Risk	277	205	7

Breakdown by Policy Unit refer to Appendix E.

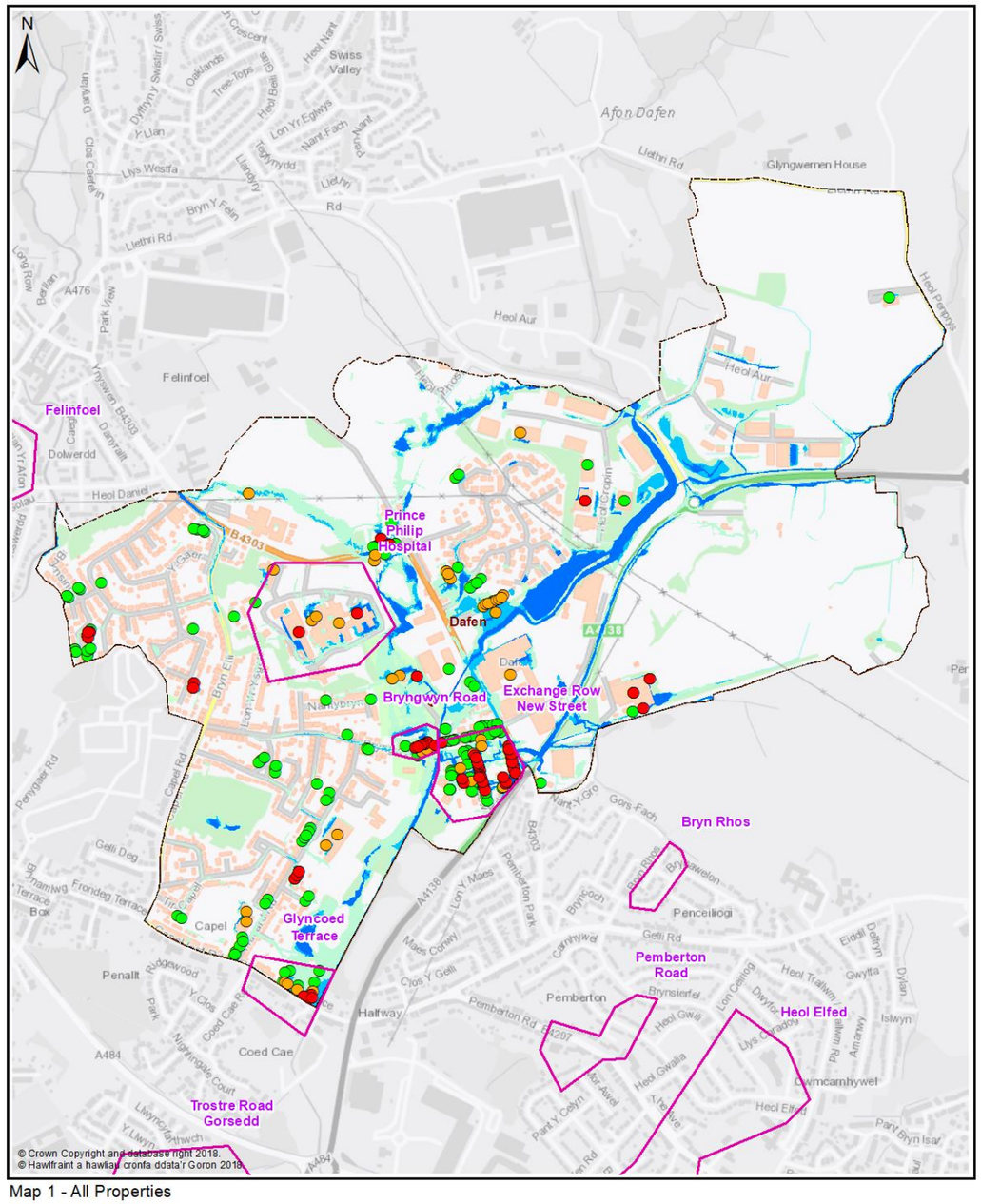
Other risk management authorities

DCWW has identified flood risk at the following locations

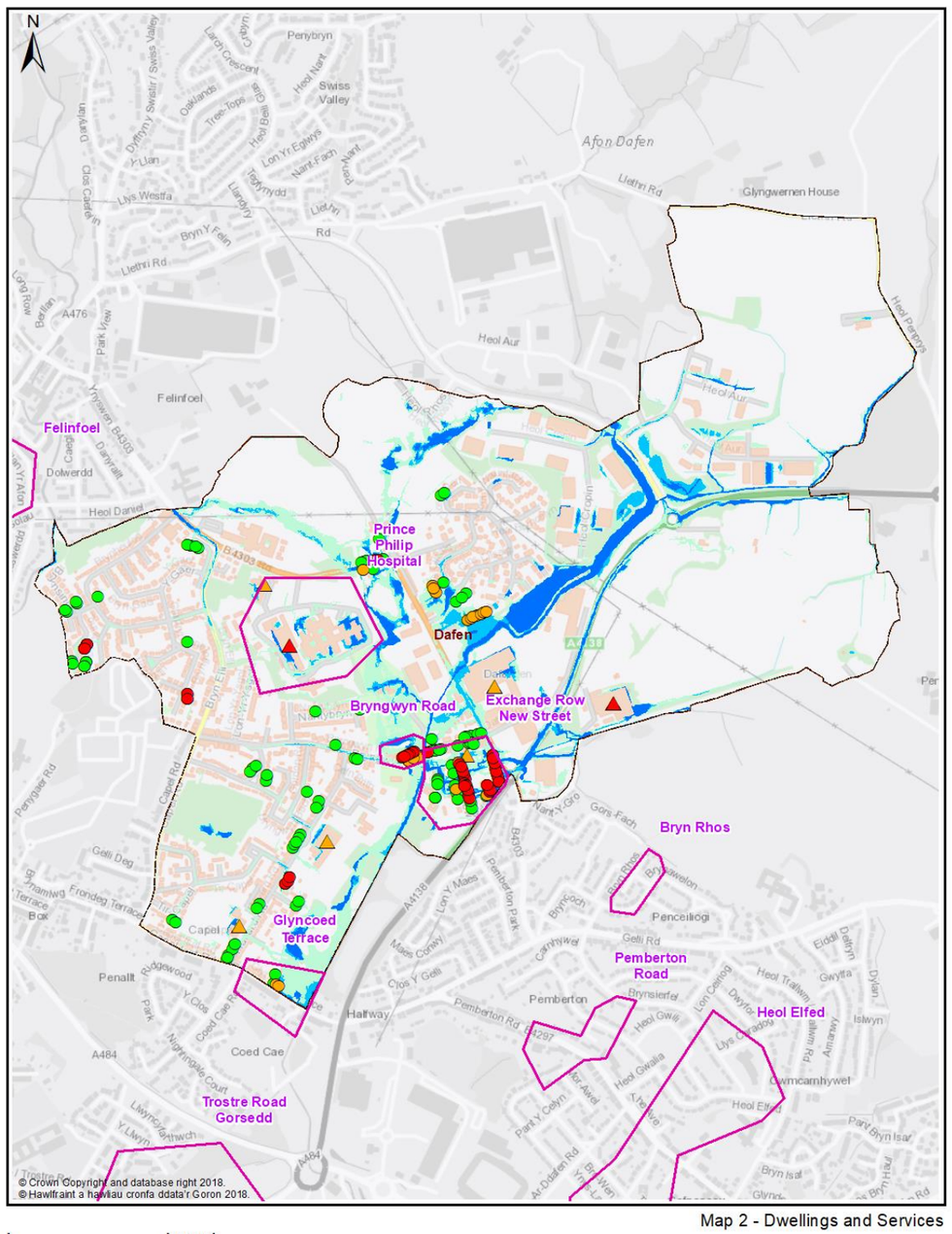
- Havard Road, Llanelli
- Y Gaer, Llanelli

At the present time DCWW are investing large sums of money in Llanelli in their Rainscape Project. CCC will continue to work in partnership with DCWW on this project

NRW will continue to manage the flood risk from the Dafen River.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

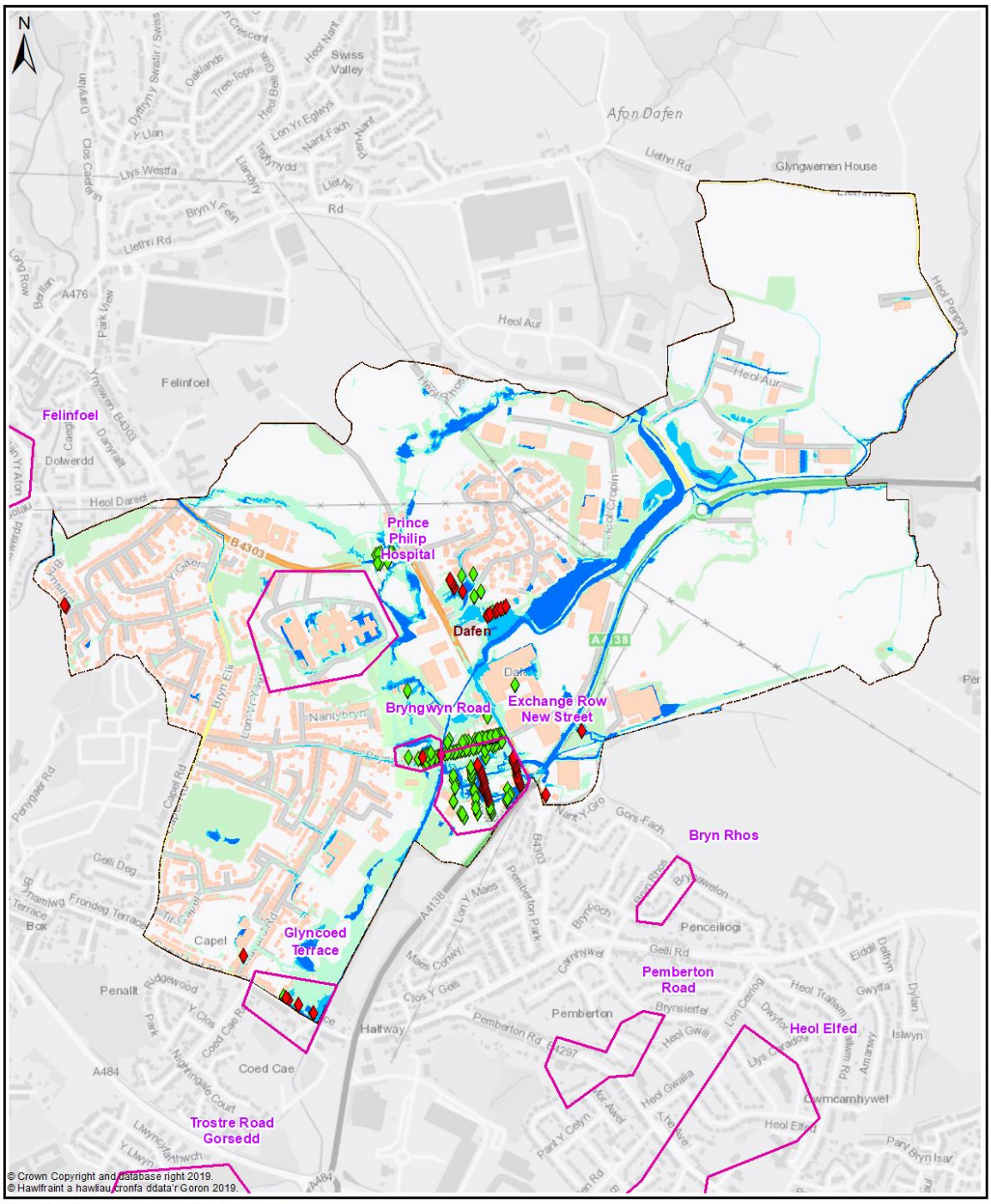
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Dafen

0 0.15 0.3 0.6 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Dafen

0 0.15 0.3 0.6 Km

Dafen - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	High	Med	Med
M22	Investigate options to reduce flood risk to community services	High	Med	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Med
M33	4 Policy Units identified for further review of potential alleviation actions	High	Ongoing	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.15 Elli

Community Council(s):	Llanelli Town
Councillor:	John Jenkins
Population:	3,198
Area:	0.97 km^2
Population Density:	3,297 people/km^2

Area Description

Urban area in Llanelli centre. Contains Llanelli commercial centre and residential areas. The River Lliedi runs through this ward and is extensively culverted.

The NRW flood maps indicate that the River Lliedi affords a significant flood risk to this area. This source is not within the scope of this report as it is managed by NRW.

Flood History

History of surface water flooding at Greenway Street and the market area.

Policy Units in Ward

There is two Policy Units identified in this Ward:

- Greenway street
- Llanelli Town Centre (spans into Lleidi Ward to the east).

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	145	42	1
Medium Risk	353	180	2
Low Risk	653	415	4

Breakdown by Policy Unit refer to Appendix E.

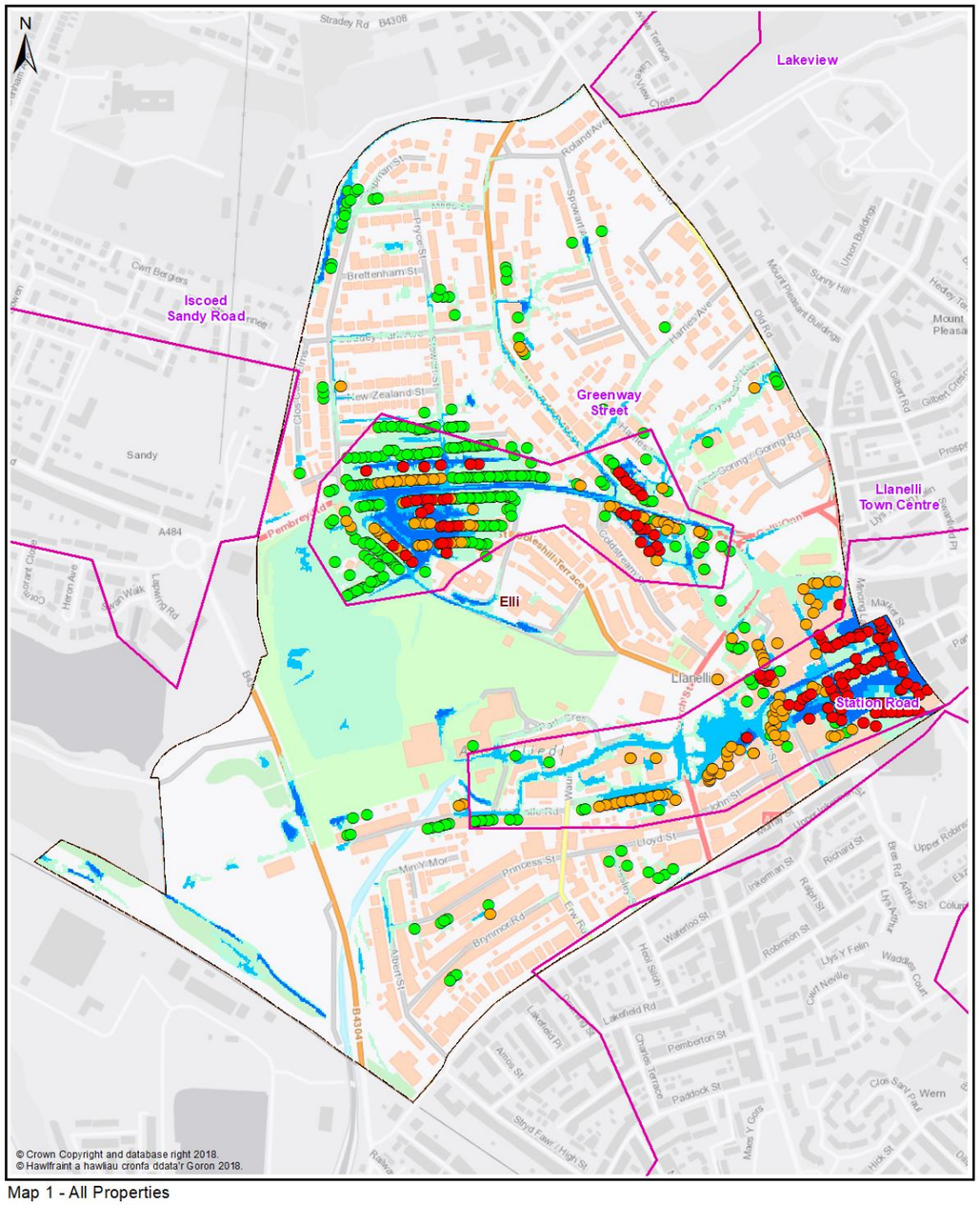
Other risk management authorities

DCWW has identified flood risk at the following locations:

- Cowell Precinct, Llanelli
- Pembrey Road, Llanelli
- Stradey Park Avenue, Llanelli
- West End, Llanelli

DCWW is currently investing large sums of money in Llanelli through the Rainscape Project. CCC will continue to work in partnership with DCWW on this project.

NRW will continue to manage the flood risk from the River Lliedi.



Map 1 - All Properties

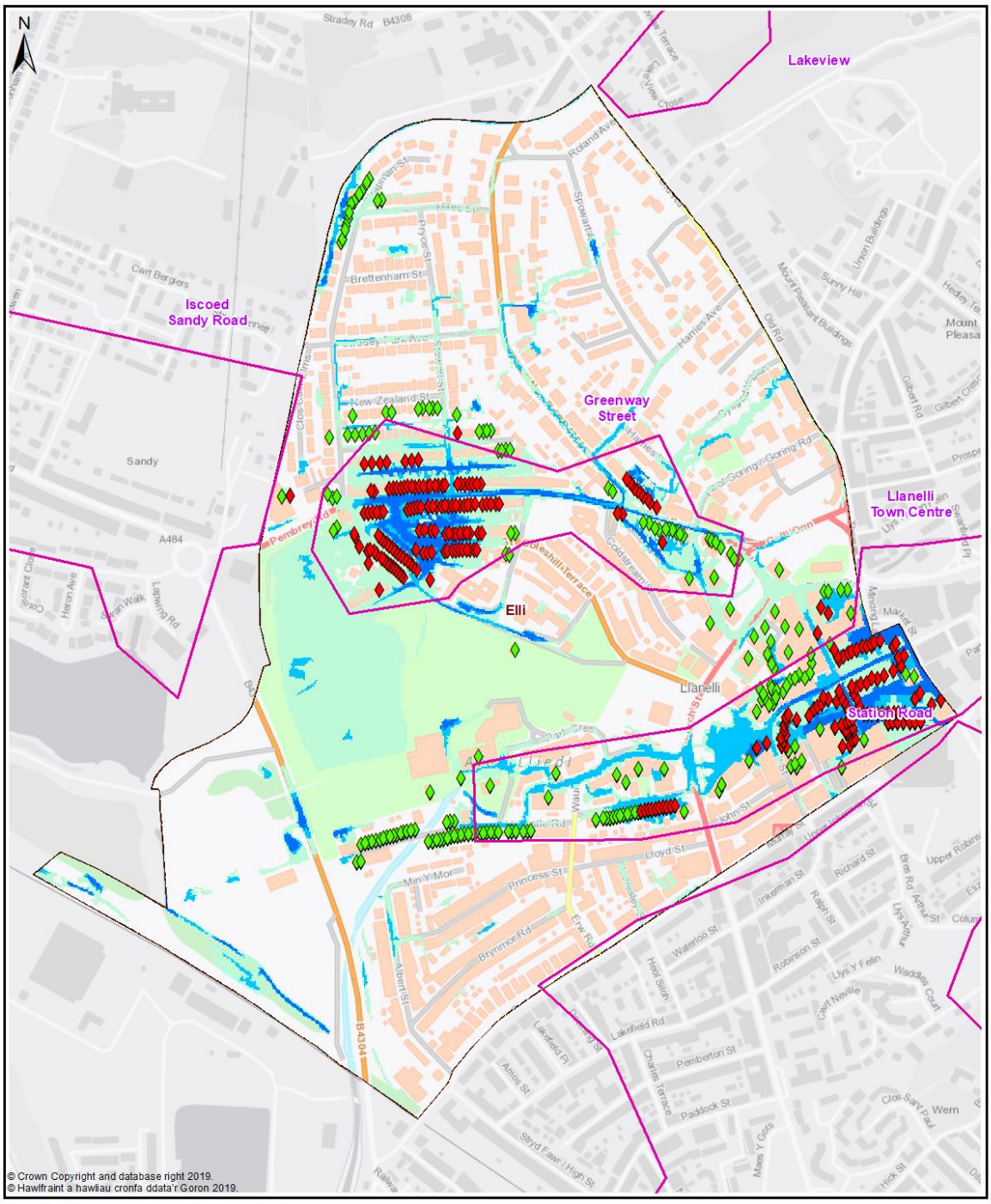
Map 2 - Dwellings and Services

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater

Ward - Elli

0 0.075 0.15 0.3 Km



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Elli

0 0.075 0.15 0.3 Km

Elli - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	High	Med	Med
M22	Investigate options to reduce flood risk to community services	High	Med	Med
M33	2 Policy Unit identified for further review of potential alleviation actions	High	Ongoing	Med
M34	Continue to collaborate / assist DCWW progressing their Rainscape initiative	High	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M44	Liaison with major retail operators to raise awareness and preparedness. Work with NRW Flood Awareness team	High	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.16 Felinfoel

Community Council(s):	Llanelli Rural
Councillor:	Hugh Richards
Population:	2,059 people
Area	2.38 km^2
Population Density	863 people/km^2

Area Description

Urban Area to the north of Llanelli town centre. Land use is a mix of residential industrial and pastoral agriculture

The NRW flood maps for this area show that River Lliedi affords a significant flood risk to this area. The River Lliedi is not within the scope of this report as it is managed by NRW.

Flood History

No Significant flooding history.

Policy Units in Ward

There is one Policy Unit identified in this Ward:

- Felinfoel - identified from the surface water flood maps as a potential flood risk area.

Count Table (see Maps 1 & 2 below)

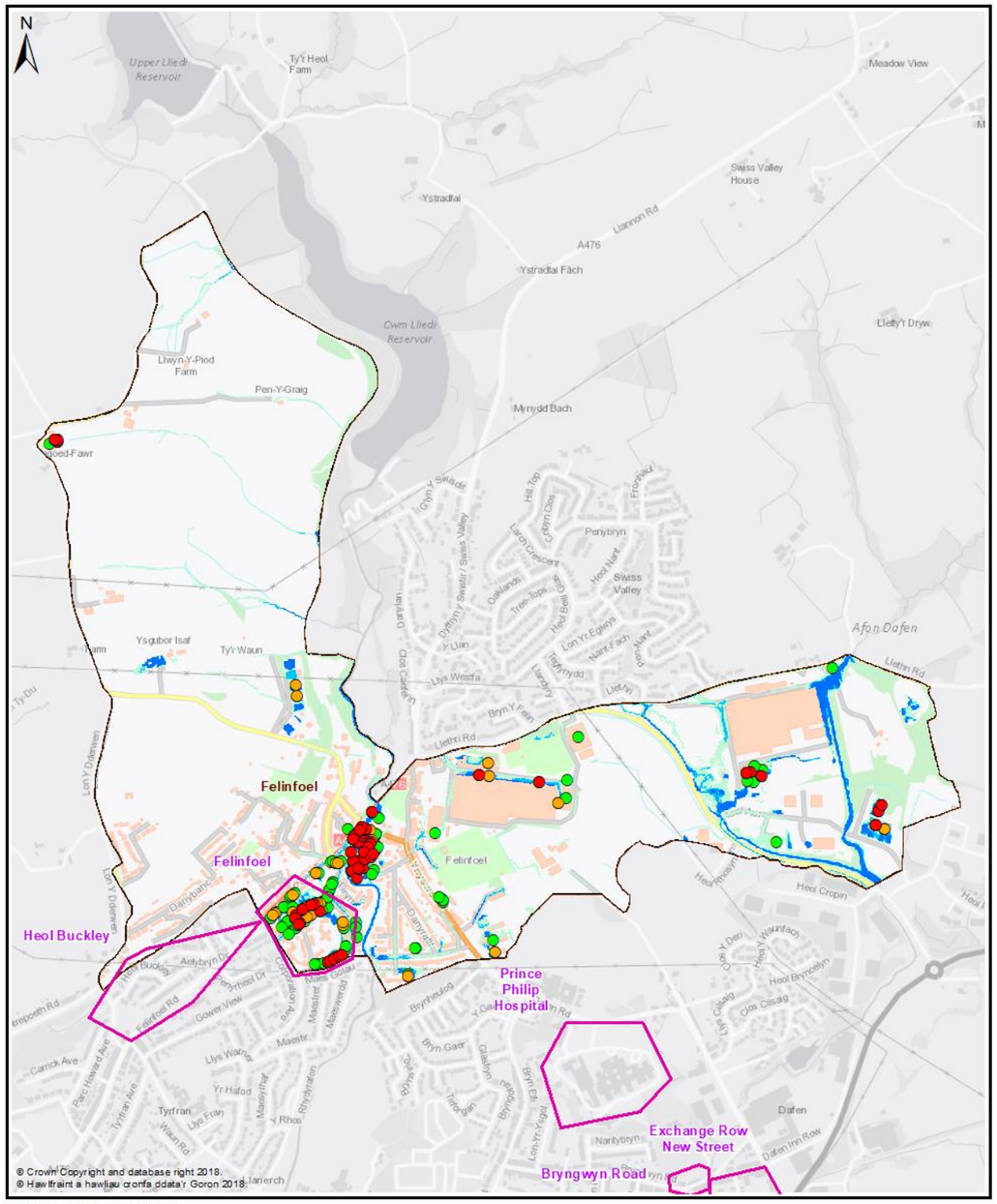
Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	60	26	0
Medium Risk	89	44	0
Low Risk	167	100	0

Breakdown by Policy Unit refer to Appendix E.

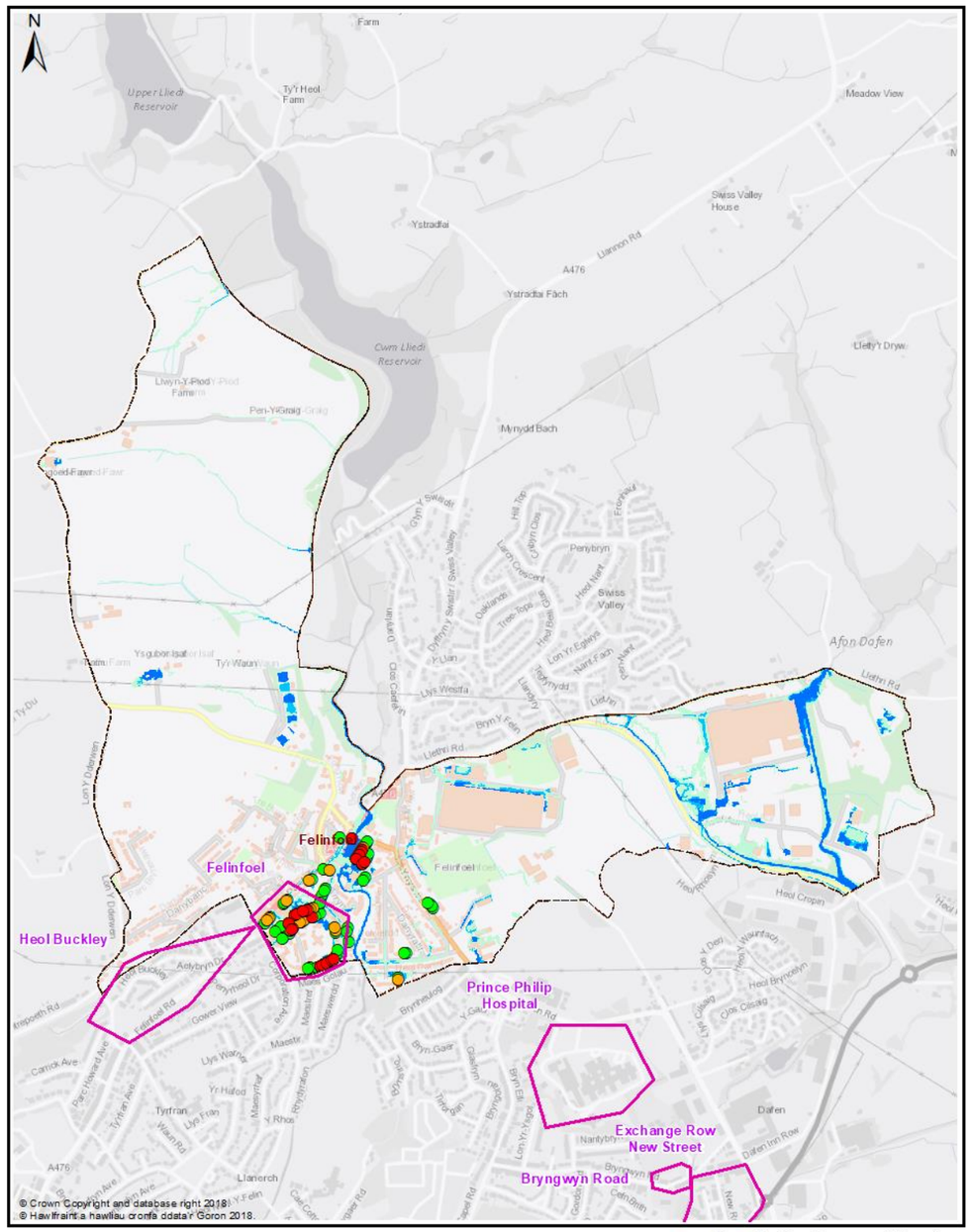
Other risk management authorities

DCWW has not identified flood risks.

NRW will continue to manage the flood risk from the River Lliedi.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

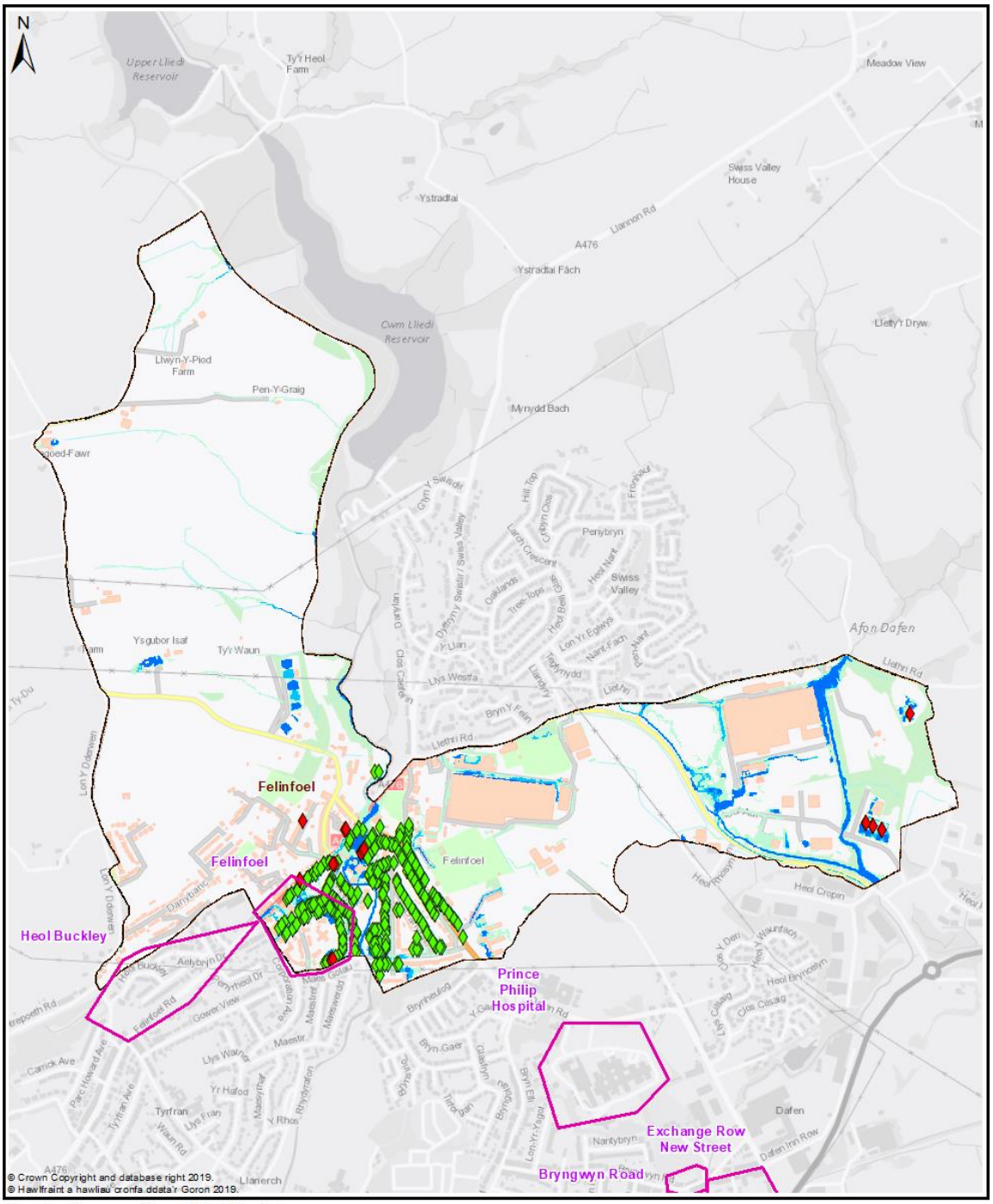
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Felinfoel

0 0.175 0.35 0.7 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Felinfoel

0 0.175 0.35 0.7 Km

Felinfoel - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	High	Med	Med
M33	Felinfoel - Policy Unit identified for further review of potential alleviation actions	High	Ongoing	Med
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.17 Garnant

Community Council(s):	Cwmamman Town
Councillor:	Kevin Madge
Population:	2,169 people
Area	15.13 km^2
Population Density	143 people/km^2

Area Description

Urban area in the Amman Valley to the east of Ammanford Town.

Land Use former mining area with former open cast mining high moorland and urban area in the valley bottom Garnant Golf course form part of the southern valley side. Contains Main Rivers Amman and Garnant

Flood History

Minor surface water flooding issues.

Policy Units in Ward

There is one Policy Unit identified in this Ward:

- Arcade Terrace

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	13	8	0
Medium Risk	29	20	0
Low Risk	118	88	0

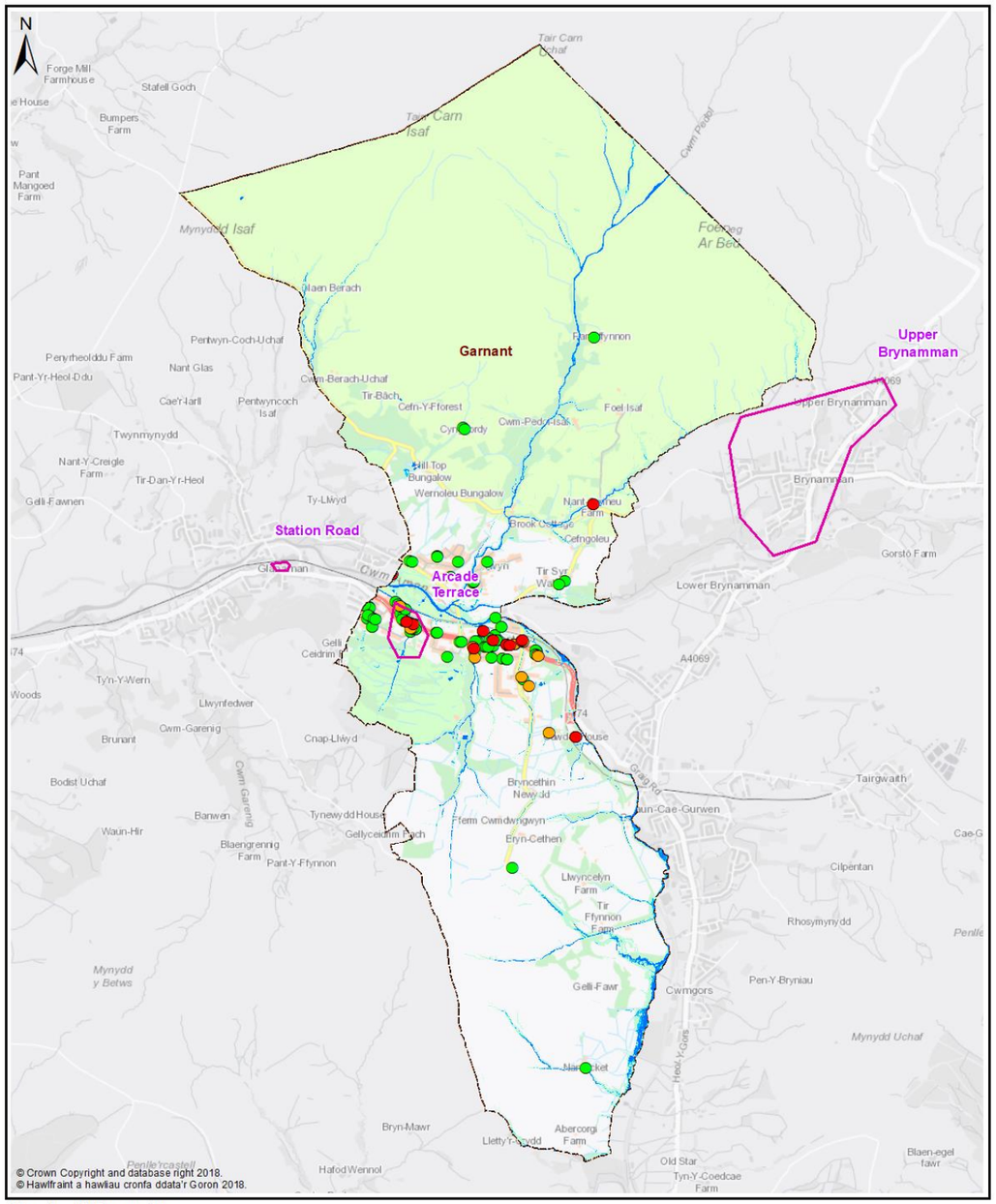
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

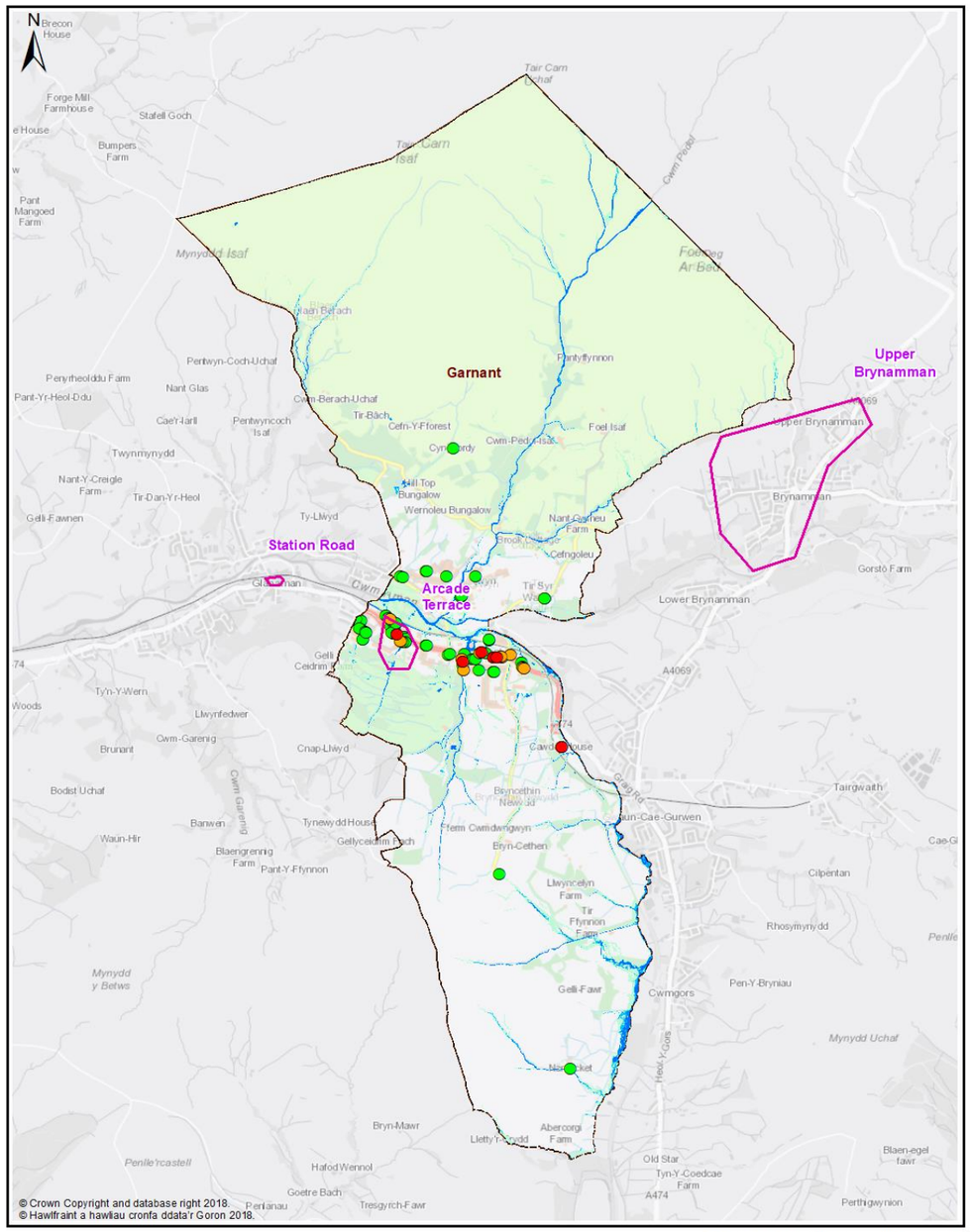
DCWW has identified flood risk at the following locations:

- Cwmamman Road
- Garnant

NRW will continue to manage flood risk from the rivers Amman and Garnant.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

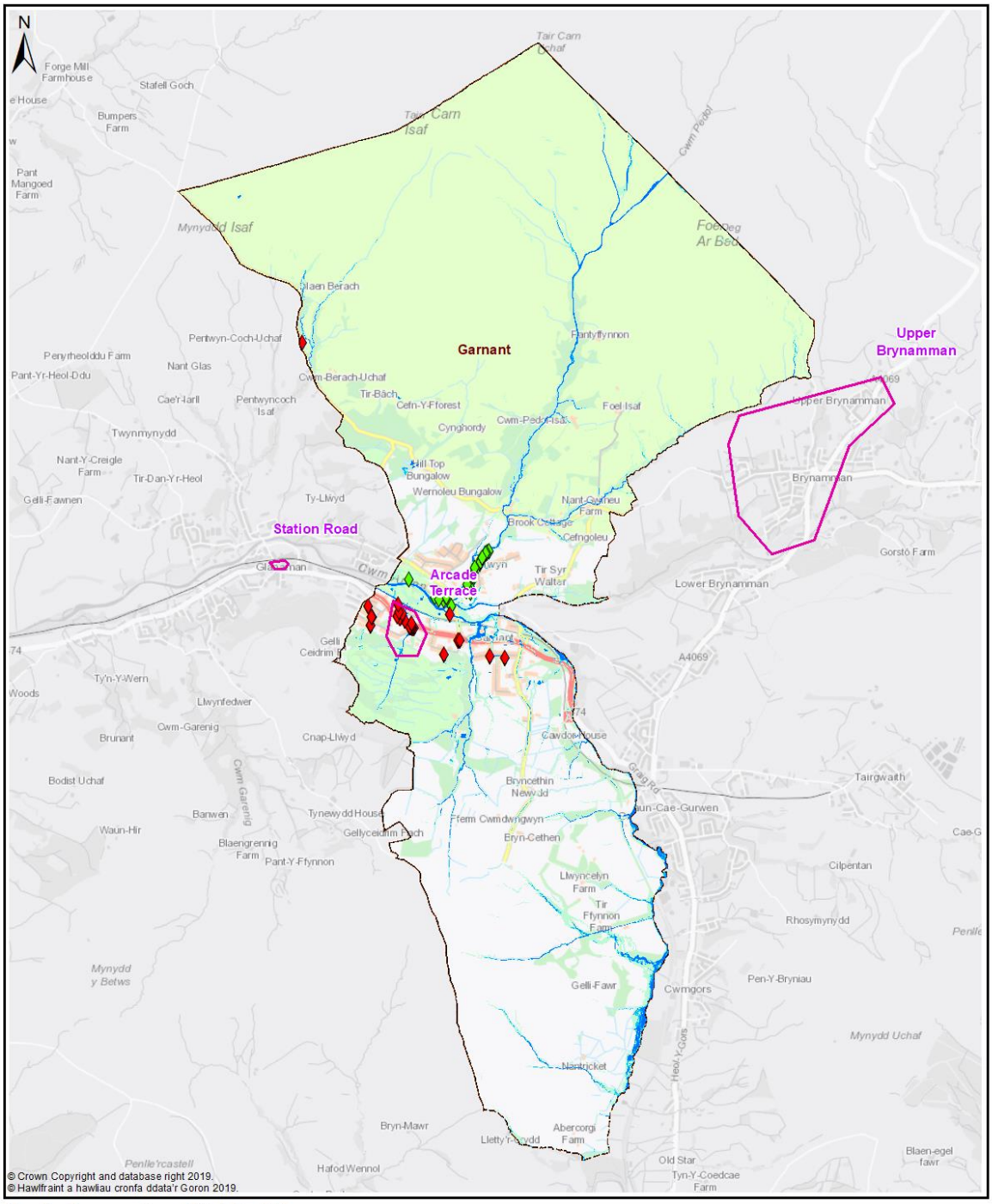
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Garnant

0 0.475 0.95 1.9 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Garnant

0 0.475 0.95 1.9 Km

Garnant - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Med	Med
M33	1 Policy Unit identified for further review of potential alleviation actions	High	Ongoing	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.18 Glanamman

Community Council(s):	Cwmamman Town
Councillor:	David Jenkins
Population:	2,320 people
Area:	12.24 km^2
Population Density:	190 people/ km^2

Area Description

Urban area in the Amman Valley to the east of Ammanford Town

Land use former mining area with former open cast mining high moorland and urban area in the valley bottom.

Flood History

Isolated surface water incidents have been recorded.

Policy Units in Ward

There is one Policy Unit identified in this Ward:

- Station Road

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	49	27	1
Medium Risk	95	68	2
Low Risk	275	207	2

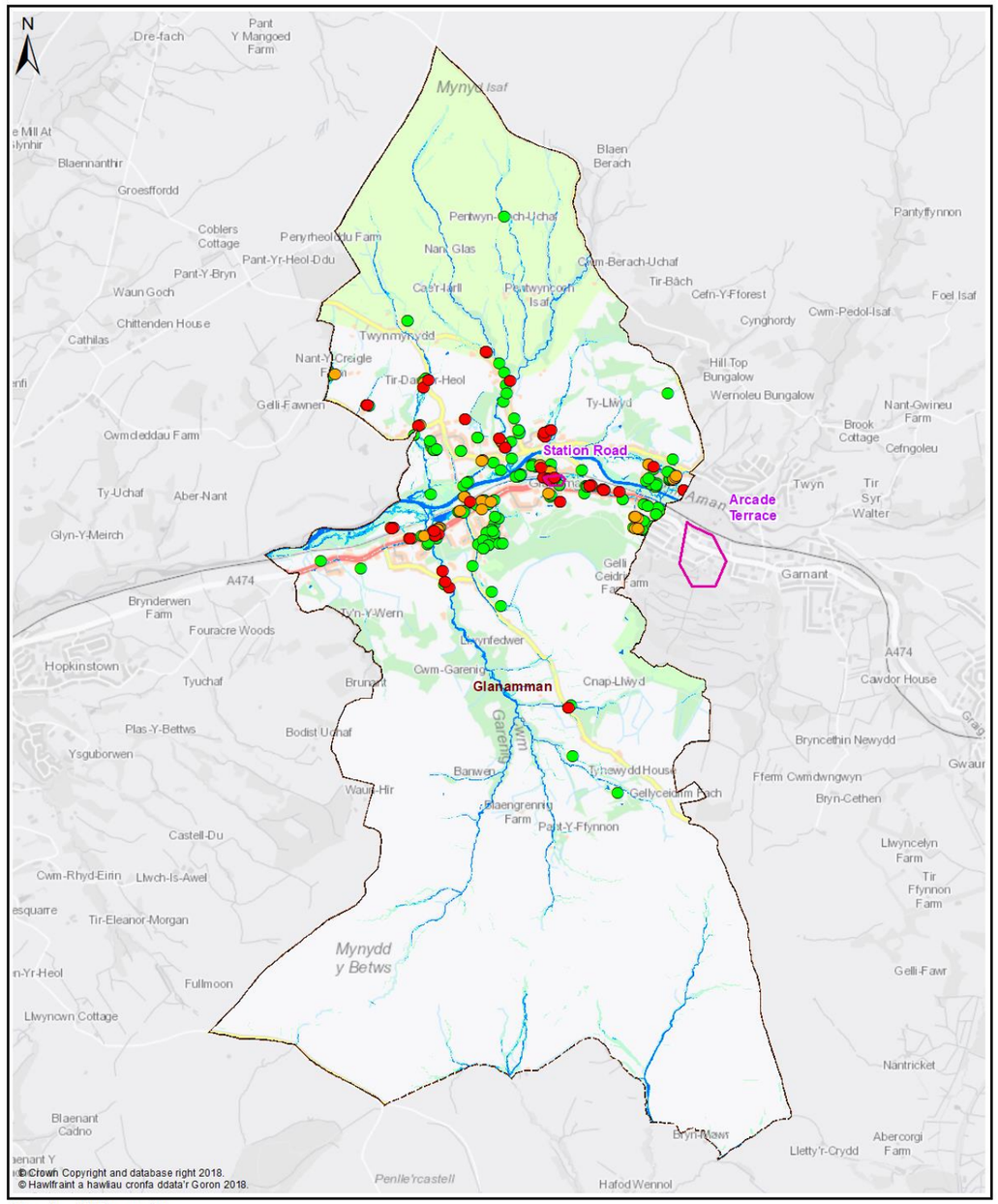
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

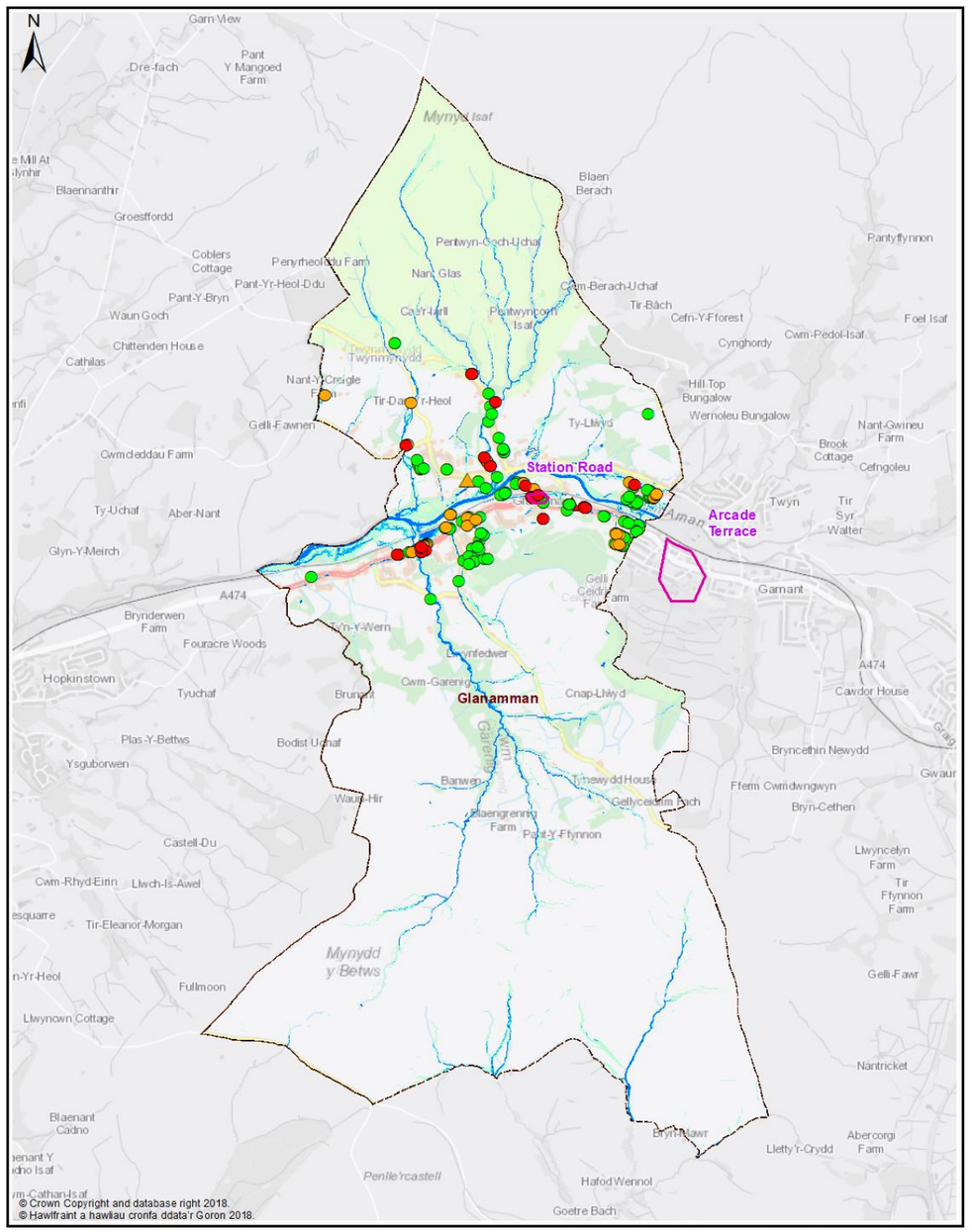
DCWW has identified flood risk at the following locations

- Station Road, Glanamman
- Tabernacle Road, Glanamman
- Tan Y Gelli, Glanamman

NRW will continue to manage the flood risk from the River Amman.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

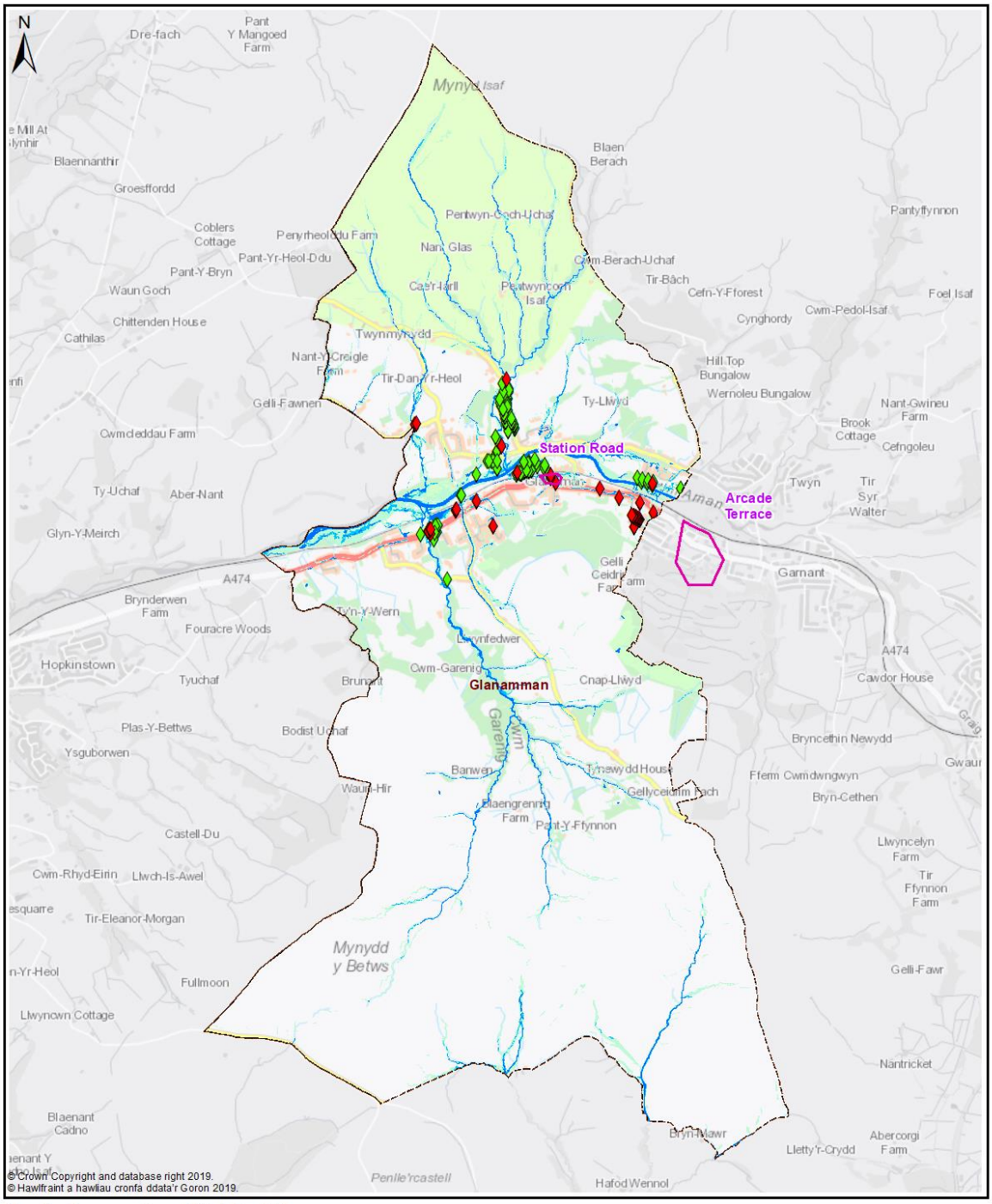
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Glanamman

0 0.4 0.8 1.6 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Glanamman

0 0.4 0.8 1.6 Km

Glanamman - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Low
M22	Investigate options to reduce flood risk to community services	Med	Med	Low
M24	Culvert inspections of existing assets & update / maintain Asset Register.	High	Med	Med
M31	Investigate opportunities to reduce runoff from adjacent moorland / hillsides	Med	Med	Low
M33	1 Policy Unit identified for further review of potential alleviation actions	High	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.19 Glanymor

Community Council(s):	Llanelli Town
Councillor:	Winston Lemon
Population:	5,984 people
Area:	12.87 km^2
Population Density:	465 people/km^2

Area Description

Urban area to the south of Llanelli Town Centre with coastal frontage.

The NRW flood maps for this area show that Rivers Lliedi and Dafen pose a significant flood risk to this area. These Main Rivers are not within the scope of this report, flood risk from this source is managed by NRW.

Flood History

2013 Surface water sewer flooding at Heol Morfa.

Policy Units in Ward

There are 2 No. Policy Units identified in this Ward:

- Seaside
- Morfa

Count Tale

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	46	24	0
Medium Risk	168	126	0
Low Risk	639	527	2

Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

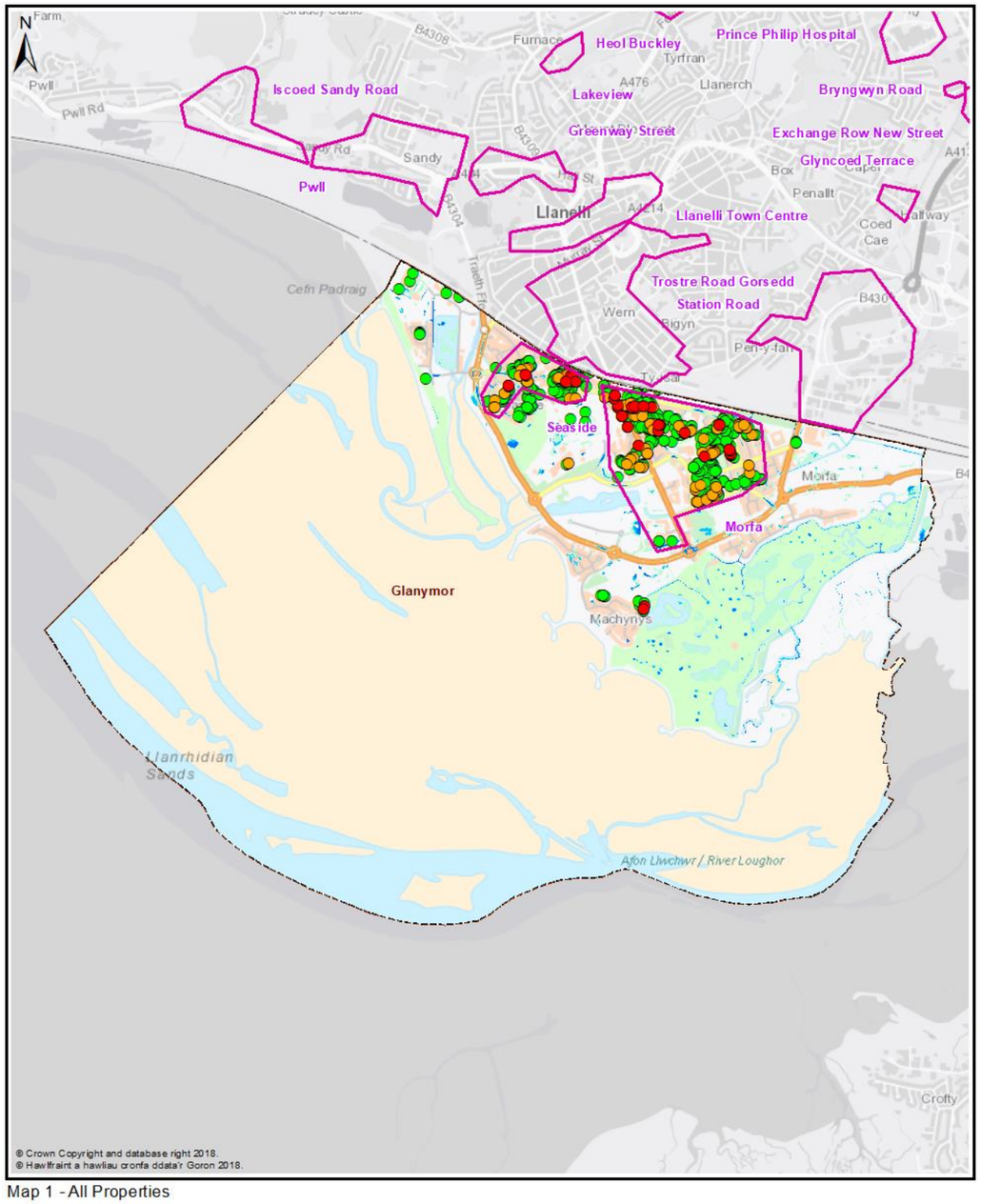
DCWW has extensive surface water and combined sewer infrastructure that drains large areas of this ward.

DCWW has identified flood risk at the following locations:

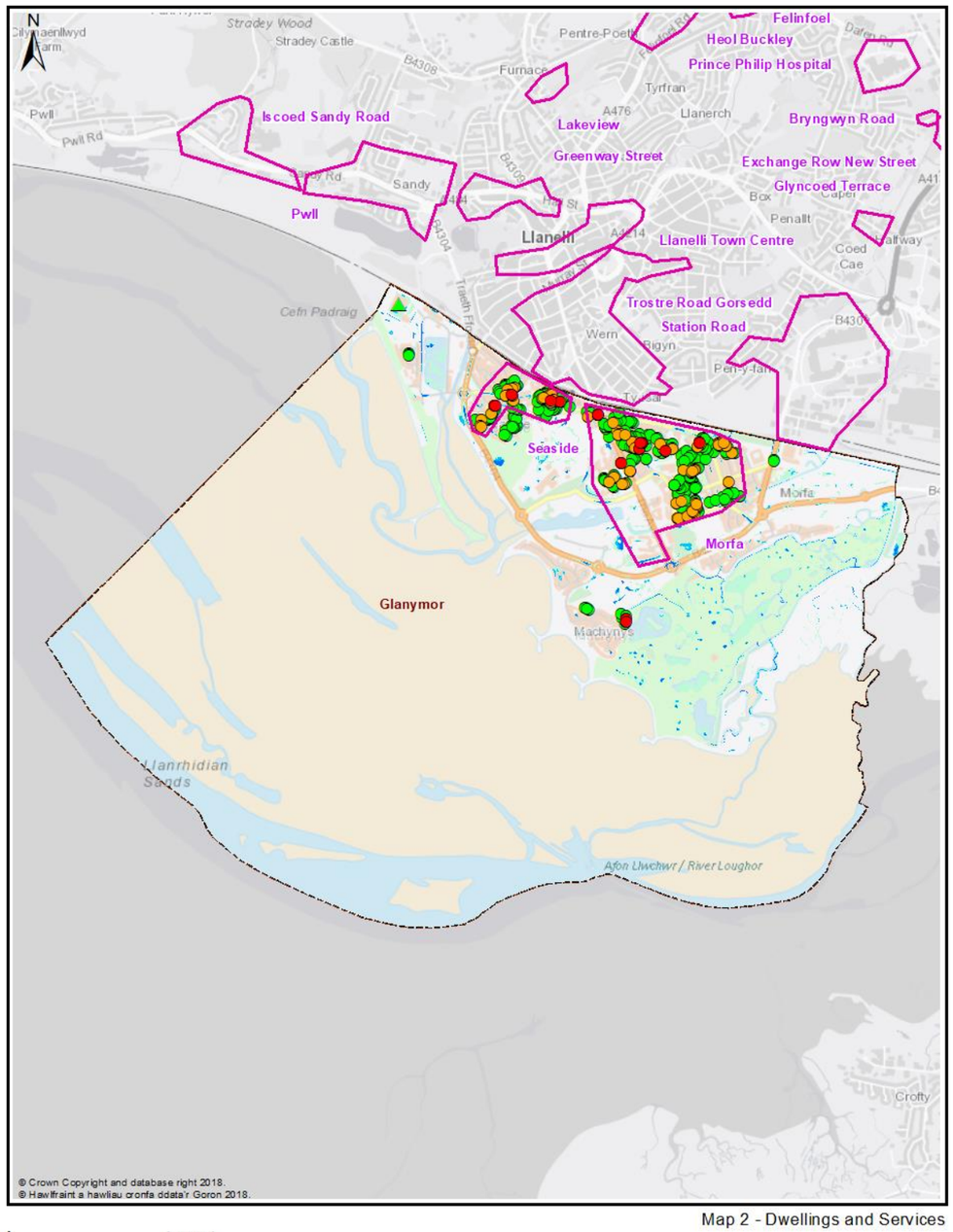
- Dolau Fawr
- Haverlock Street

At the present time DCWW are investing large sums of money in Llanelli in their Rainscape Project. CCC will continue to work in partnership with DCWW on this project.

NRW will continue to manage the flood risk from the Rivers Lliedi and Dafen.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

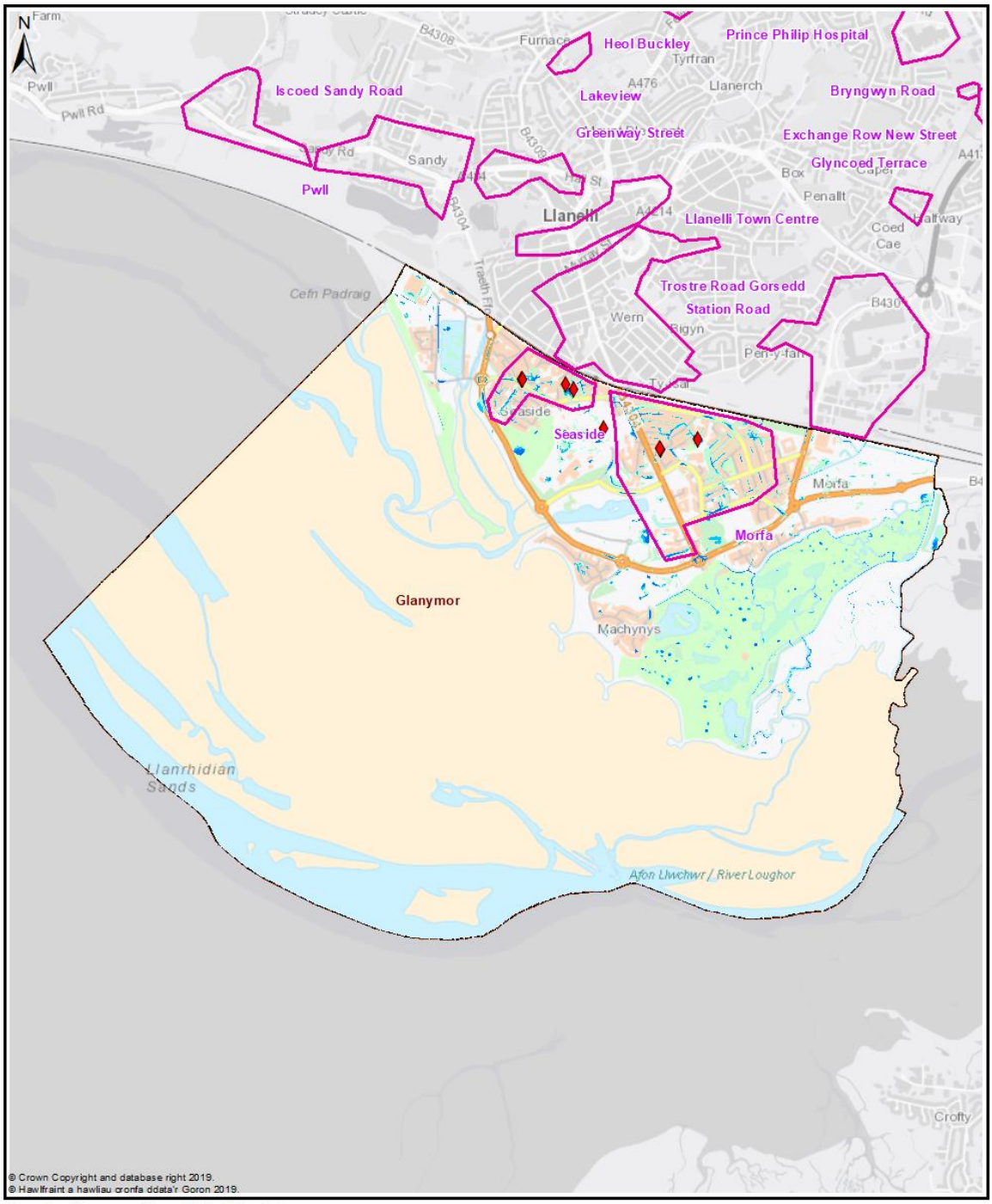
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Glanymor

0 0.375 0.75 1.5 Km

Legend

- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Glanymor

0 0.375 0.75 1.5 Km

Glanymor - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area (s)	High	Ongoing	Low
M22	Investigate options to reduce flood risk to properties within the overall community	High	Ongoing	Med
M33	Seaside & Morfa - Policy Units identified for further review of potential alleviation actions	Med	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	High	Ongoing	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.20 Glyn

Community Council(s):	Llanelli Rural
Councillor:	Jim Jones
Population:	2,163 people
Area:	23.27 km^2
Population Density:	93 people/km^2

Area Description

Predominately rural area containing the settlements of Five Roads, Part of Pontyates and Pont Henri.

Land Use – Former coal mining area with rough pasture/ pastoral agriculture. The Main River Gwendraeth Fawr forms the boundary in the Pont Henri Area although this presents limited flood risk in this Ward.

Flood History

Isolated Surface Water incidents.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	18	6	1
Medium Risk	30	12	1
Low Risk	91	38	1

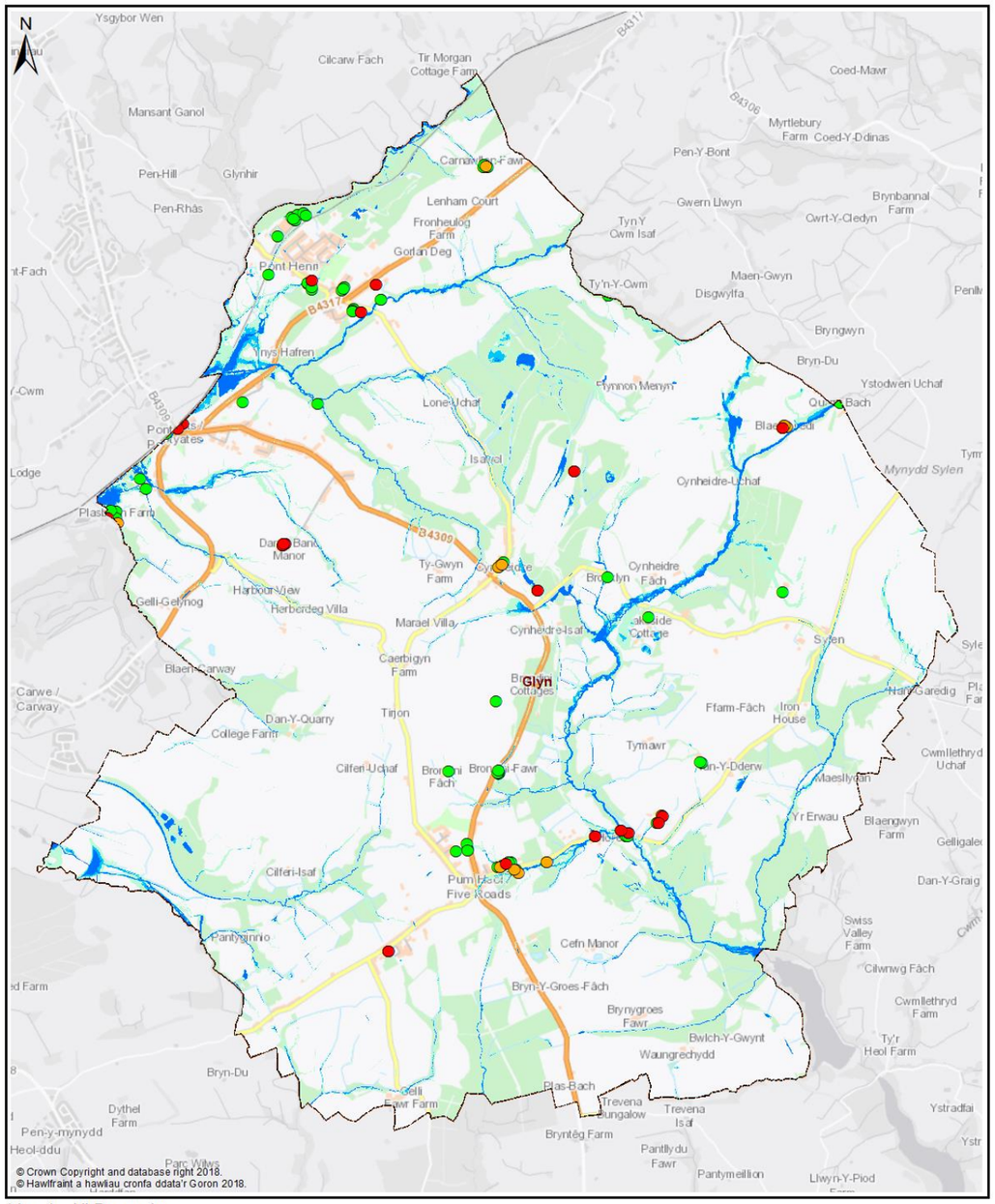
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

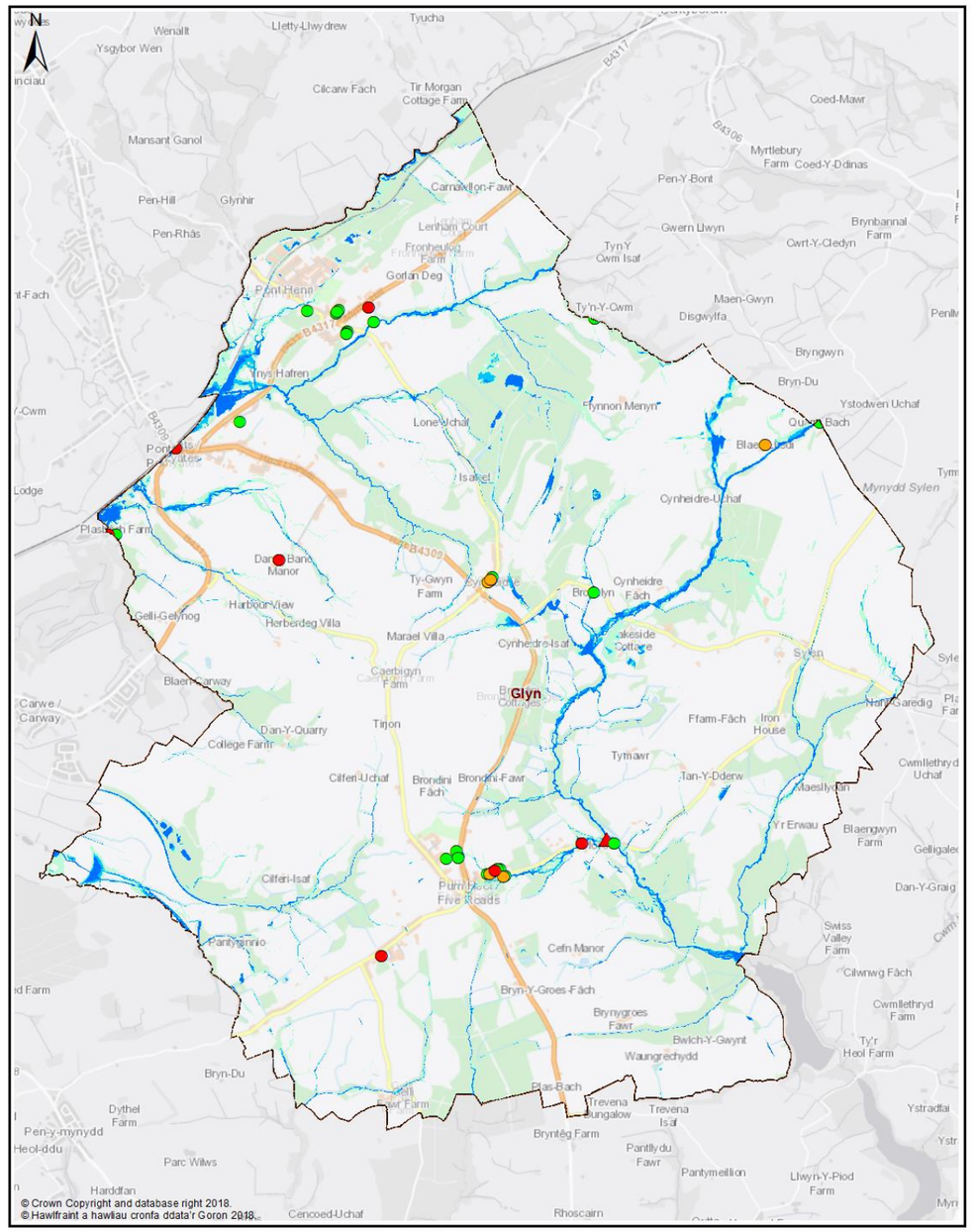
DCWW has identified flood risk at the following locations:

- Five Roads

NRW will continue to manage Flood Risk from the Gwendraeth Fawr River.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

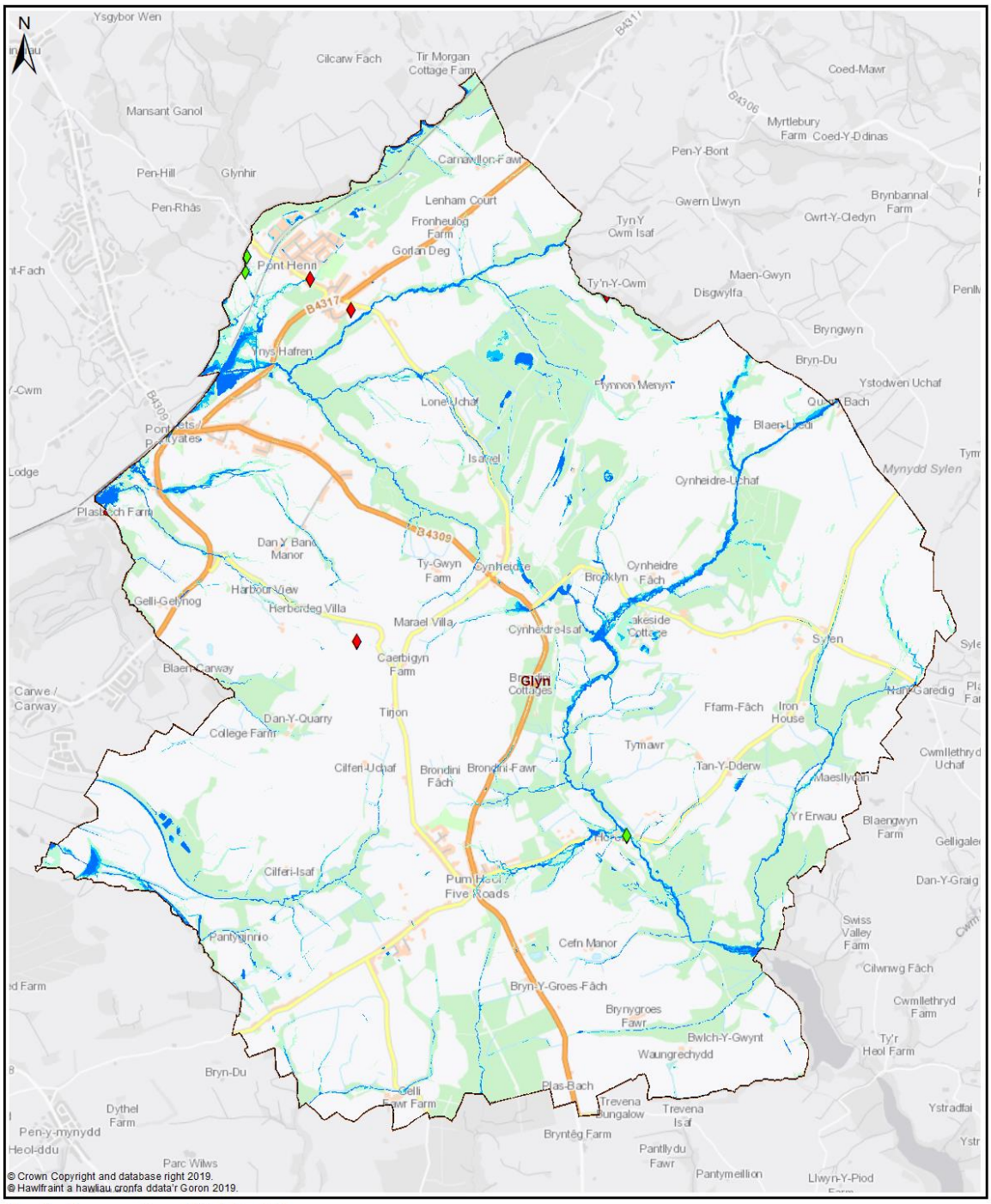
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Glyn

0 0.425 0.85 1.7 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Glyn - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M24	Culvert inspections of existing assets & update / maintain Asset Register.	High	Ongoing	Med
M31	Investigate opportunities to reduce runoff from adjacent moorland / hillsides.	Med	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations.	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate.	Med	Ongoing	Low

9.3.21 Gorslas

Community Council(s):	Gorslas
Councillor:	Terry Davies Darren Pice
Population:	4,143 people
Area:	16.5 km^2
Population Density:	251 people/km^2

Area Description

Predominately rural area containing the settlements Gorslas Cefneithin and Drefach

Land Use – Former coal mining area with rough pasture/ pastoral agriculture

The Main River Gwendraeth Fach forms the boundary for a short length and there is a short length of the Gwendraeth Fawr at Drefach although this presents limited flood risk in this Ward.

Flood History

Isolated surface water incidents.

Policy Units in Ward

There are 2 No. Policy Units identified in this Ward:

- Gorslas Square
- Drefach

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	62	37	0
Medium Risk	89	56	1
Low Risk	207	136	2

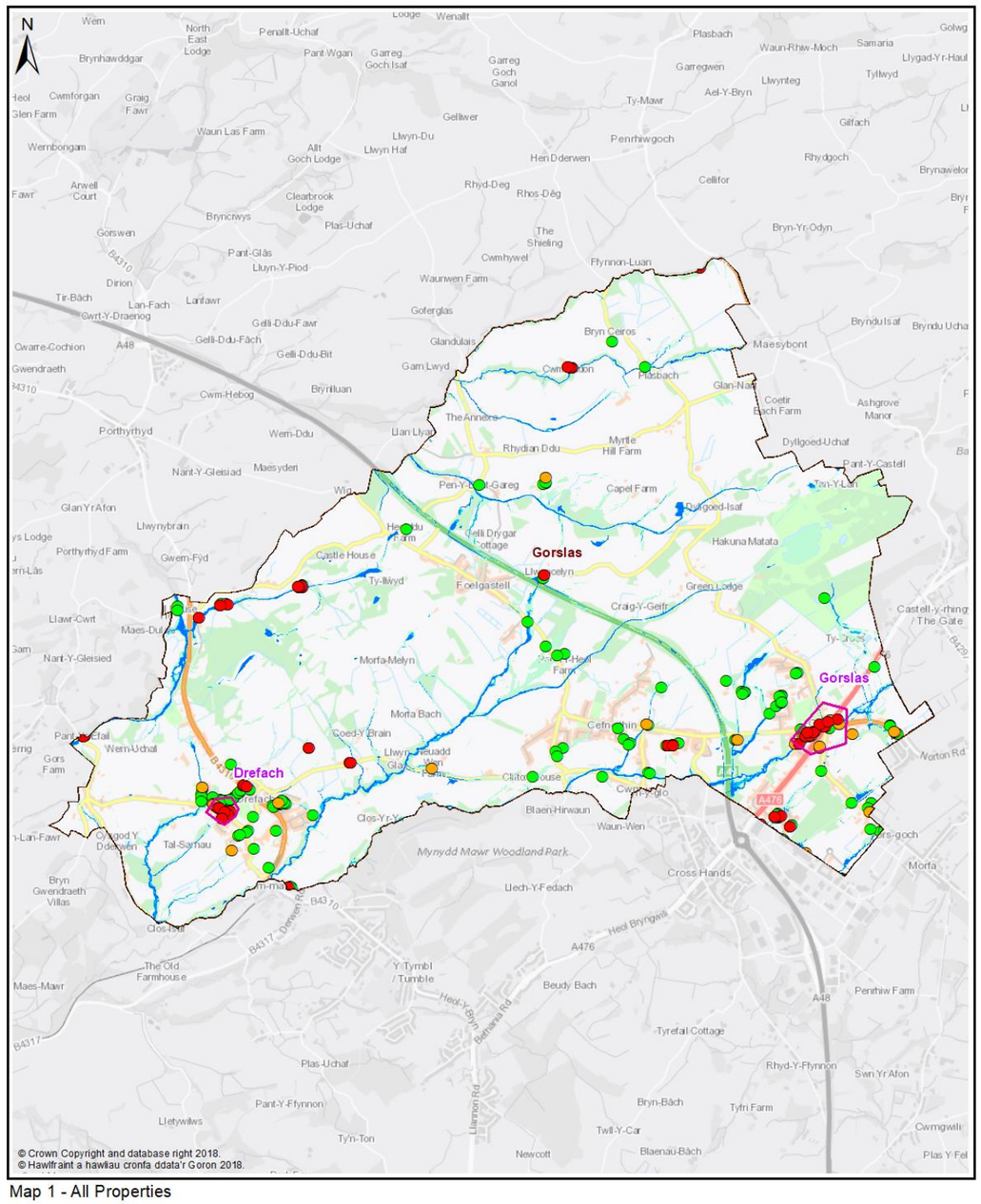
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

DCWW has identified flood risk at the following locations:

- Brynglas Estate, Drefach
- Brynlluan, Gorslas
- Carmarthen Road, Cross Hands
- Cwm Mwyn, Gorslas
- Drefach, Llanelli
- Heol Blaenhirwaun, Drefach
- Heol Dinefwr, Foelgastell
- Heolyfoel, Foelgastell
- Heolyparc, Cefneithin

NRW will continue to manage flood risk from the Gwendraeth Fawr and Gwendraeth Fach.



Map 1 - All Properties

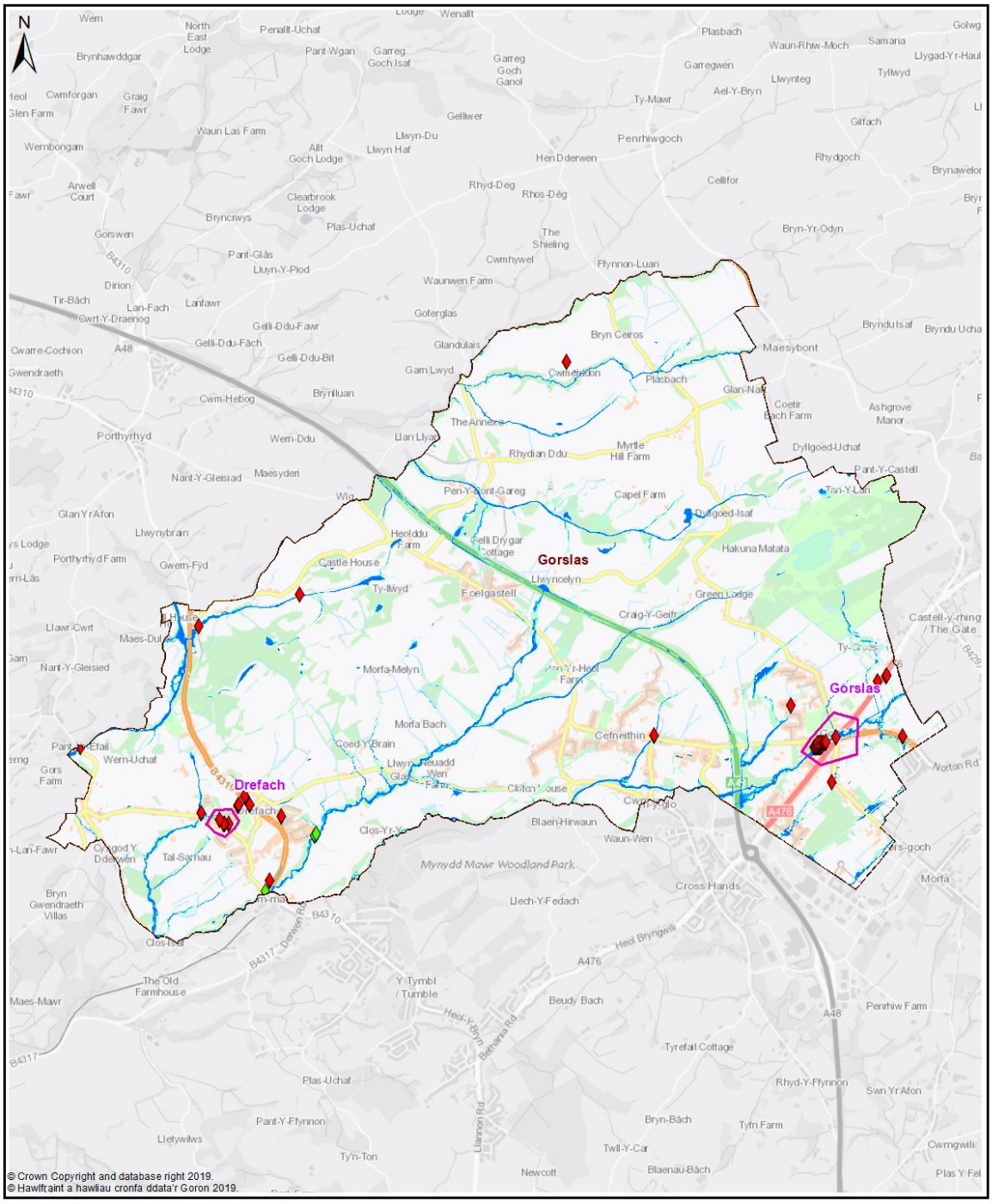
Map 2 - Dwellings and Services

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater

Ward - Gorslas

0 0.475 0.95 1.9 Km



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Gorslas

0 0.475 0.95 1.9 Km

Gorslas - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	High	Ongoing	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Med
M31	Investigate opportunities to reduce runoff from adjacent moorland / hillsides	Med	Med	Low
M33	2 Policy Units identified for further review of potential alleviation actions	Med	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.22 Hendy

Community Council(s):	Llanedi
Councillor:	Gareth Beynon Thomas
Population:	3,309 people
Area:	15.12 km^2
Population Density:	219 people/km^2

Area Description

A mixture of rural and developed area to north east of Llanelli containing the settlements Hendy, Fforest and Llanedi. The M4 motorway runs through this ward.

Land Use – Former coal mining in the Hendy area with rough pasture / pastoral agriculture.

The Main River Loughor forms the eastern boundary of this ward and the River Gwili runs through the ward. These present a modest flood risk in the Hendy area. The Loughor and Gwili Rivers are not within the scope of this report as they are managed by NRW.

Flood History

Isolated surface water incidents.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	6	14	0
Medium Risk	47	32	0
Low Risk	149	103	0

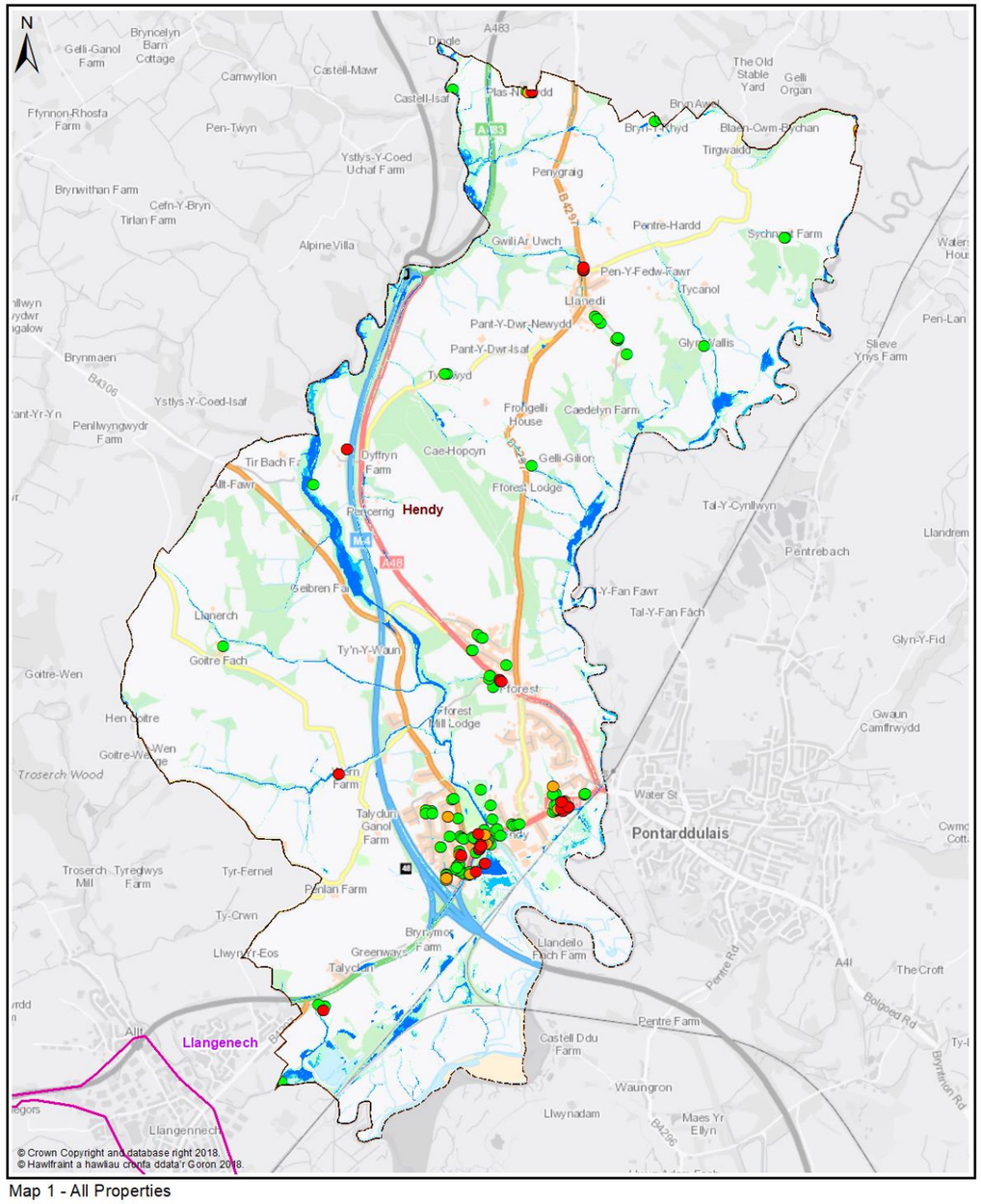
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

DCWW has identified flood risk at the following locations:

- Arlan Gwili
- Llanedi

NRW will continue to manage Flood Risk from the Rivers Loughor and Gwili.



Map 1 - All Properties

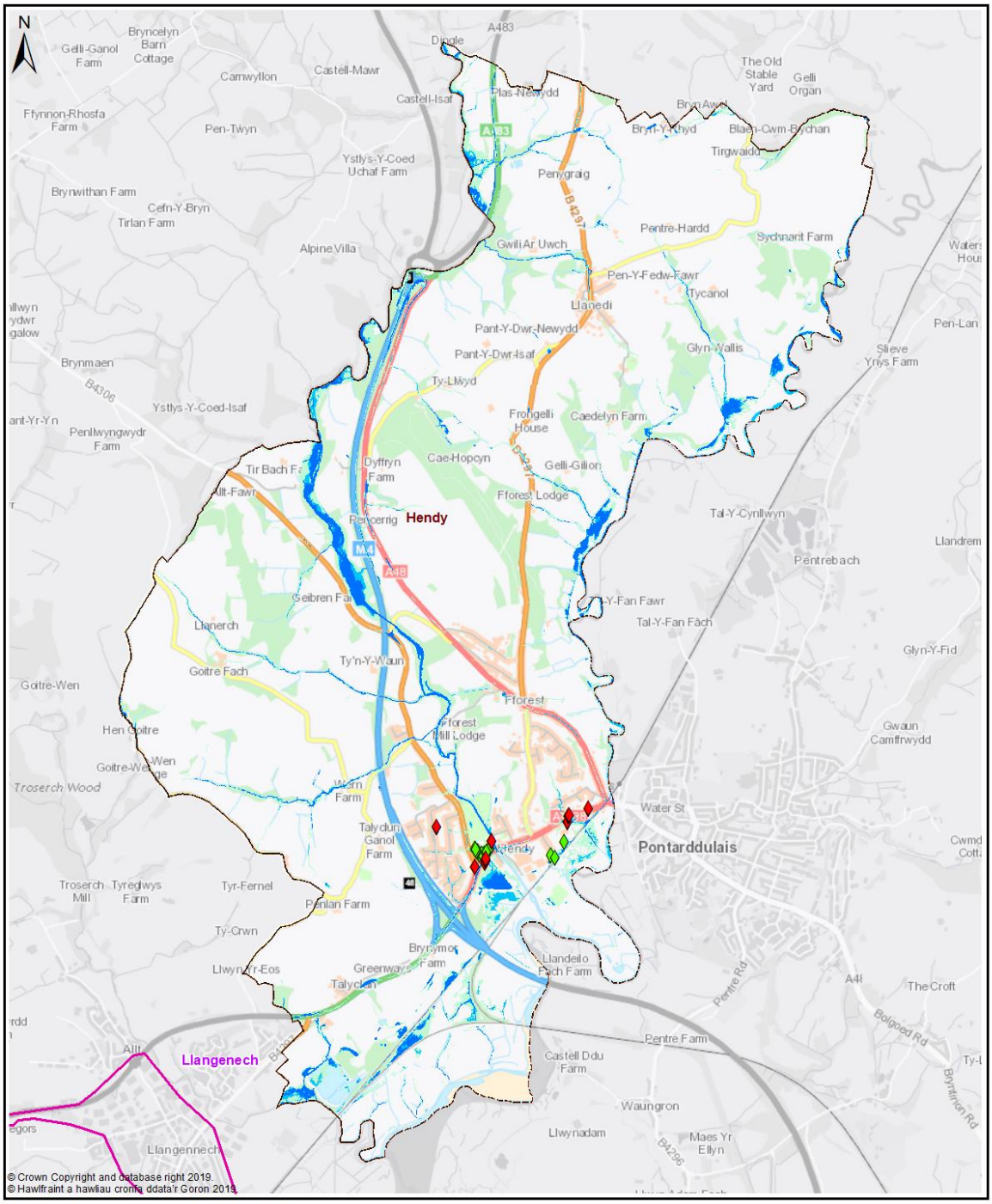
Map 2 - Dwellings and Services

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater

Ward - Hendy

0 0.4 0.8 1.6 Km



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Hendy - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M33	3 Policy Units identified for further review of potential alleviation actions	Med	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.23 Hengoed

Community Council(s):	Llanelli Rural
Councillor:	Sian Caiach Penny Edwards
Population:	3,662 people
Area:	19.09 km^2
Population Density:	192 people/km^2

Area Description

Hengoed Ward is located to the west of Llanelli Town Centre and comprises the areas of Pwll, Sandy and Furnace.

Generally urban along the coastal strip, with pastoral agriculture on higher land to the north. Large housing development is currently being constructed on the former Stradey Rugby Field.

Contains the Main Rivers Dulais and Cille which together with the tide poses the main flood risk in this area. The Main Rivers and tidal flooding are not within the scope of this report as they are managed by NRW.

Flood History

Flooding from the River Dulais in Pwll and severe flooding in the Sandy Road from the Cille prior to the Cille Bypass culvert being constructed.

Incidents of surface water flooding in Pwll, Sandy Road, Iscoed Pen y Wern.

Policy Units in Ward

There are 2 No. Policy Units identified in this Ward:

- Pwll
- Iscoed & Sandy Road

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	135	99	0
Medium Risk	229	157	0
Low Risk	448	336	0

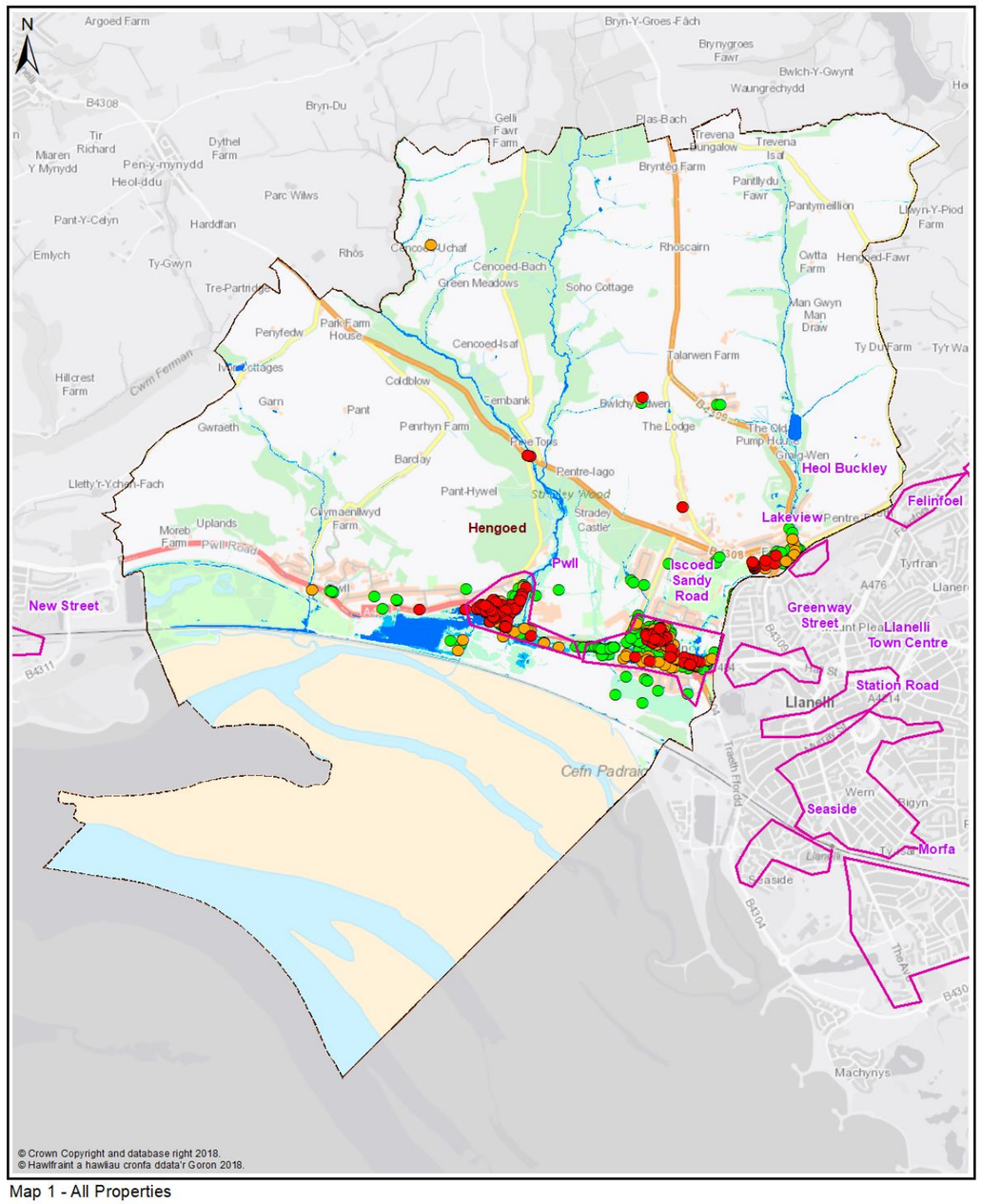
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

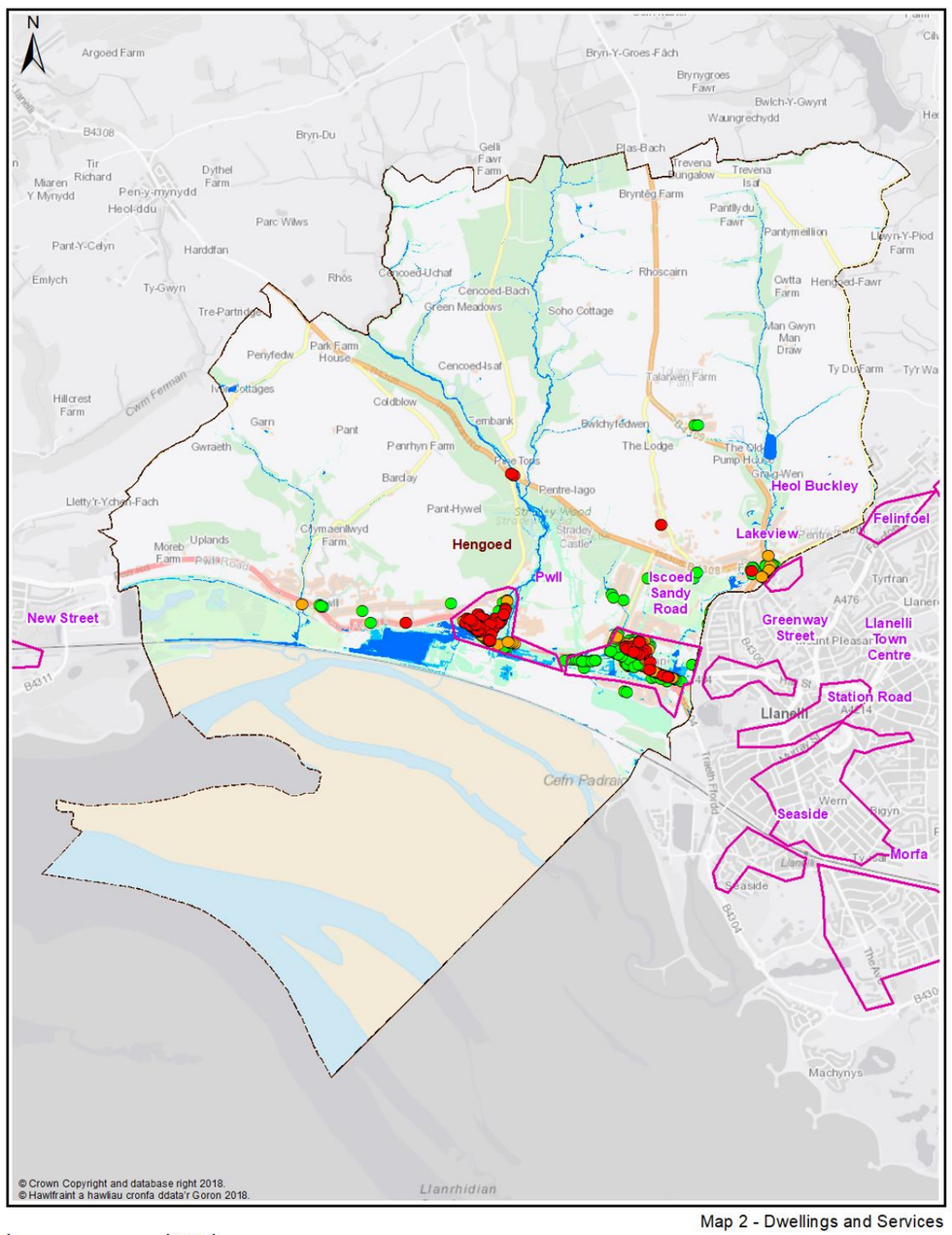
DCWW has identified flood risk at the following locations:

- Gerycoed, Llanelli
- Bassett Terrace, Pwll, Llanelli
- Maengwynne, Llanelli
- Sandy Road, Llanelli
- Stradey Road, Llanelli

NRW will continue to manage flood risk from Rivers Dulais and Cille as well as from tidal sources.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

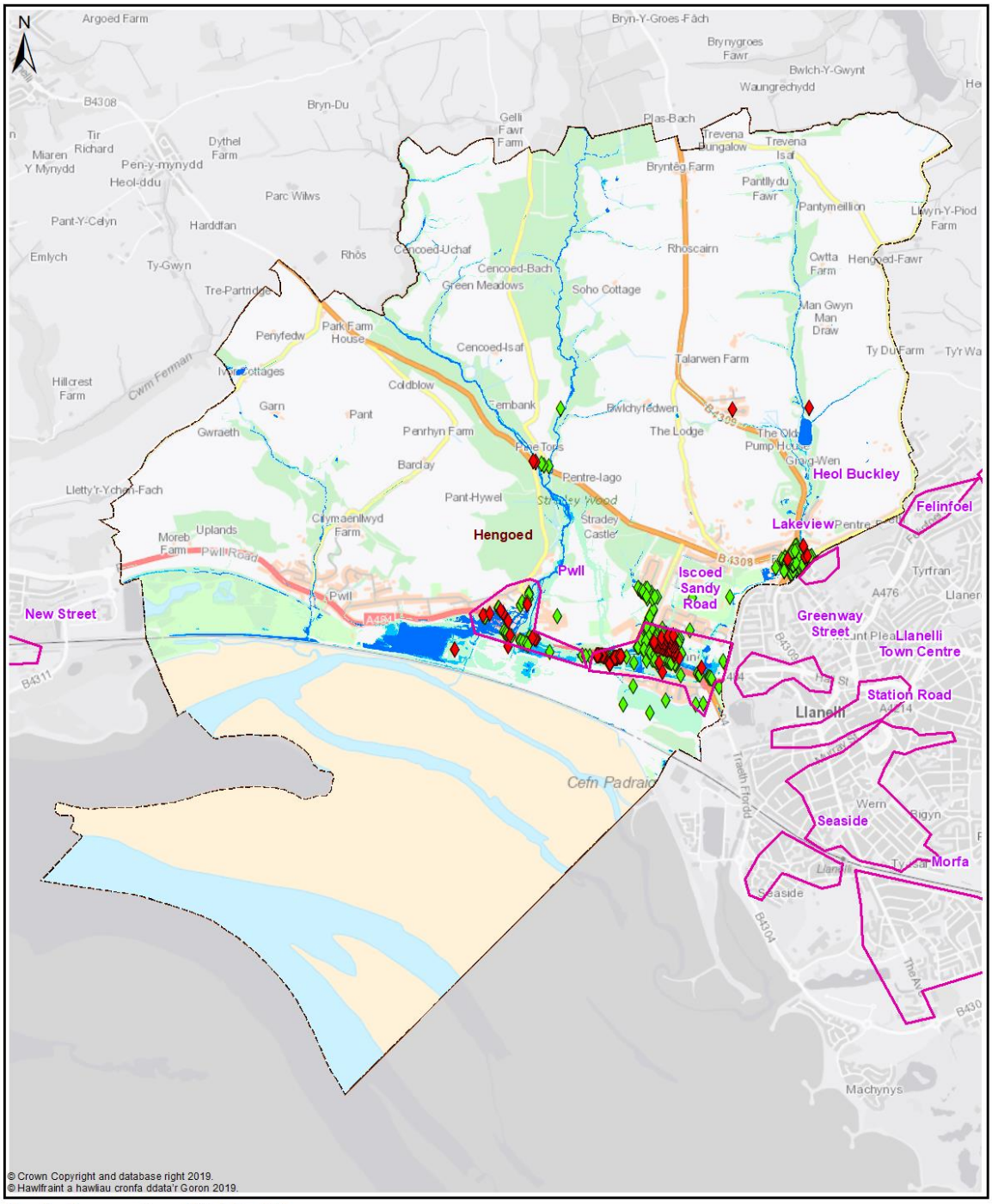
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Hengoed

0 0.425 0.85 1.7 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Hengoed

0 0.425 0.85 1.7 Km

Hengoed - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area	High	Ongoing	Med
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Ongoing	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Med	Med
M33	2 Policy Units identified for further review of potential alleviation actions	Med	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.24 Kidwelly

Community Council(s):	Kidwelly Town
Councillor:	Ryan Thomas
Population:	3,569 people
Area:	12.51 km^2
Population Density:	285 people/km^2

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	43	31	0
Medium Risk	83	52	0
Low Risk	229	151	0

Breakdown by Policy Unit refer to Appendix E.

Area Description

Kidwelly is a small town at the tidal limits of the Gwendraeth Estuary. It comprises of a mix of urban, pastoral agricultural land use. This is a former coal mining in area.

The NRW flood maps for this area show that Gwendraeth Rivers and tidal flooding poses a significant flood risk to the area. The flood risks from these sources are managed by NRW and are not within the scope of this report.

Flood History

Flooding at Ferry Road from a small watercourse which falls steeply from high ground plus reported direct surface runoff agricultural land onto Ferry Road.

Policy Units in Ward

There are 2 No. Policy Units identified in this Ward:

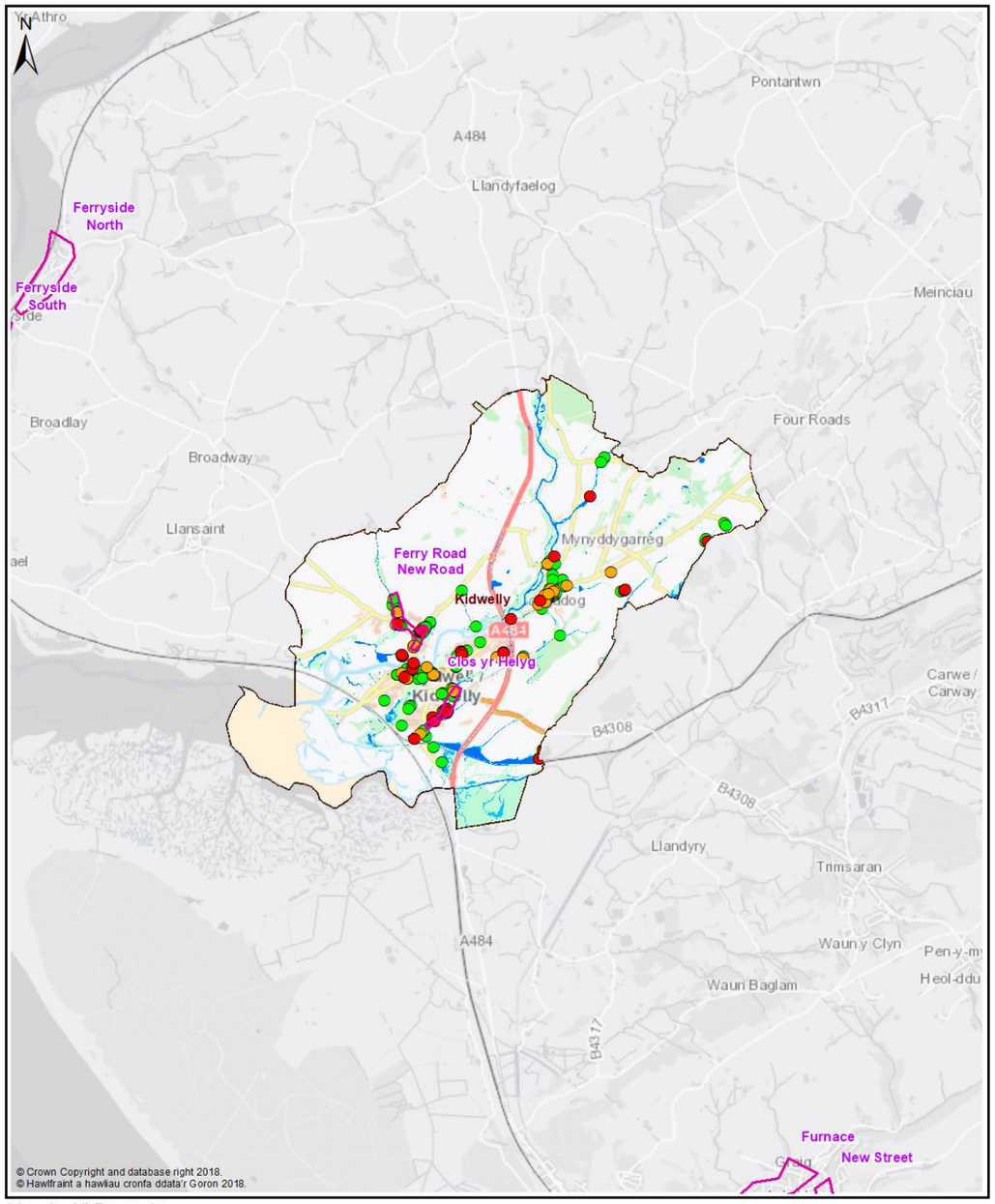
- Ferry Road & New Street
- Clos yr Helyg

Other risk management authorities

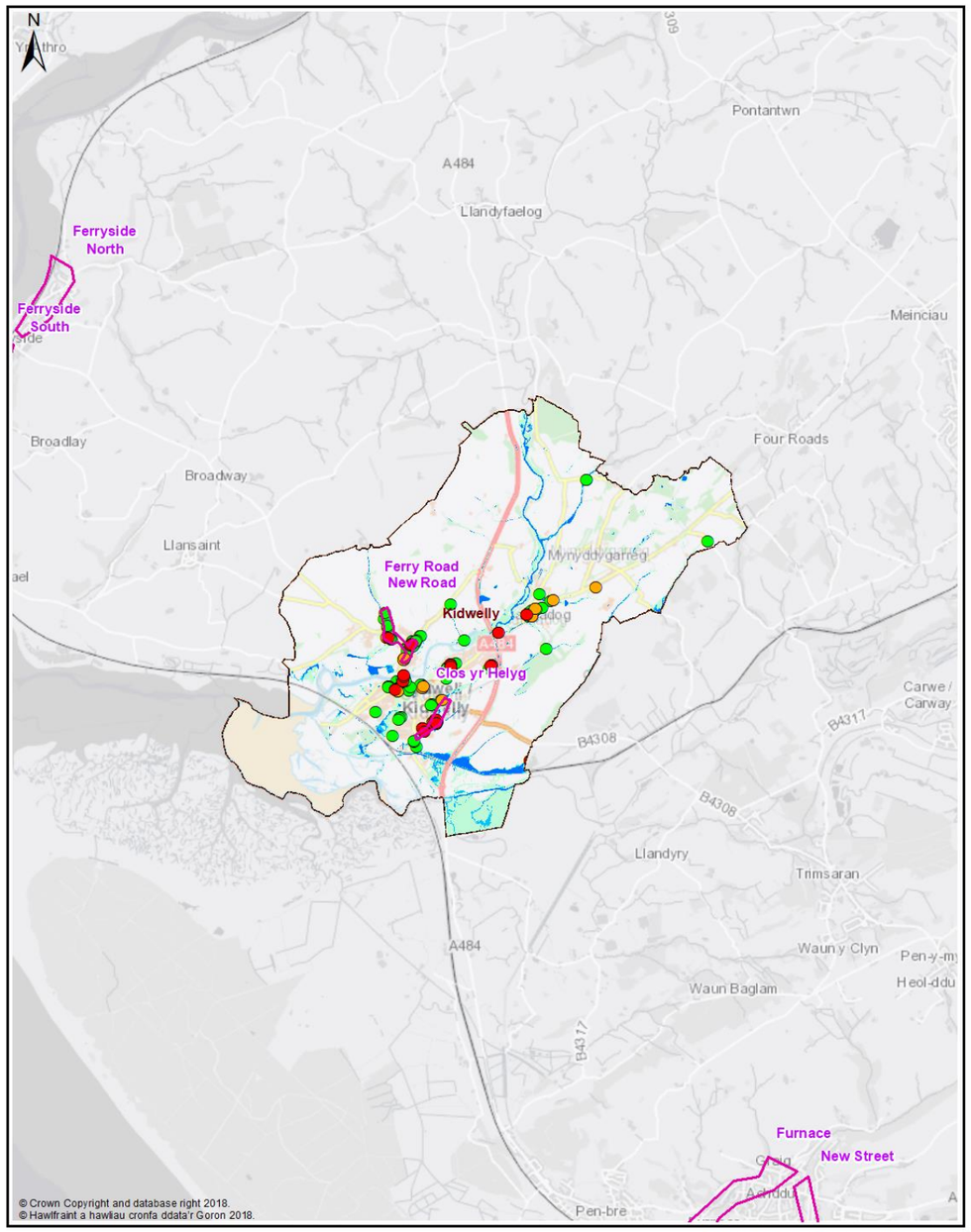
DCWW has identified flood risk at the following locations:

- Pembrey Road, Kidwelly
- Water Street, Kidwelly
- Parc Pendre, Kidwelly

NRW will continue to manage flood risk from Gwendraeth Fawr, Fach and tidal sources.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

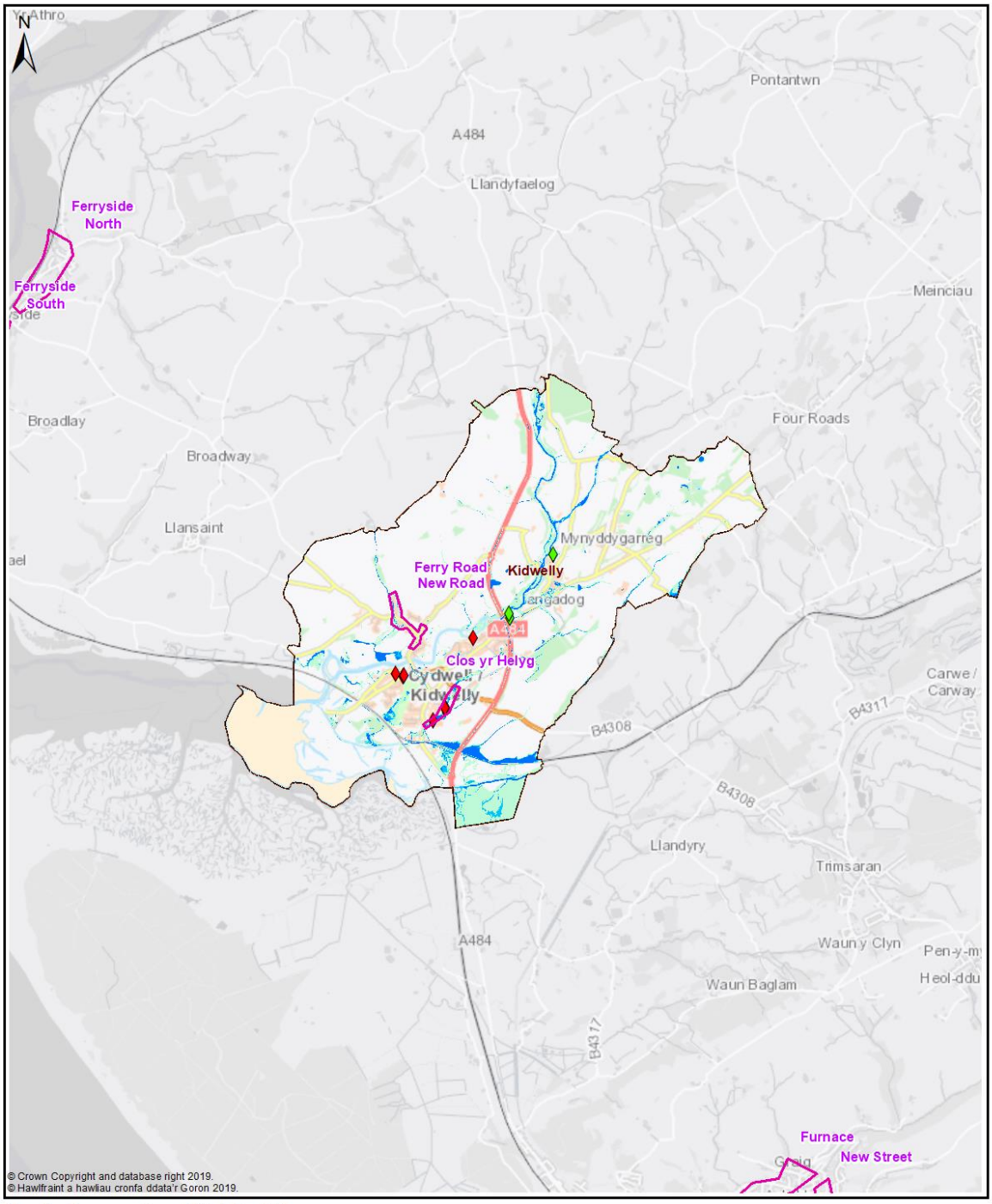
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Kidwelly

0 0.5 1 2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Kidwelly

0 0.5 1 2 Km

Kidwelly - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area	High	Ongoing	Med
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M24	Culvert inspections of existing assets & update/ maintain Asset Register	High	Med	Med
M31	Investigate opportunities to reduce runoff from adjacent moorland / hillsides	Med	Med	Med
M33	2 Policy Units identified for further review of potential alleviation actions	Med	Med	Med
M33	Investigate opportunities to reduce runoff from adjacent agricultural land	Med	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.25 Laugharne

Community Council(s):	Laugharne Town Llanddowror and Llanmilo Eglwscummin
Councillor:	Jane Tremlet
Population:	2,789 people
Area:	114.2 km^2
Population Density	24 people/km^2

Area Description

A predominantly rural area at south west of Carmarthenshire coastal area with relatively steep slopes to higher ground. Contains the settlements of Laugharne, Llanddowror, Pendine, Llanmilo and Red Roses. The Taf River and estuary forms the north and eastern boundaries with the coast forming the boundary to the south.

The NRW flood maps for this area show that Coran River and tidal flooding poses a significant flood risk to this area. Regular flooding occurs in Laugharne and Pendine from the tide.

Flood History

Severe flooding has occurred in Llanddowror from the River Hyddfon.

There is a history of flooding from surface water running off high ground and causing flooding in Pendine. Flooding in Laugharne from the Laques and from surface water in Clifton Street.

Policy Units in Ward

There are 2 No. Policy Units identified in this Ward:

- Llanddowror
- Laques, Laugharne

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	97	50	0
Medium Risk	142	76	0
Low Risk	298	154	0

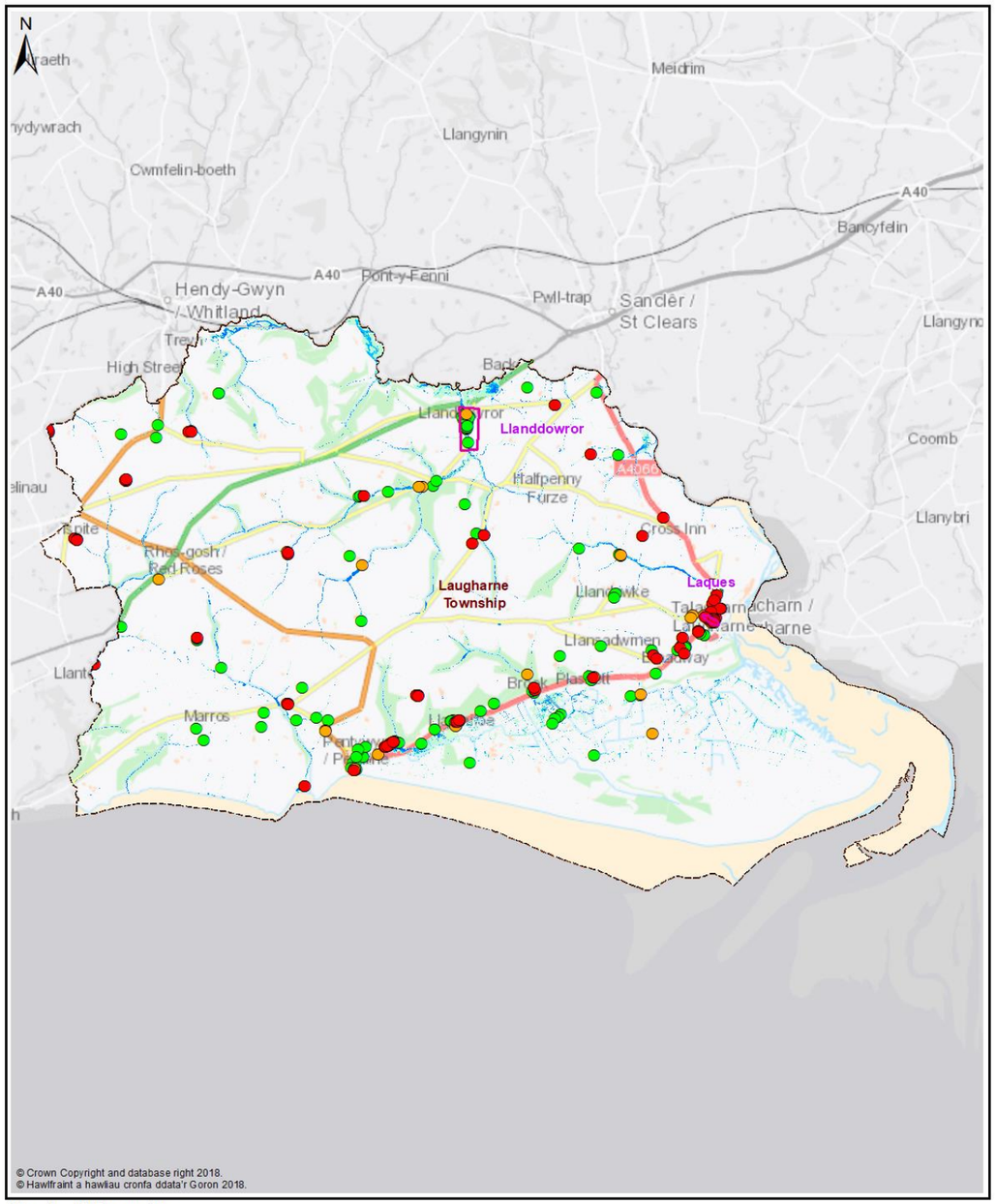
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

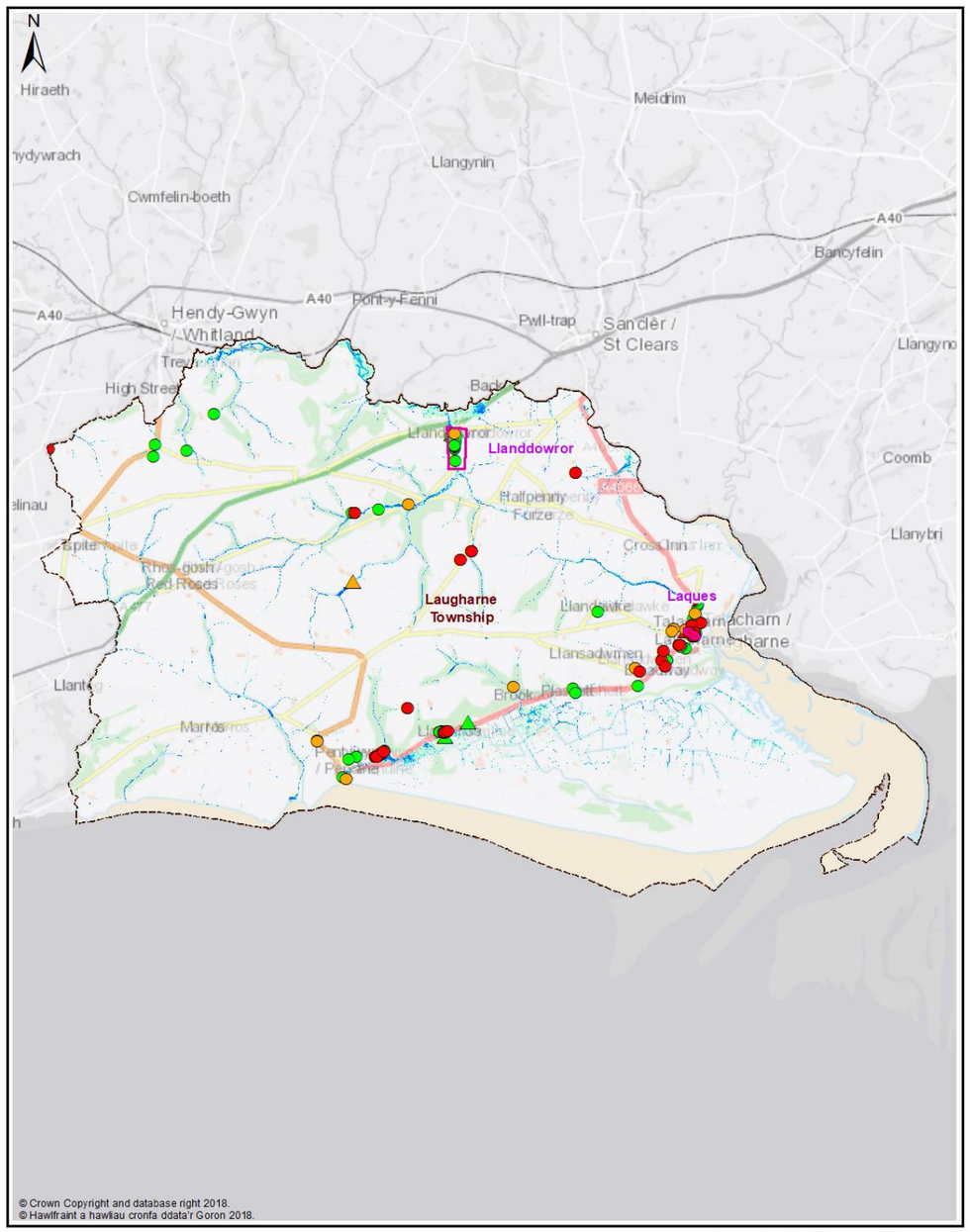
DCWW has identified flood risk at the following locations:

- Grist Square, Laugharne
- Llanddowror
- Dukes Meadow, Pendine
- Pendine
- Water Street, Laugharne
- Marsh Road, Pendine
- Pantyffynnon, St Clears

NRW will continue to manage flood risk from The Coran River, Taf and tidal sources.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

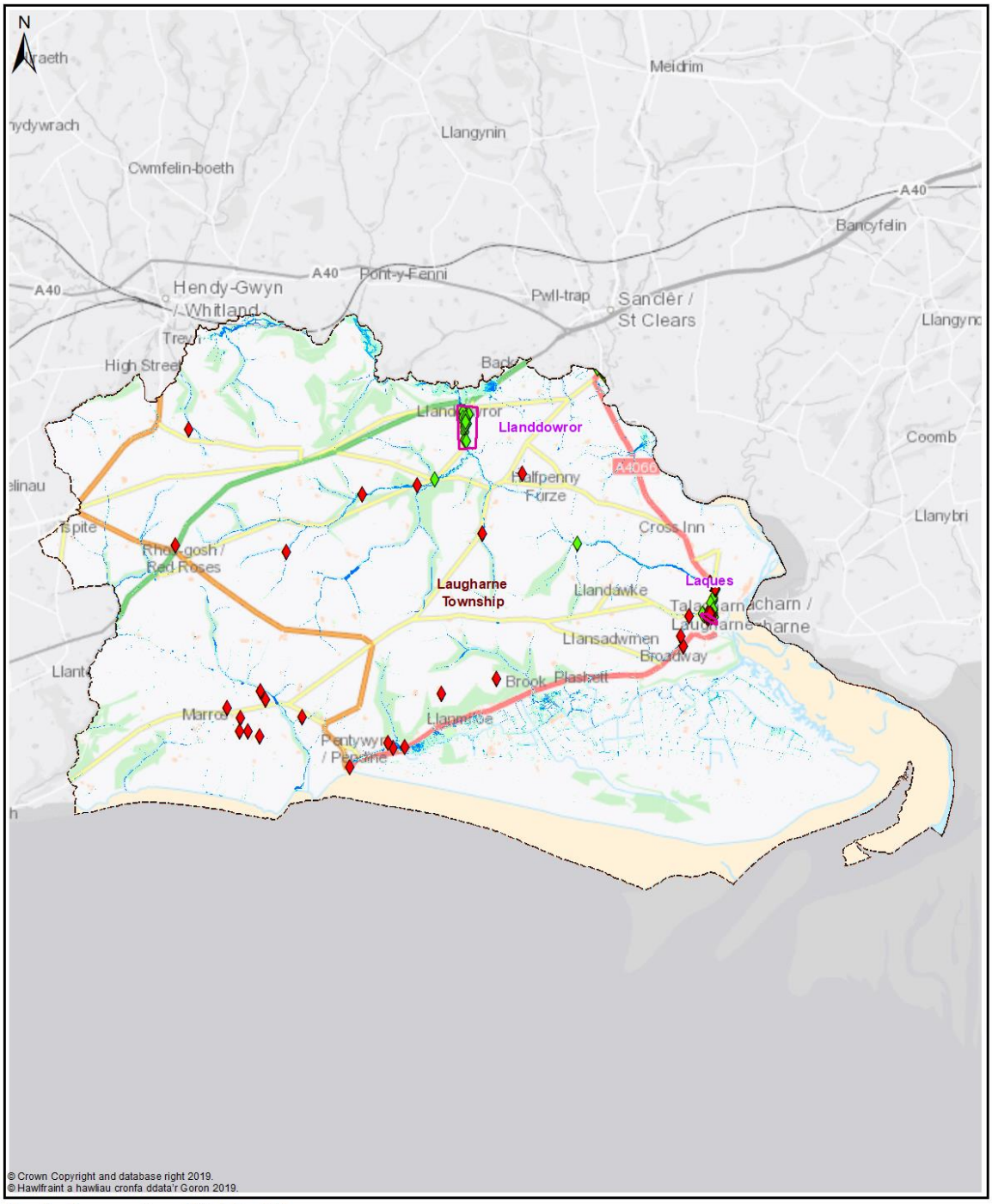
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Laugharne Township

0 1.25 2.5 5 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Laugharne Township

0 1.25 2.5 5 Km

Laugharne - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M24	Culvert inspections of existing assets & update/ maintain Asset Register	High	Med	Med
M33	2 Policy Units identified for further review of potential alleviation action(s)	Med	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.26 Llanboidy

Community Council(s)	Llanboidy
	Llangynin
	Cilymaunllwyd
Councillor:	Roy Llewellyn
Population:	2,075 people
Area:	102.10 km^2
Population Density:	20 people/km^2

Area Description

Rural area north of Whitland containing Llanboidy, Efailwen, Glandy Cross and Login.

Land use is predominantly pastoral agriculture.

The NRW flood maps for this area show that the River Gronw poses a significant flood risk to parts of Llanboidy. The River Gronw is not within the scope of this report as it is managed by NRW.

Flood History

Isolated surface water incidents.

Policy Units in Ward

There are no Policy Units identified in this ward.

Count Table (see Maps 1 & 2 below)

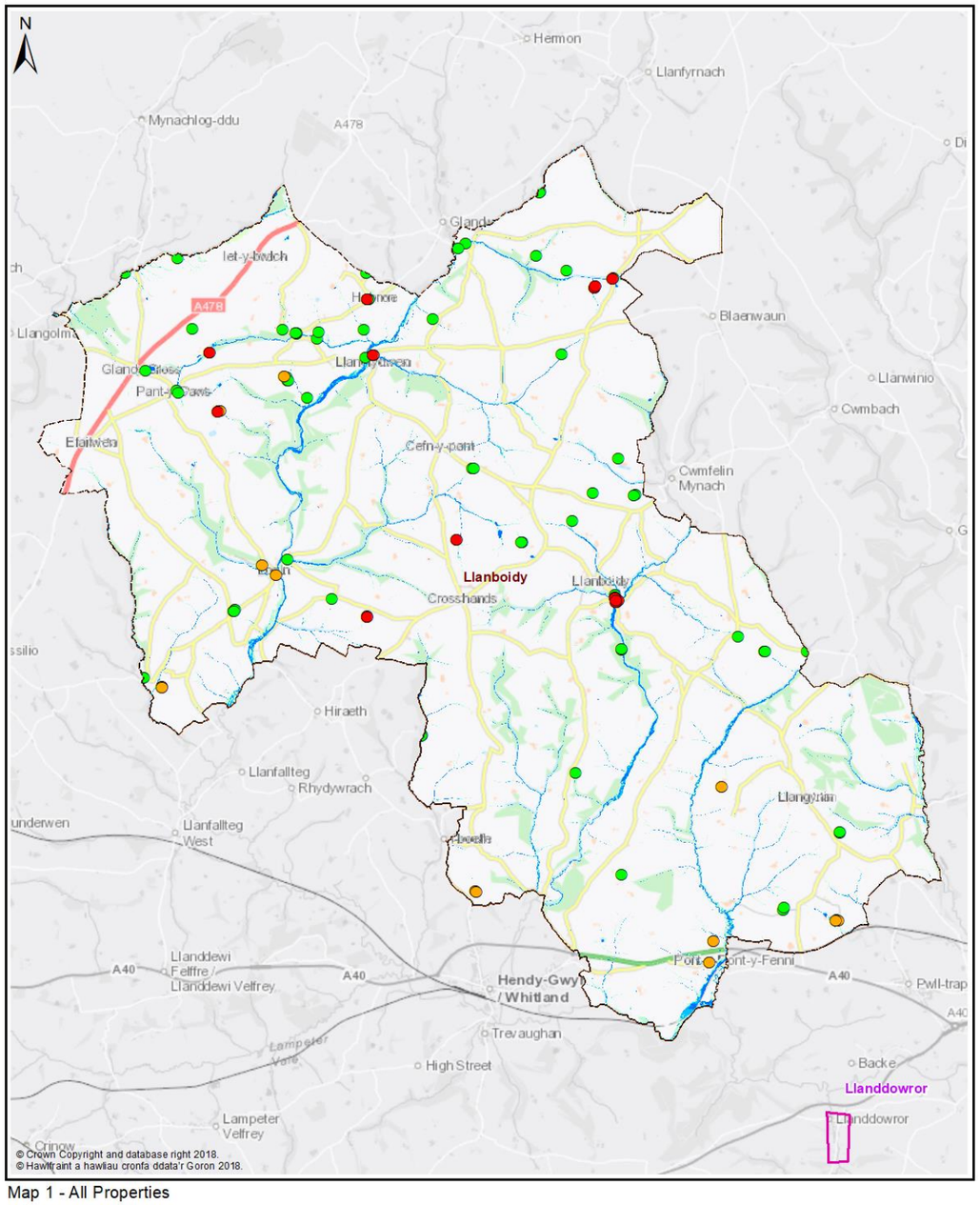
Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	14	3	0
Medium Risk	31	6	1
Low Risk	99	20	3

Breakdown by Policy Unit refer to Appendix E.

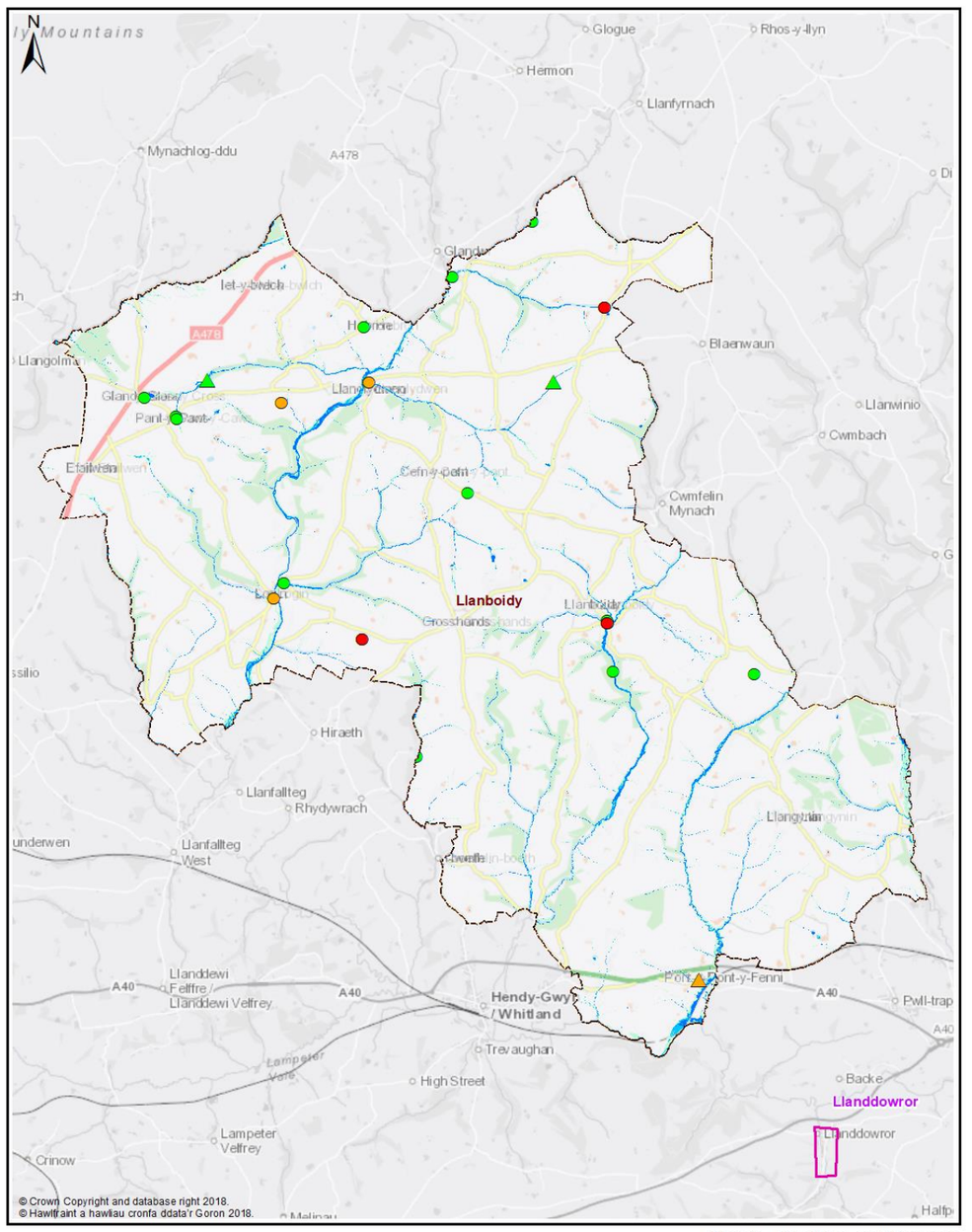
Other risk management authorities:

DCWW has not identified any areas of flood risk.

NRW will continue to manage flood risk from the Gronw River.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

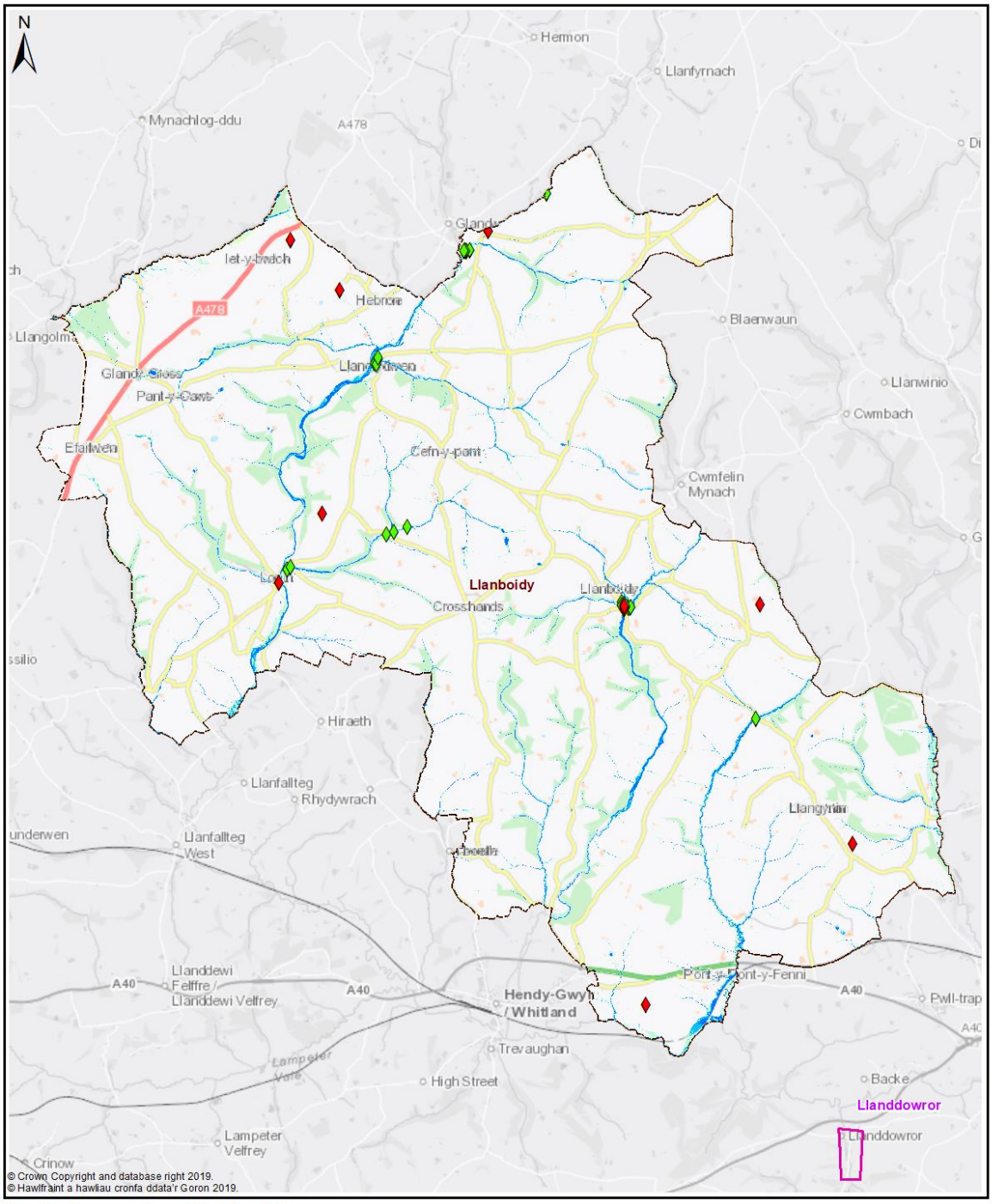
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llanboidy

0 1 2 4 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llanboidy

0 1 2 4 Km

Llanboidy - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M31	Investigate opportunities to reduce runoff from adjacent moorland / hillsides	Med	Med	Med
M33	Llanboidy - Policy Area identified for further review of potential alleviation action(s)	Med	Med	Med
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.27 Llanddarog

Community Council(s):	Llanddarog Llanarthne
Councillor:	Wyn Evans
Population:	2,937 people
Area	44.48 km^2
Population Density	46 people/ km^2

Area Description

Rural area approx. 11km to the east of Carmarthen containing the settlements of Llanddarog, Porthyrhyd, Llanarthne and Capel Dewi.

Land use is predominately pastoral agriculture. The Tywi River forms the northern boundary of this ward but does not present a significant flood risk in this area.

The Rivers Gwendraeth Fach and Dulais flow through the middle of the ward with the Gwendraeth Fach presenting a flood risk at Porthyrhyd.

The Rivers Tywi, Gwendraeth Fach and Dulais are not within the scope of this report as they are managed by NRW.

Flood History

Isolated surface water incidents.

Policy Units in Ward

There are no Policy Units identified in this ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	71	25	1
Medium Risk	94	33	1
Low Risk	208	79	3

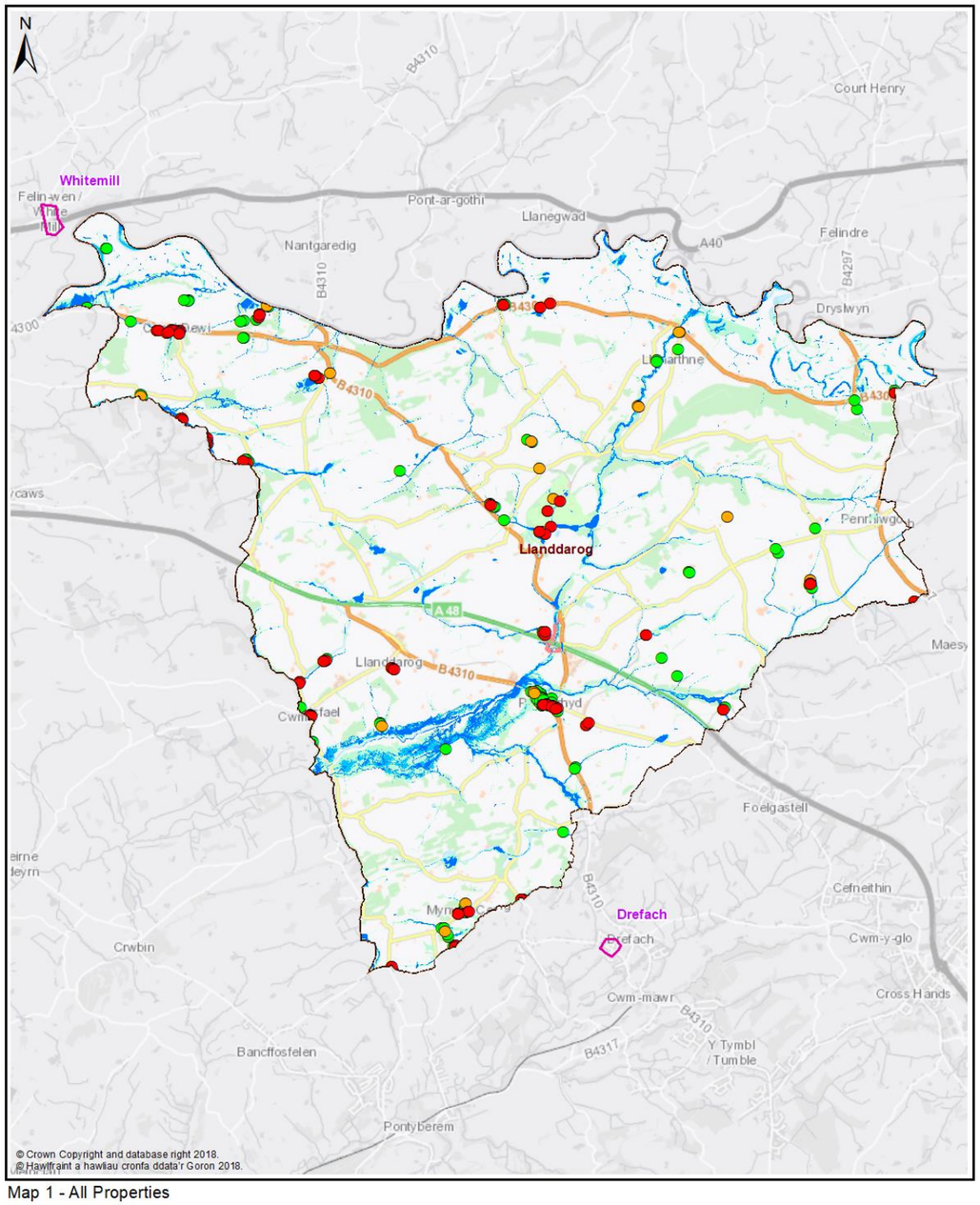
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

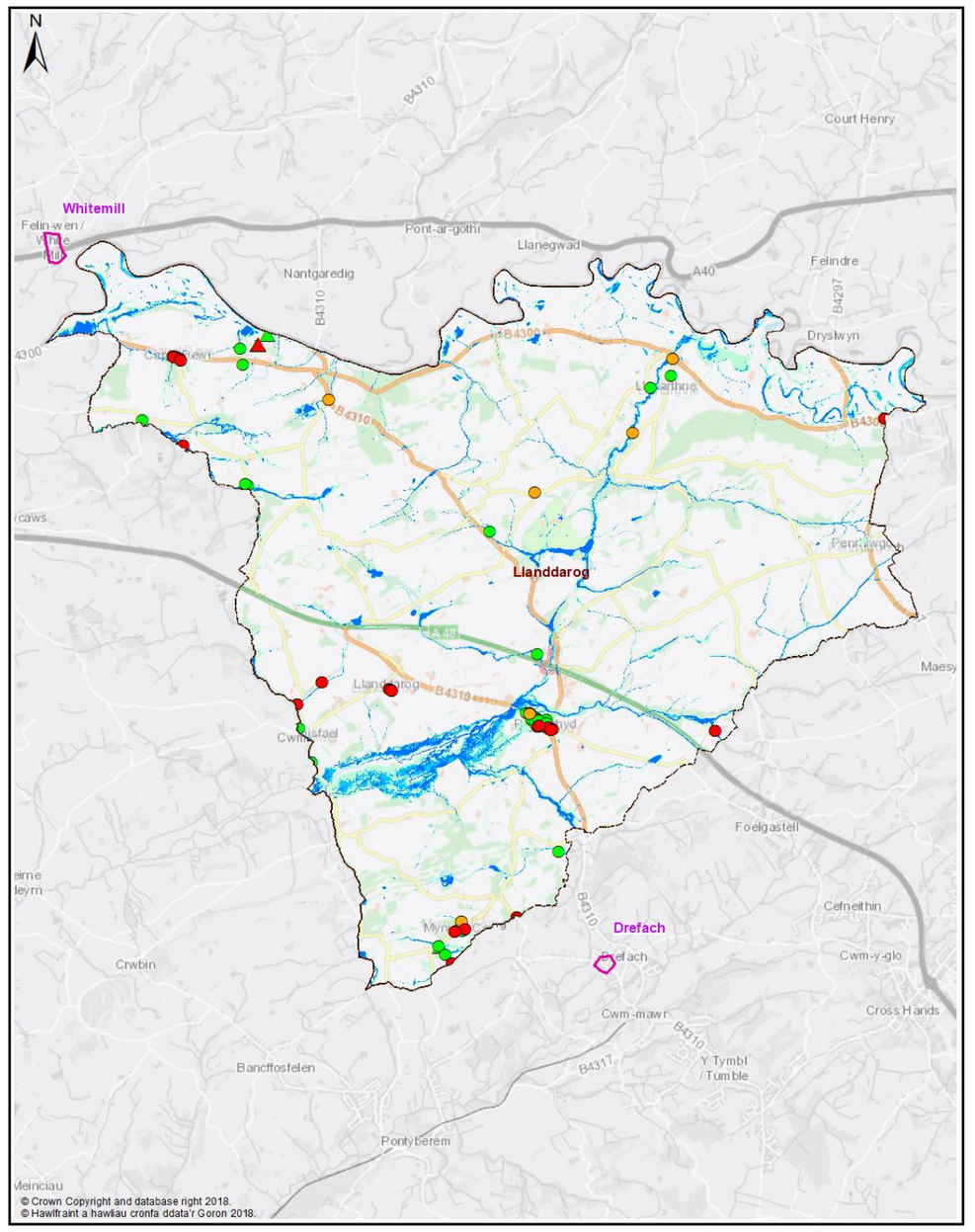
DCWW has identified flood risk at the following location

- Llanddarog

NRW will continue to manage Flood Risk from the Rivers Tywi, Gwendraeth Fach and Dulais.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

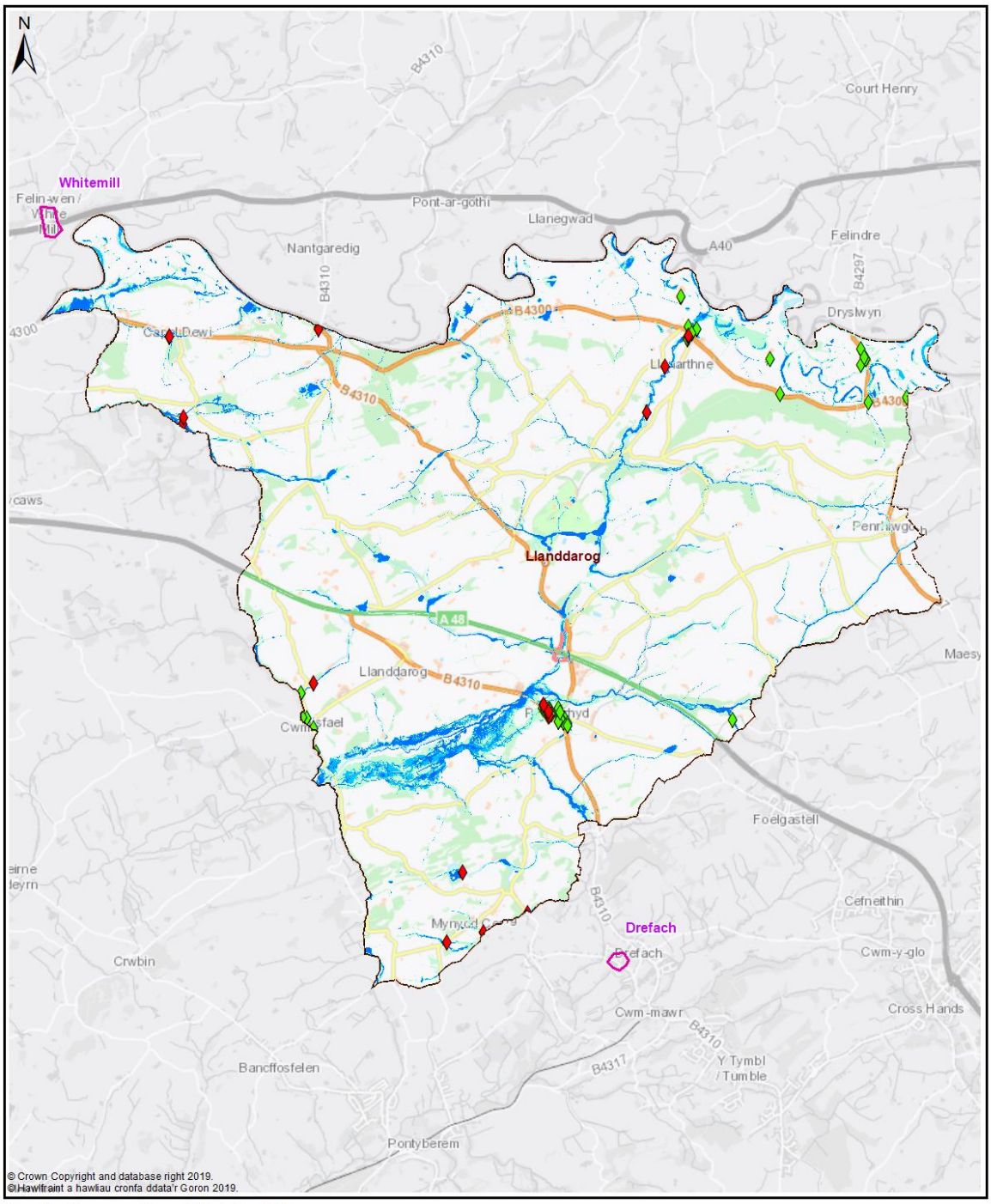
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llanddarog

0 0.75 1.5 3 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llanddarog

0 0.75 1.5 3 Km

Llanddarog - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M31	Investigate opportunities to reduce runoff from adjacent moorland / hillsides.	Med	Med	Low
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers.	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate.	Med	Ongoing	Low

9.3.28 Llandeilo

Community Council(s):	Llandeilo Town Dyfryn Cennen
Councillor:	Edward Gwyn Thomas
Population:	2,248 people
Area:	47.49 km^2
Population Density	61 people/ km^2

Area Description

Largely rural area containing the market towns of Llandeilo, Ffairfach and Trap.

The Main Rivers Towy and Cennen run through this ward and the Gurney Fach forms part of the boundary. Llandeilo Town itself is raised above the floodplain but the river Towy and Cennen pose significant flood risk to the Ffairfach area.

The Towy, Cennen and Gurnay Fach Rivers are not within the scope of this report as they are managed by NRW.

Flood History

Surface water incidents in the Ffairfach area.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	32	10	1
Medium Risk	52	23	1
Low Risk	192	96	3

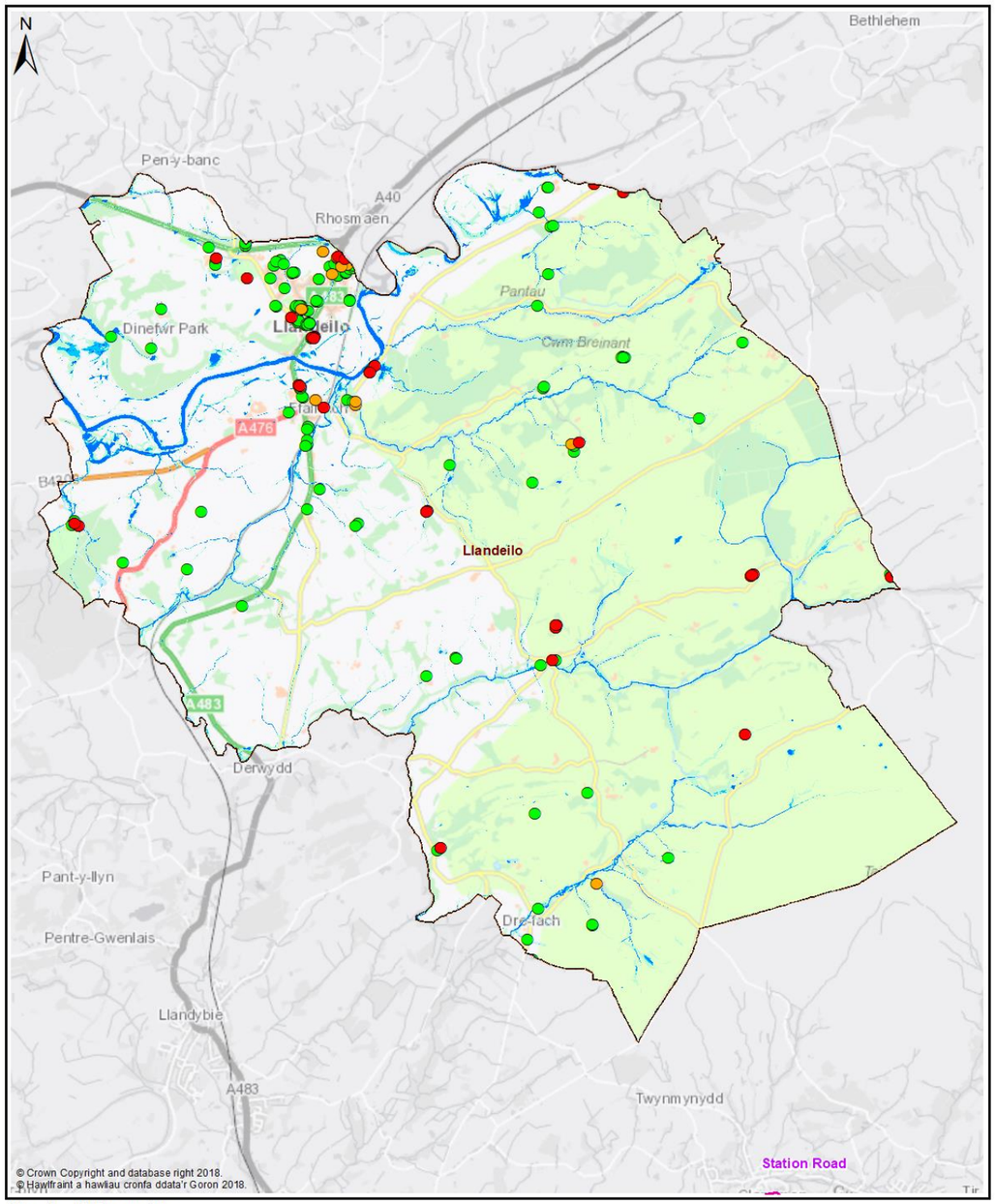
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

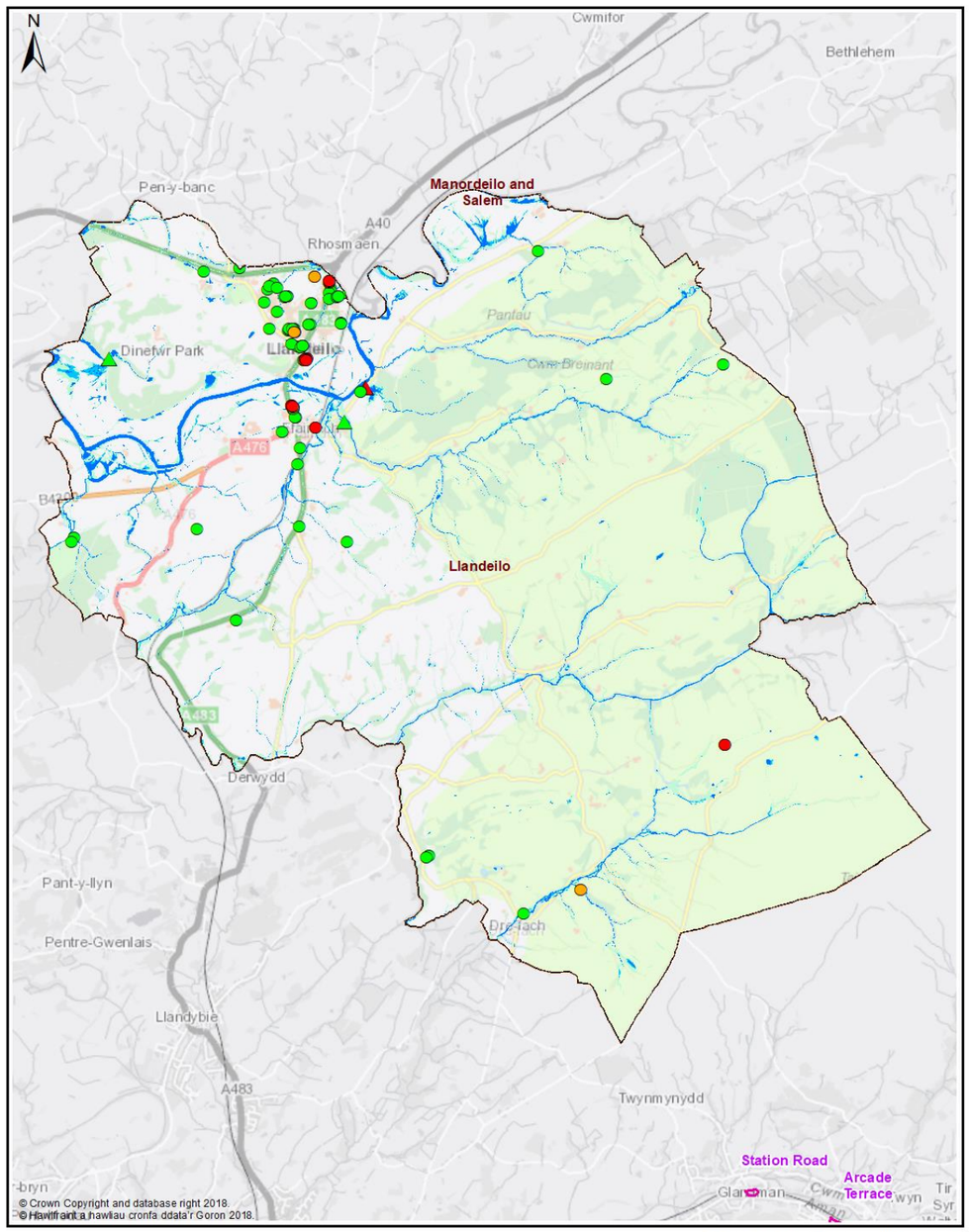
DCWW has identified flood risk at the following locations:

- Quay Street, Llandeilo
- Rhosmaen Street, Llandeilo
- Towy Terrace, Ffairfach

NRW will continue to manage Flood Risk from the Rivers Towy, Cennen and Gurnay Fach.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

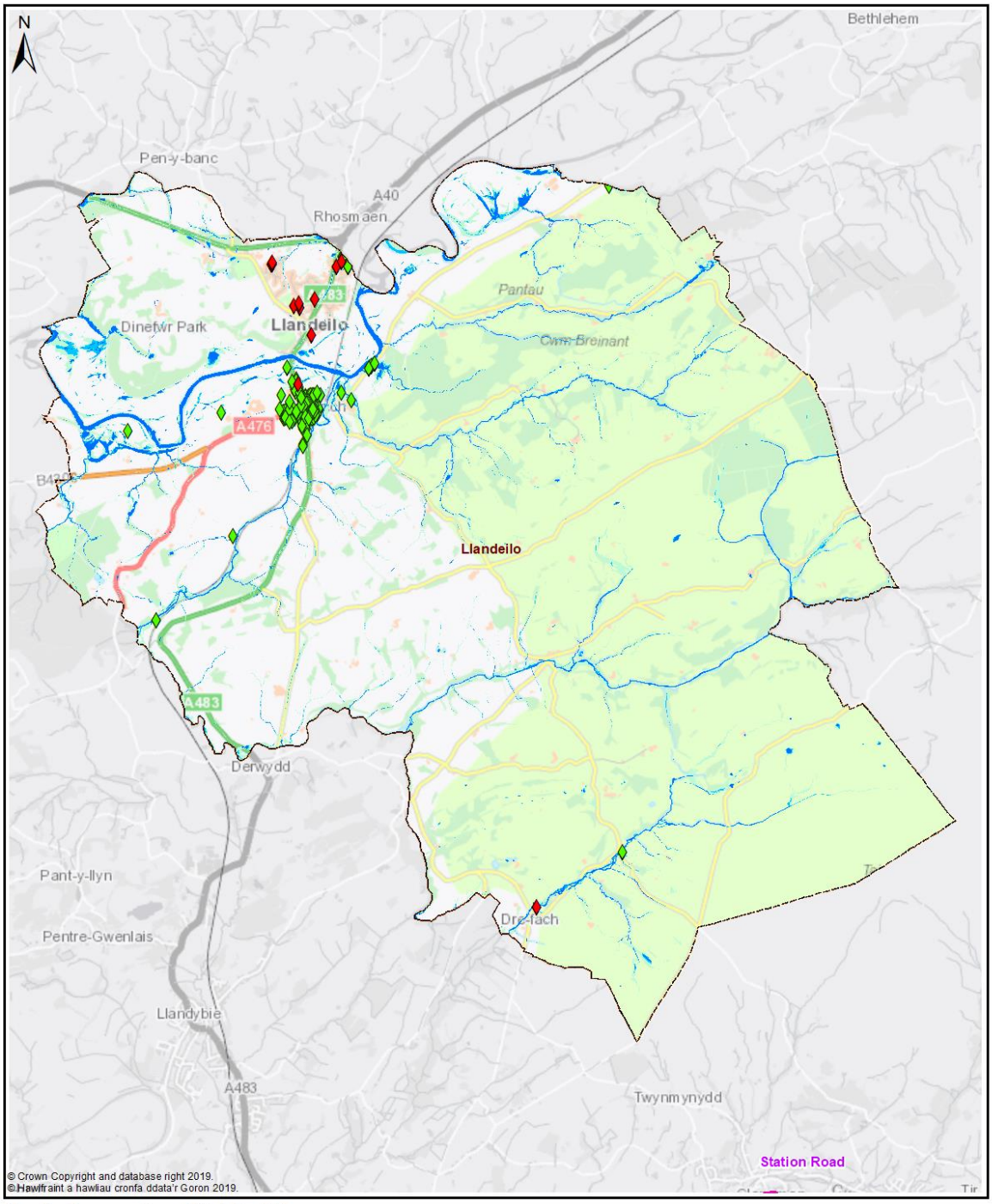
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llandeilo

0 0.5 1 2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llandeilo

0 0.5 1 2 Km

Llandeilo - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M31	Investigate opportunities to reduce runoff from adjacent moorland / hillsides.	Med	Med	Low
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.29 Llandovery

Community Council(s):	Llandovery Town Llanfair Ar y Bryn
Councillor:	Ivor Jackson
Population:	2,012 people
Area:	115.8 km^2
Population Density:	23 people/km^2

Area Description

Largely rural area at the North East of Carmarthenshire.

Containing the market town of Llandovery and the settlements of Cyhordy and Rhandirmwyn.

Land use consists of pastoral agriculture and forestry with areas of high land in the north of the ward.

In Llandovery the Rivers of Tywi Bran and Gwydderig meet and these present a significant flood risk in Llandovery.

The Loughor and Gwili rivers are not within the scope of this report as they are managed by NRW.

Flood History

Severe flooding in the past from Main Rivers Bran and Gwydderig.

Regular flooding on Cillycwm Road from the Bawddwr.

Policy Units in Ward

There is one Policy Unit identified in this Ward:

- Nant Bawddwr

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	57	16	1
Medium Risk	108	41	1
Low Risk	419	215	3

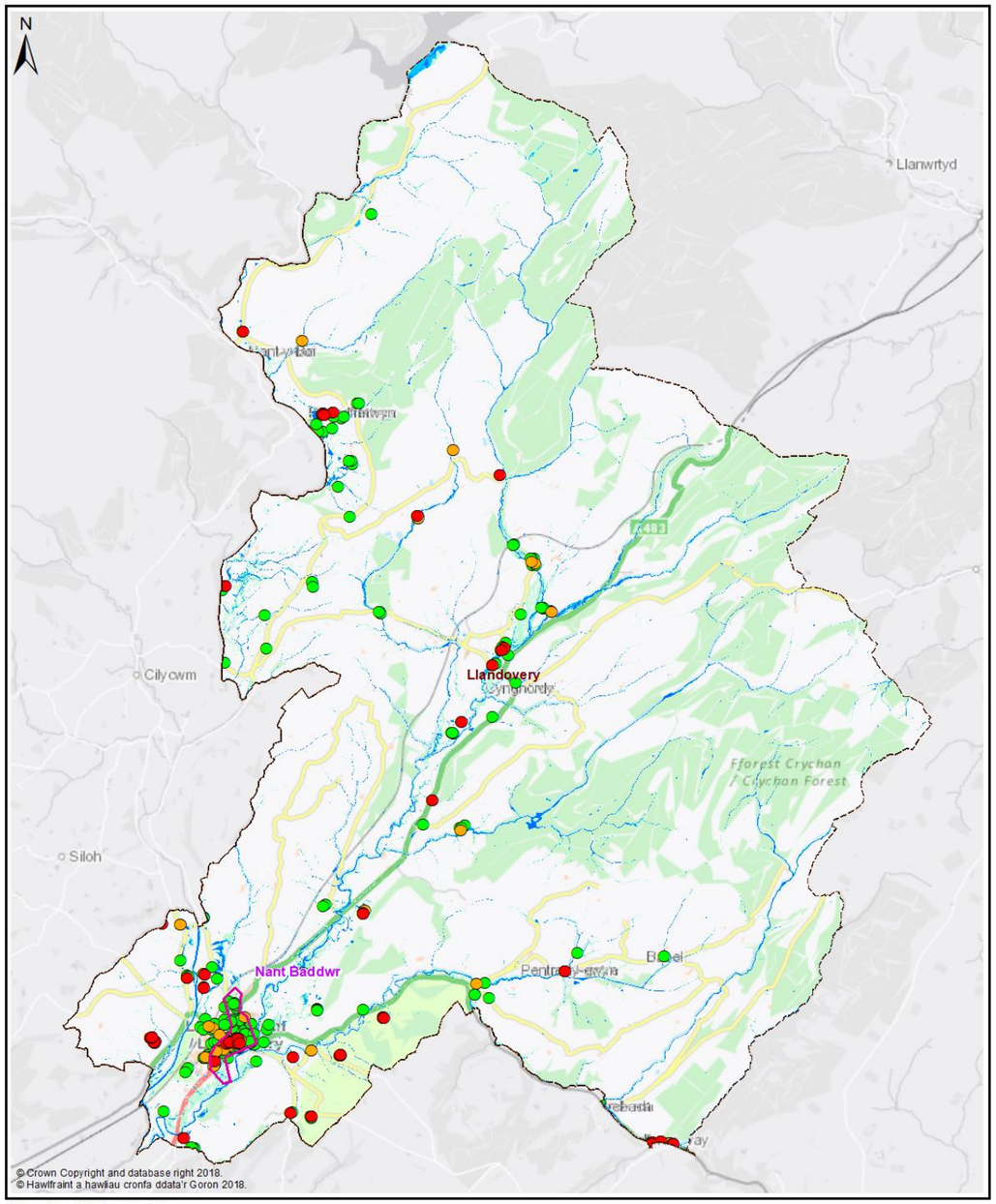
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities DCWW

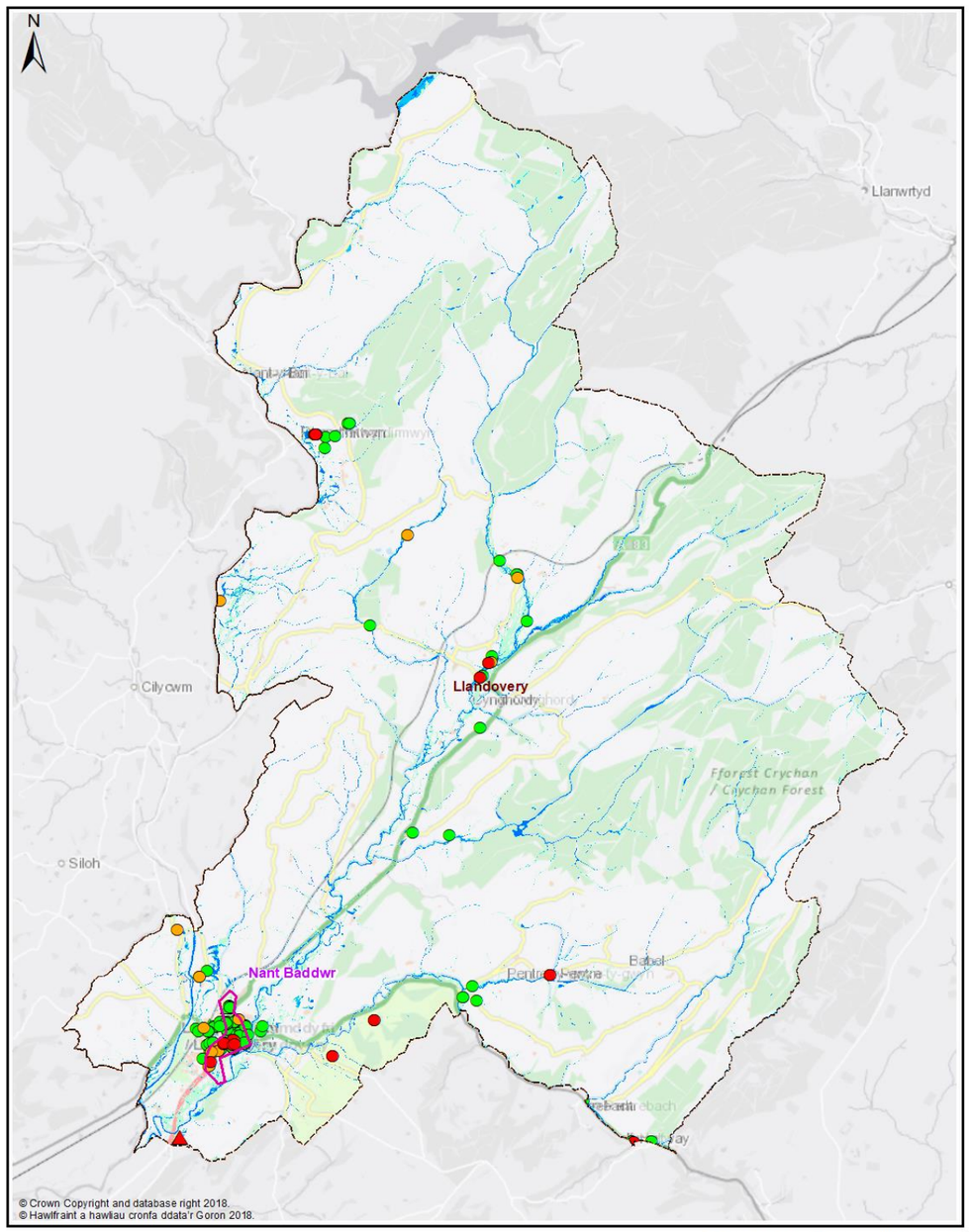
DCWW has identified flood risk at the following location:

- Broad Street, Llandovery

NRW will continue to manage flood risk from the Rivers Tywi Bran and Gwydderig.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

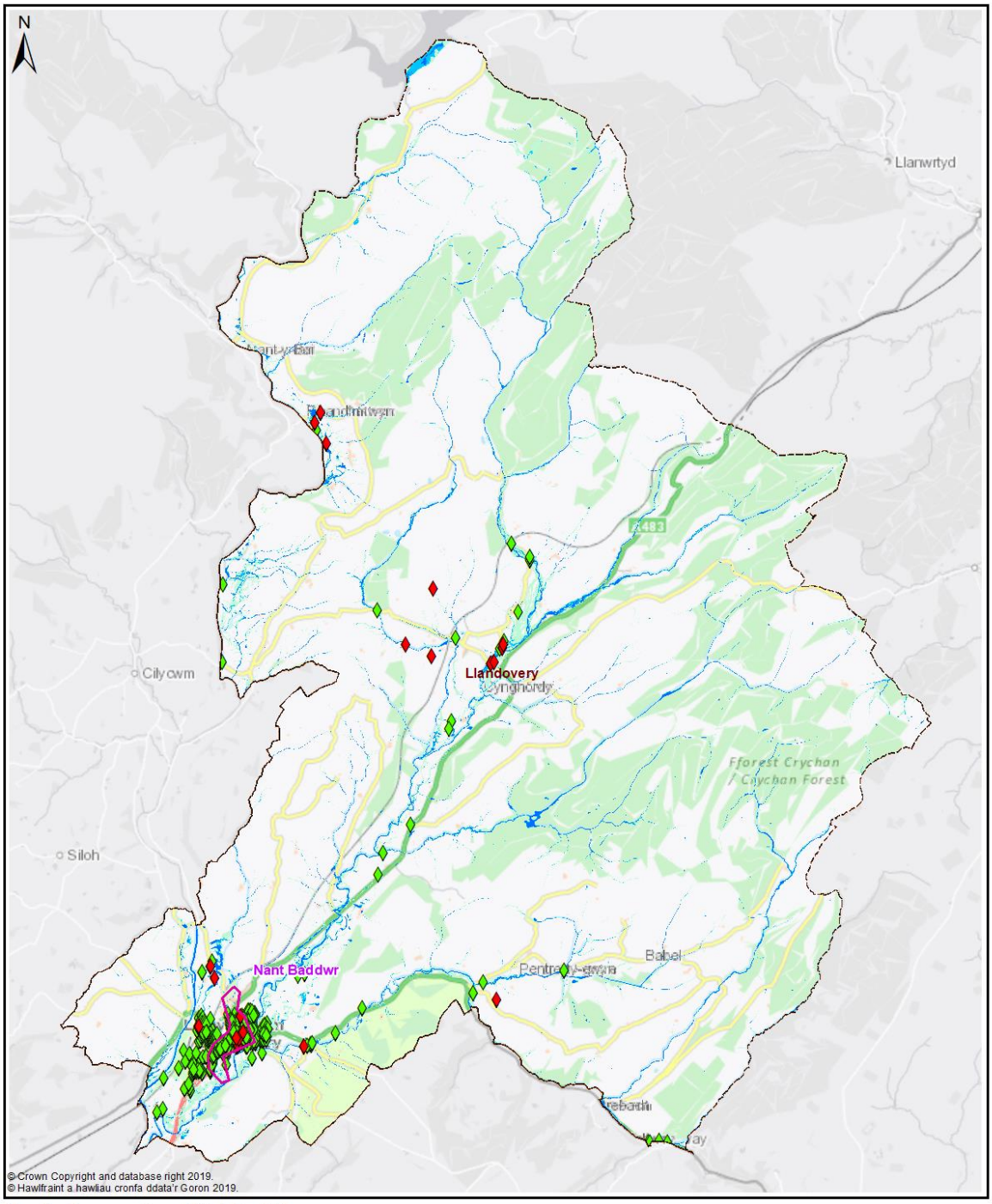
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llandovery

0 1 2 4 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llandovery

0 1 2 4 Km

Llandovery - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area	High	Ongoing	Med
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M24	Culvert inspections of existing assets & update/ maintain Asset Register	High	Ongoing	Med
M31	Investigate opportunities to reduce runoff from adjacent moorland / hillsides.	Med	Med	Med
M33	1 Policy Unit identified for further review of potential alleviation actions	High	Ongoing	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.30 Llandybie

Community Council(s):	Llandybie
Councillor:	Antony Jones
Population:	3126 people
Area	25.59 km^2
Population Density	172 people/km^2

Area Description

Largely rural ward to the north of Ammanford town containing the village of Llandybie.

Land use is pastoral agriculture with woodlands and limestone quarrying.

The Loughor, Morlais and Lash Main Rivers flow through this ward.

The NRW flood maps for this area show that Loughor Morlais and Lash Rivers afford a significant flood risk to this area. The Loughor and Morlais Rivers are not within the scope of this report as they are managed by NRW.

Flood History

Flooding from the Nant Gwyddfan.

Surface water flooding at:

- Eriw Bryhindedd.
- Wernddu Road
- McKays Road.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	41	25	0
Medium Risk	94	66	0
Low Risk	367	272	0

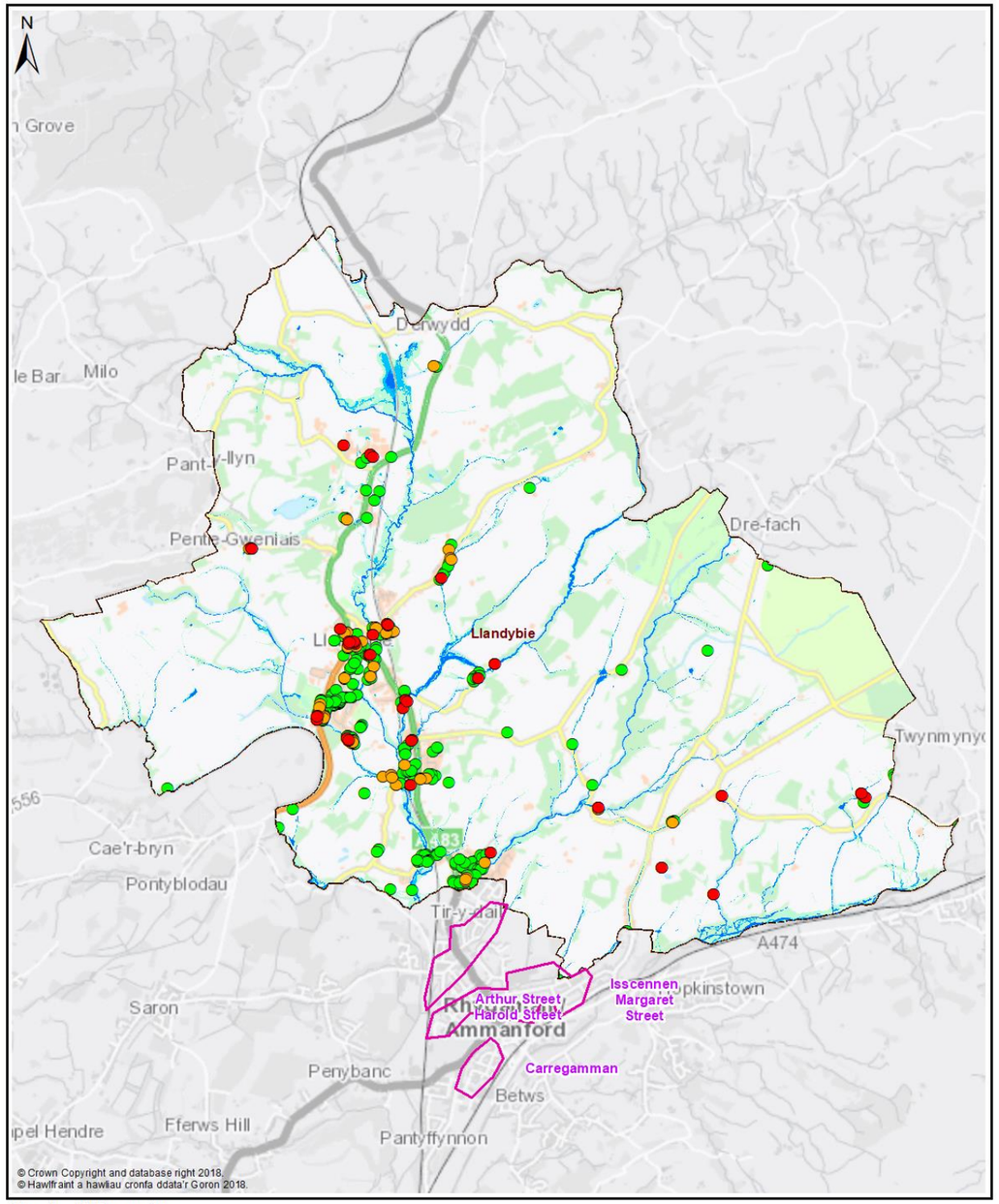
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities:

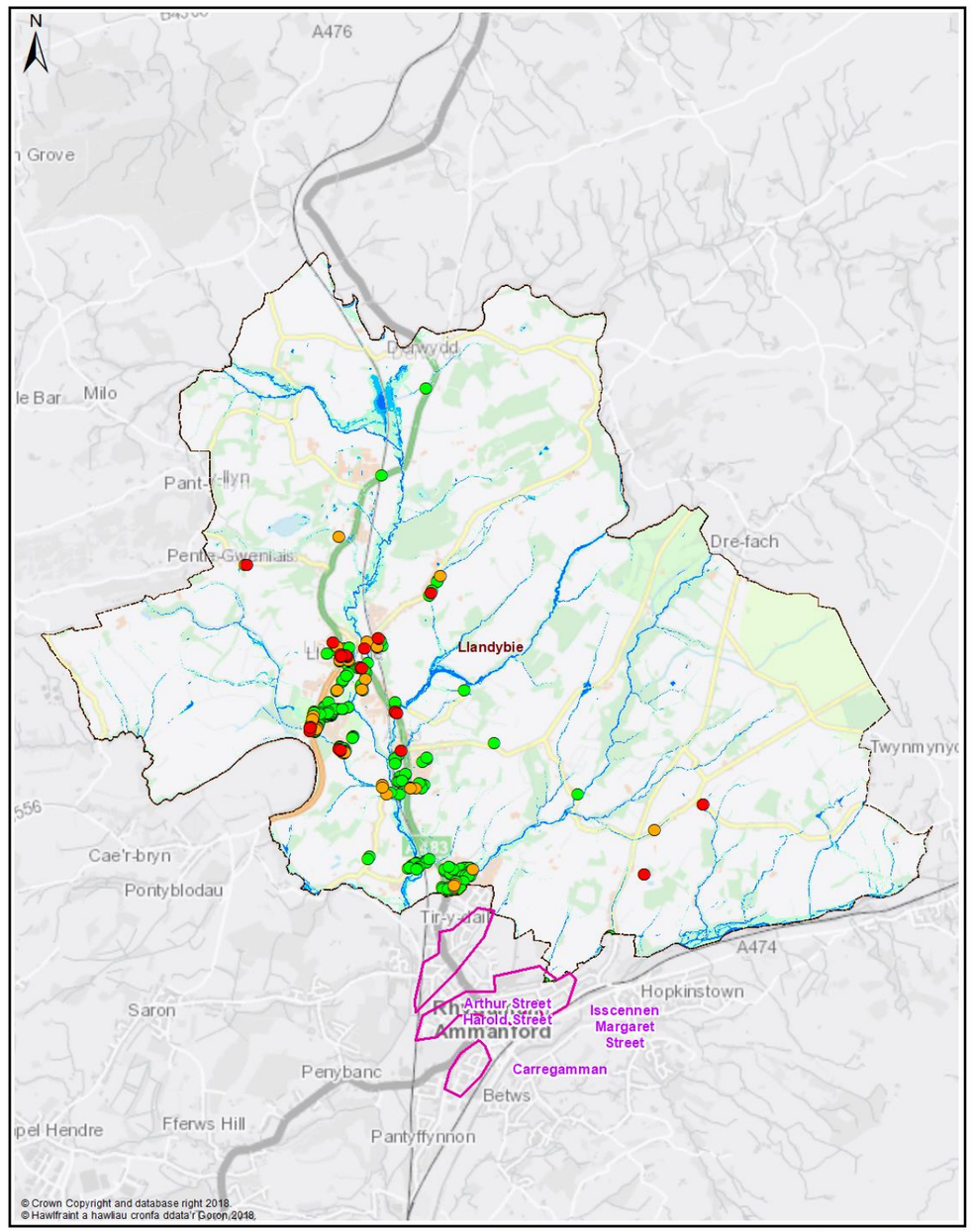
DCWW has identified flood risk at the following locations:

- Aberlash Road, Ammanford
- Blaenau Road, Llandybie
- McKays Road, Llandybie
- Wernddu Road, Ammanford

NRW will continue to manage flood risk from the Rivers Loughor, Morlais and Las.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

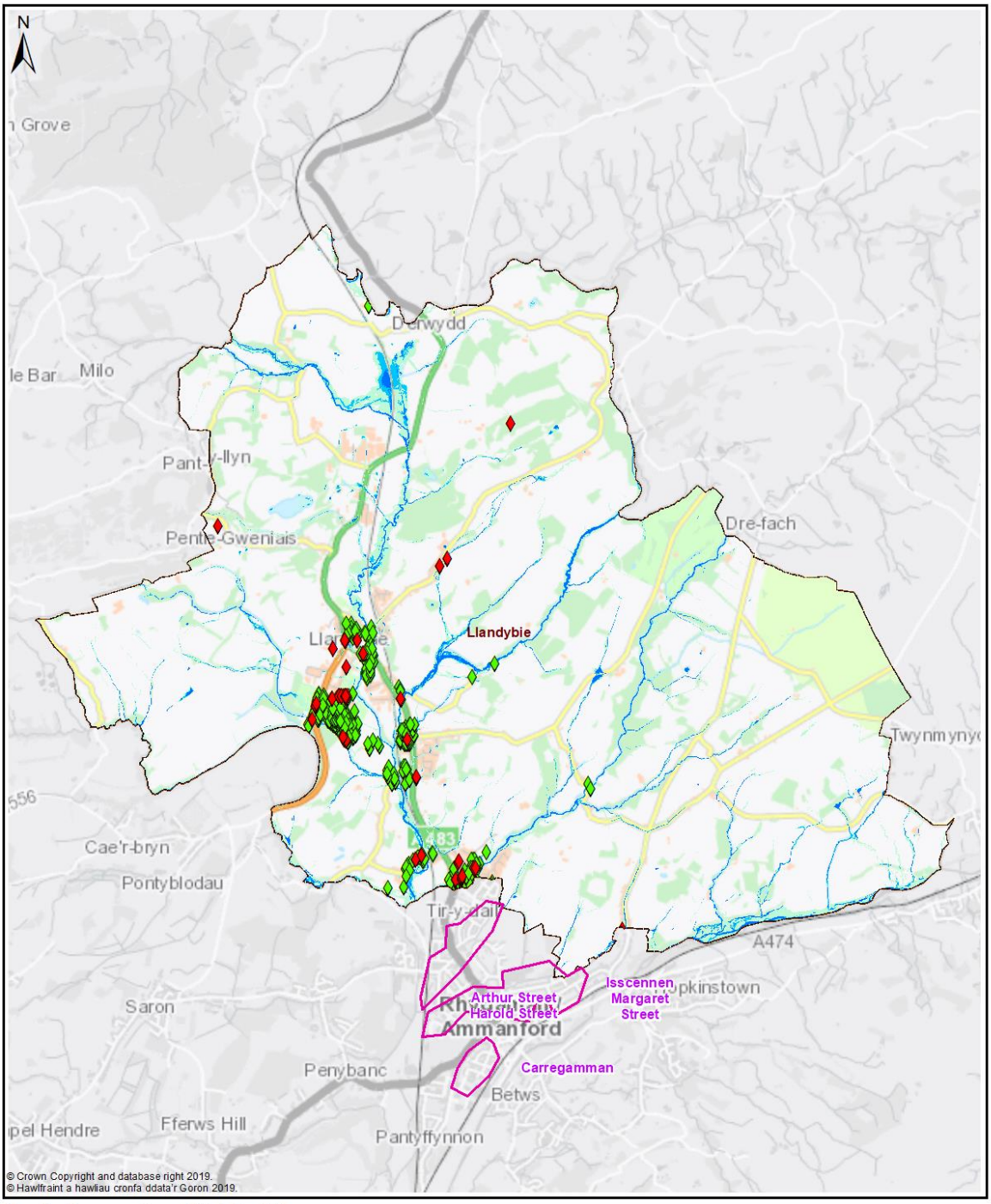
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llandybie

0 0.5 1 2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llandybie

0 0.5 1 2 Km

Llandybie - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area	High	Ongoing	Med
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M31	Investigate opportunities to reduce runoff from adjacent moorland / hillsides	Med	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.31 Llanegwad

Community Council(s):	Llanegwad Llanfihangle Rhos –Y-Corn Llanfynydd
Councillor:	Mansel Charles
Population:	2458 people
Area:	148.2 km^2
Population Density:	17 people/km^2

Area Description

Large rural Ward approximately 12 km east of Carmarthen Town Centre containing the settlements Llanfynydd, Nantgaredig, Llanegwad, Brechfa and Abergorlech.

Land use is pastoral agriculture with large forestry plantations.

Main Rivers: River Tywi at the southern boundary. The River Cothi runs through the middle of the ward. Sannan and Dulais at south east of ward.

Flood History

Flooding from small watercourse at Nantgaredig.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	58	16	1
Medium Risk	84	29	1
Low Risk	197	76	1

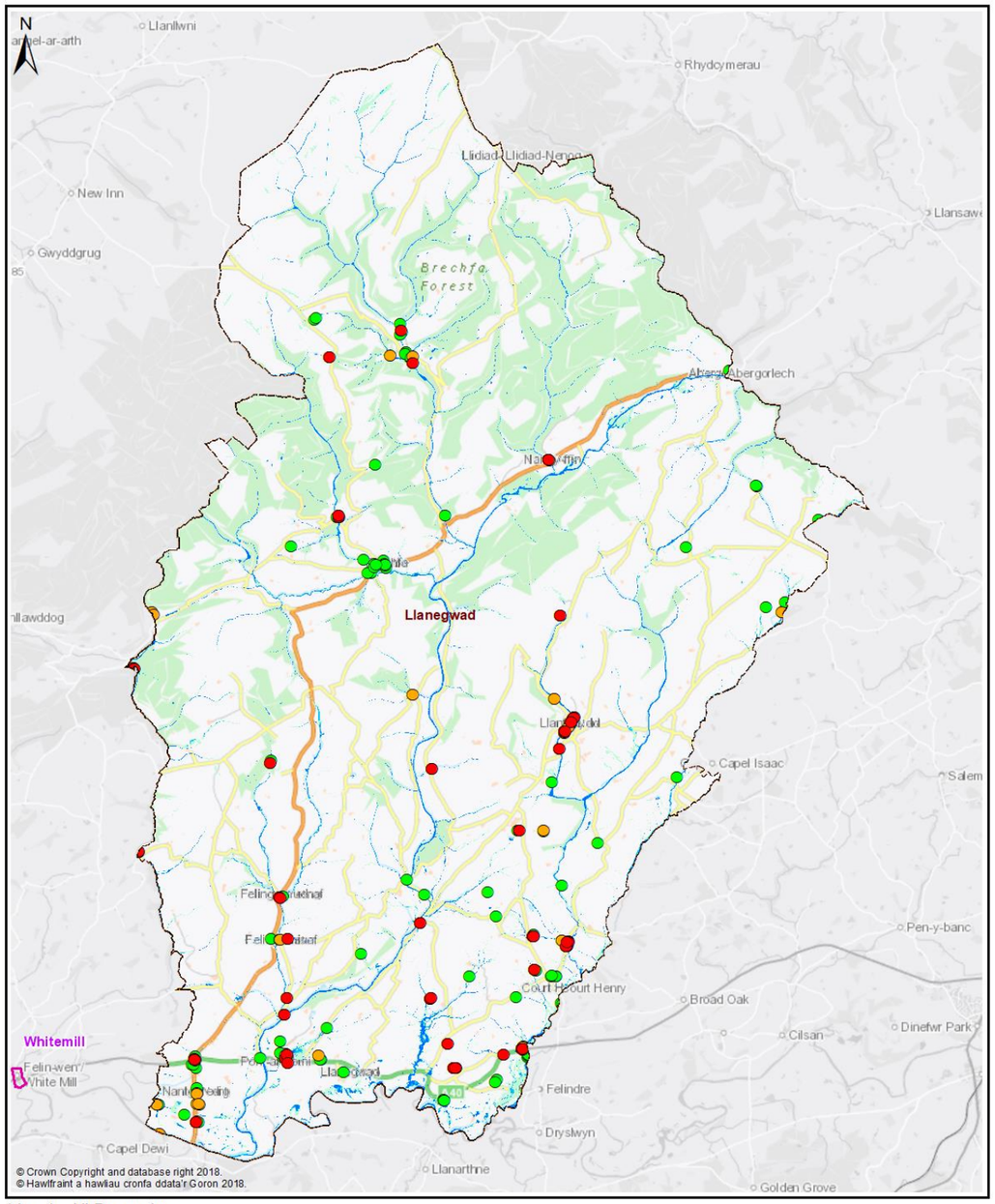
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities DCWW

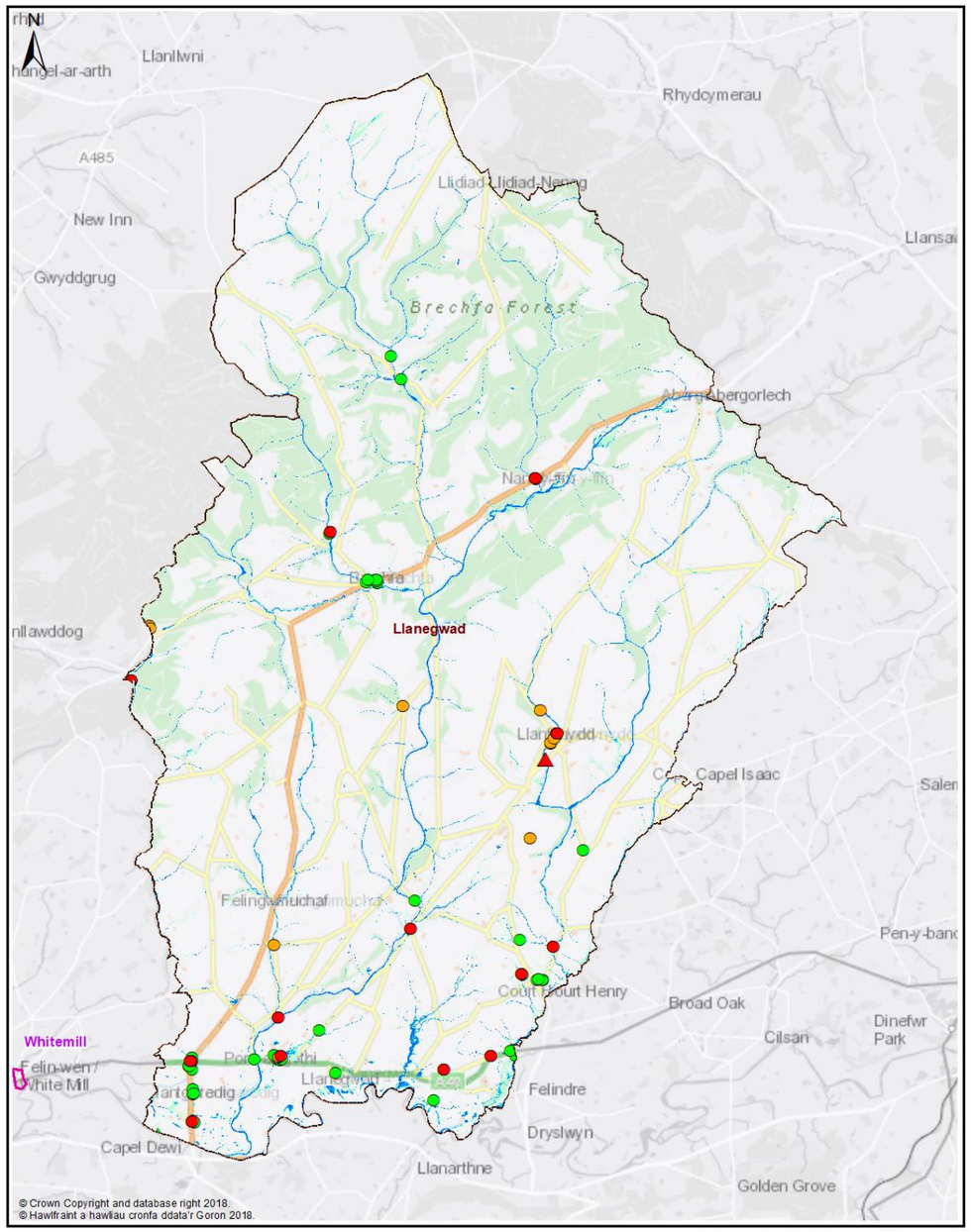
DCWW has identified flood risk at the following locations:

- Brechfa
- Dryslwyn, Carmarthen
- Felingwmuchaf
- Llanfynydd
- Nantgaredig

NRW will continue to manage flood risk from the Rivers Tywi, Cothi, Sannan and Dulais.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

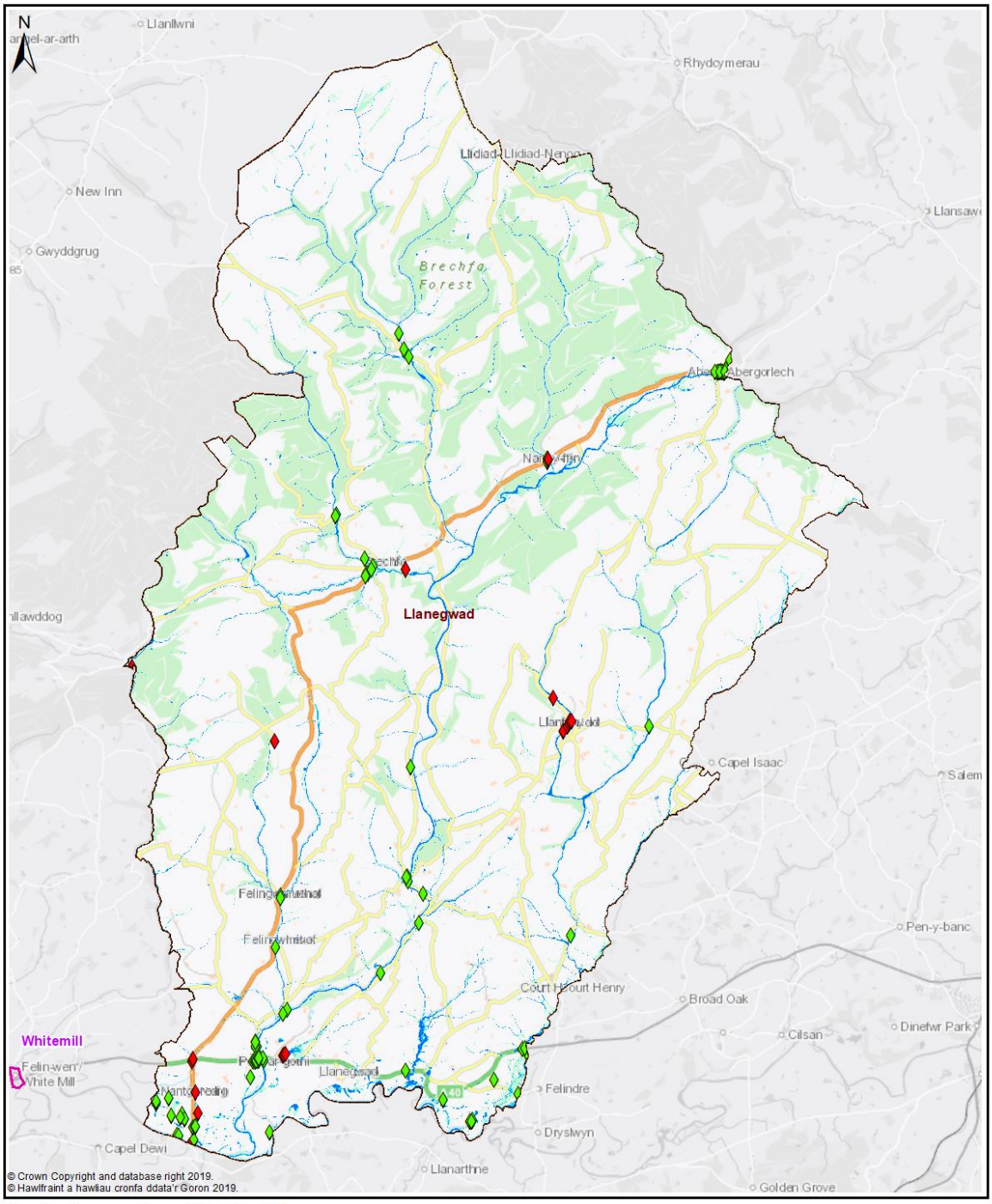
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llanegwad

0 1 2 4 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llanegwad

0 1 2 4 Km

Llanegwad - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Low
M31	Investigate opportunities to reduce runoff from adjacent moorland / hillsides	Med	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.32 Llanfihangel Aberbythych

Community Council(s):	Llanfihangel Aberbythych Llangathen
Councillor:	Linda Evans
Population:	2,842 people
Area:	88.97 km^2
Population Density:	32 people/km^2

Area Description

Largely rural Ward spanning the Towy valley to the west of Llandeilo.

Small settlements include Carmel, Golden Grove, Llangathen and part of Penygroes.

Land use is pastoral agriculture including a large area of the River Towy floodplain, woodlands and some limestone quarrying around Carmel.

Flood History

Flood risk from the River Towy although the number of properties at risk are few.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	28	9	0
Medium Risk	46	16	0
Low Risk	132	28	0

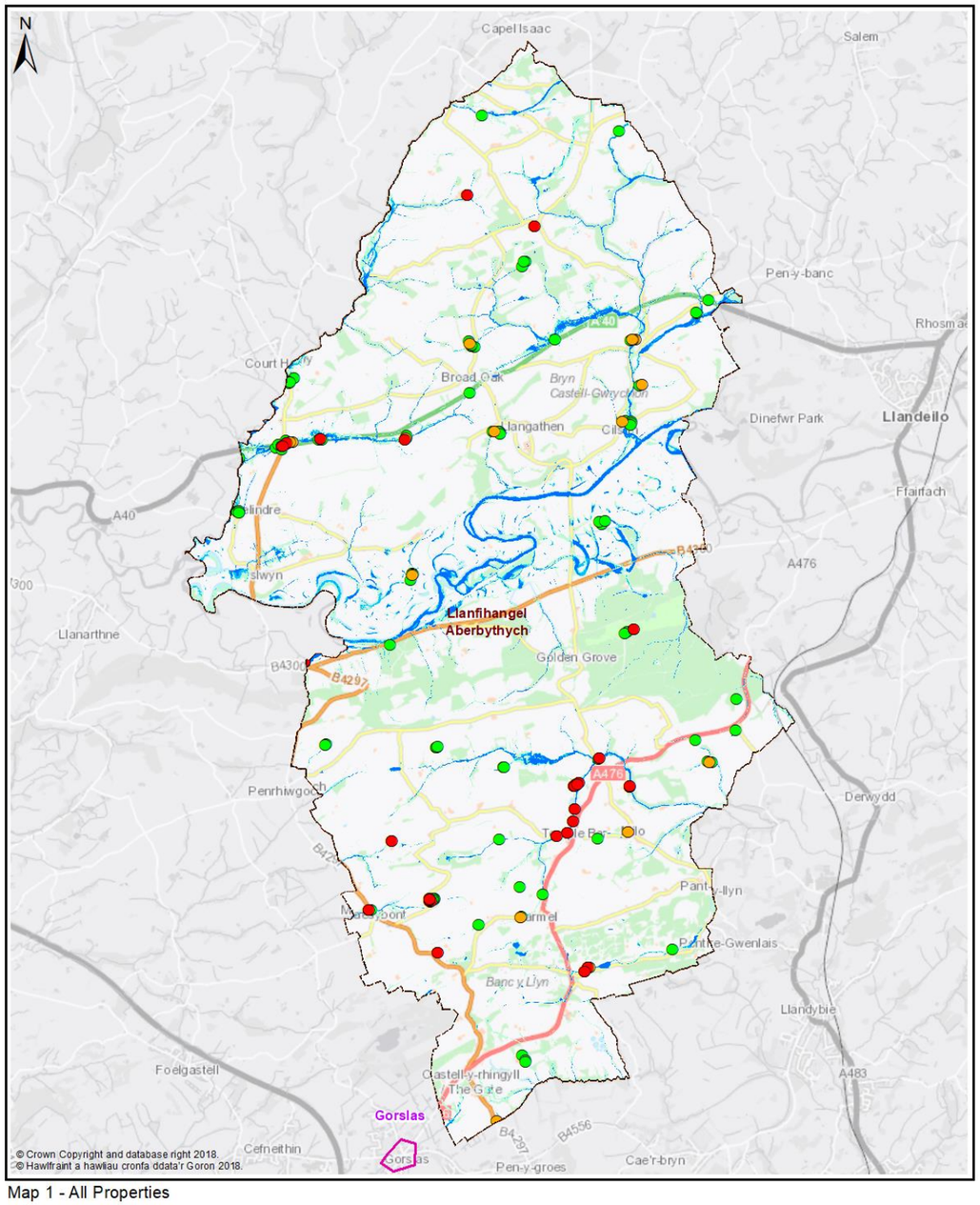
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities:

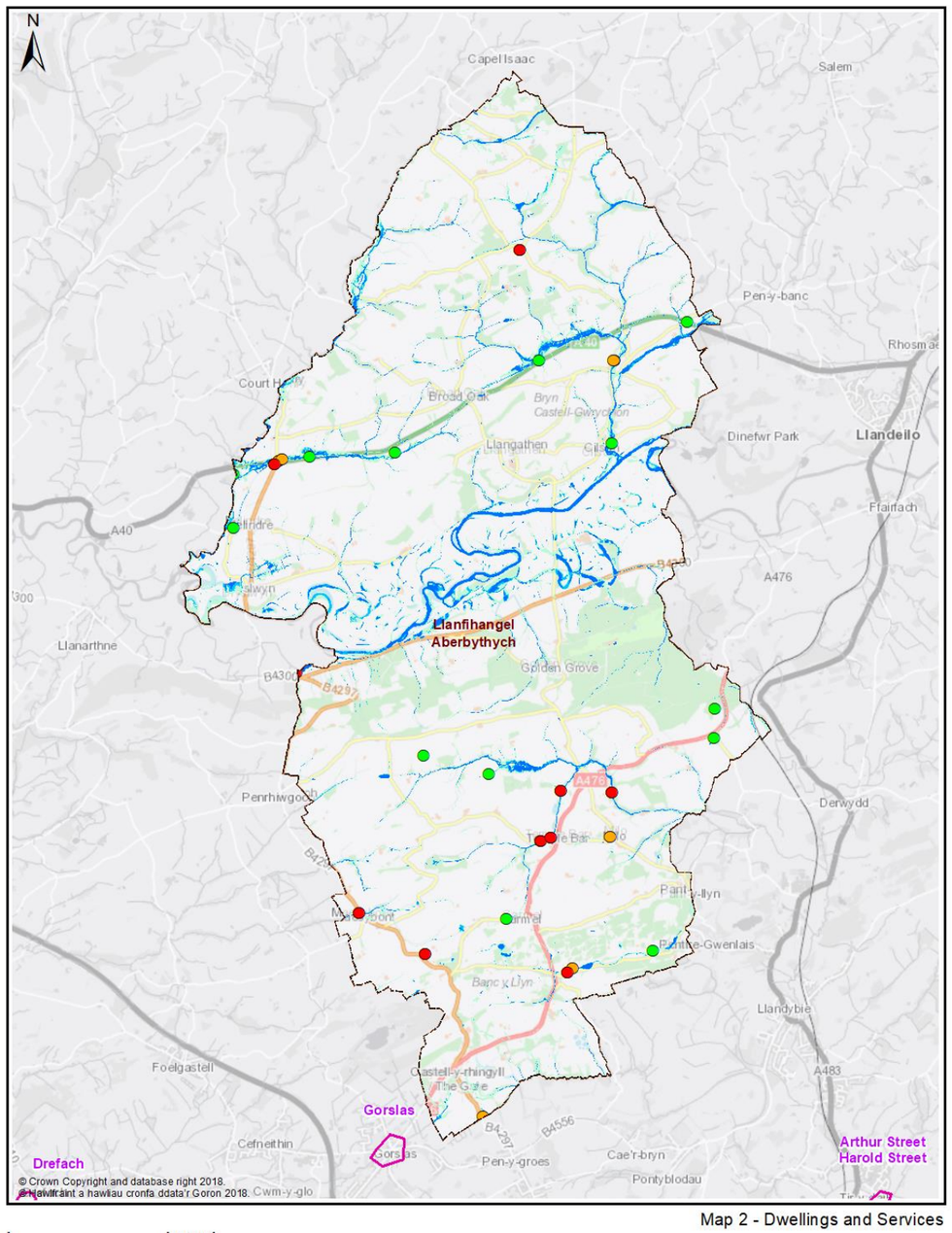
DCWW has identified flood risk at the following location:

- Gate Road, Penygroes

NRW will continue to manage flood risk from the River Towy.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

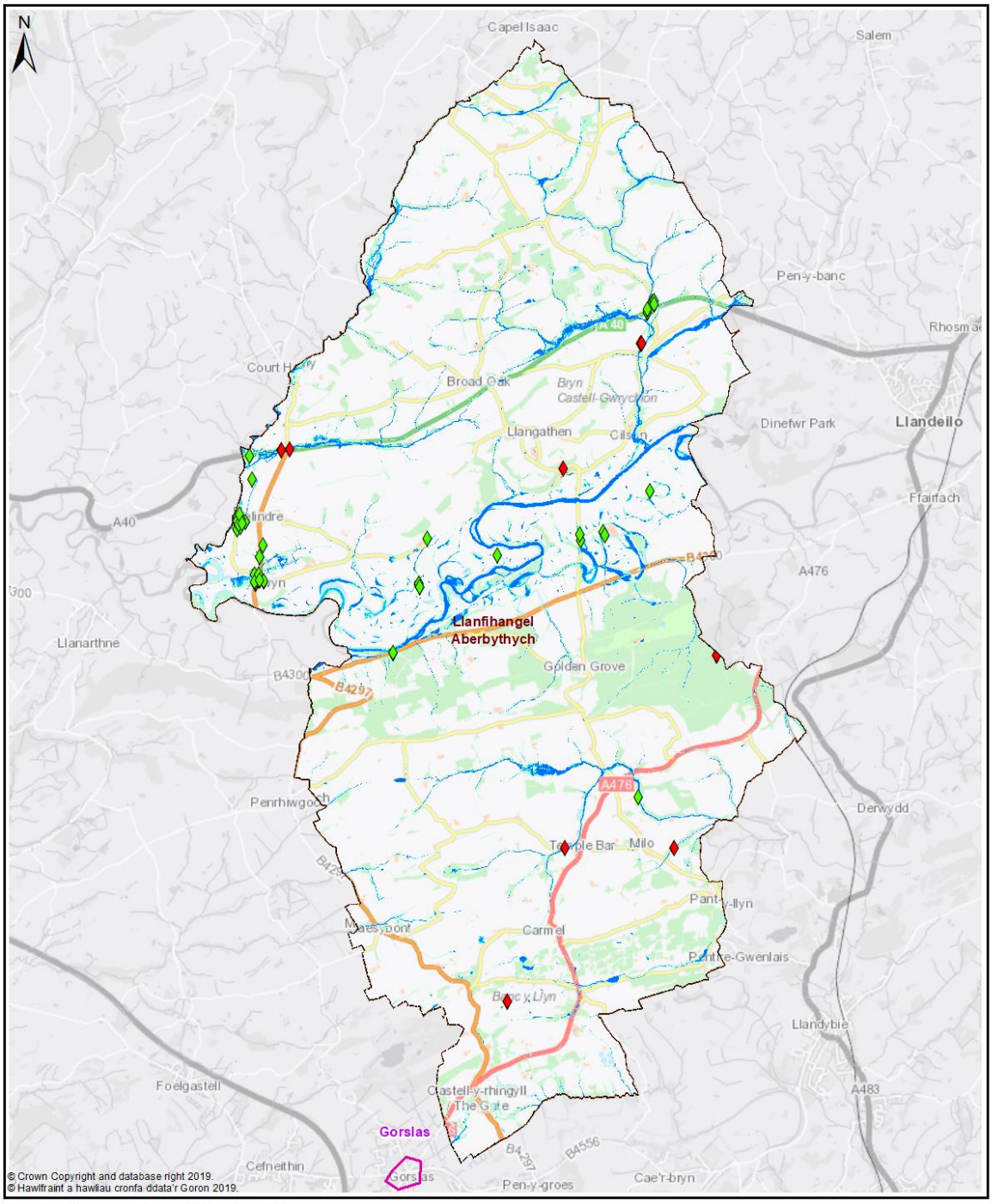
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llanfihangel Aberbythych

0 0.75 1.5 3 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llanfihangel Aberbythych

0 0.75 1.5 3 Km

Llanfihangel Aberbythych - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.33 Llanfihangel-ar-Arth

Community Council(s):	Llanfihangel-Ar-Arth Llanllwni
Councillor:	Linda Evans
Population:	2,911 people
Area:	88.97 km^2
Population Density:	33 people/km^2

Area Description

The Ward comprises a rural area on the county's north border, between the River Teifi and steep hills and valleys leading to Brechfa Forest. Pencader village is the largest settlement with smaller settlements including Alltwalis, Dolgran, Gwyddgrug, Llanfihangel-Ar-Arth, Llanllwni & New Inn.

The general geography of the area consists of steep valleys and hills. There is extensive woodland area including Brechfa Forest, Allt Perth-Y-Berllan and Pengraigygigfran.

The Main Rivers in the Ward are the Afon Teifi, Afon Talog and Afon Tyweli. .

Flood History

Incidents of fluvial flooding in Alltwalis from a tributary of Nant Alltwalis. This includes a reported incident of groundwater flooding in Alltwalis.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	67	21	1
Medium Risk	98	33	2
Low Risk	206	91	3

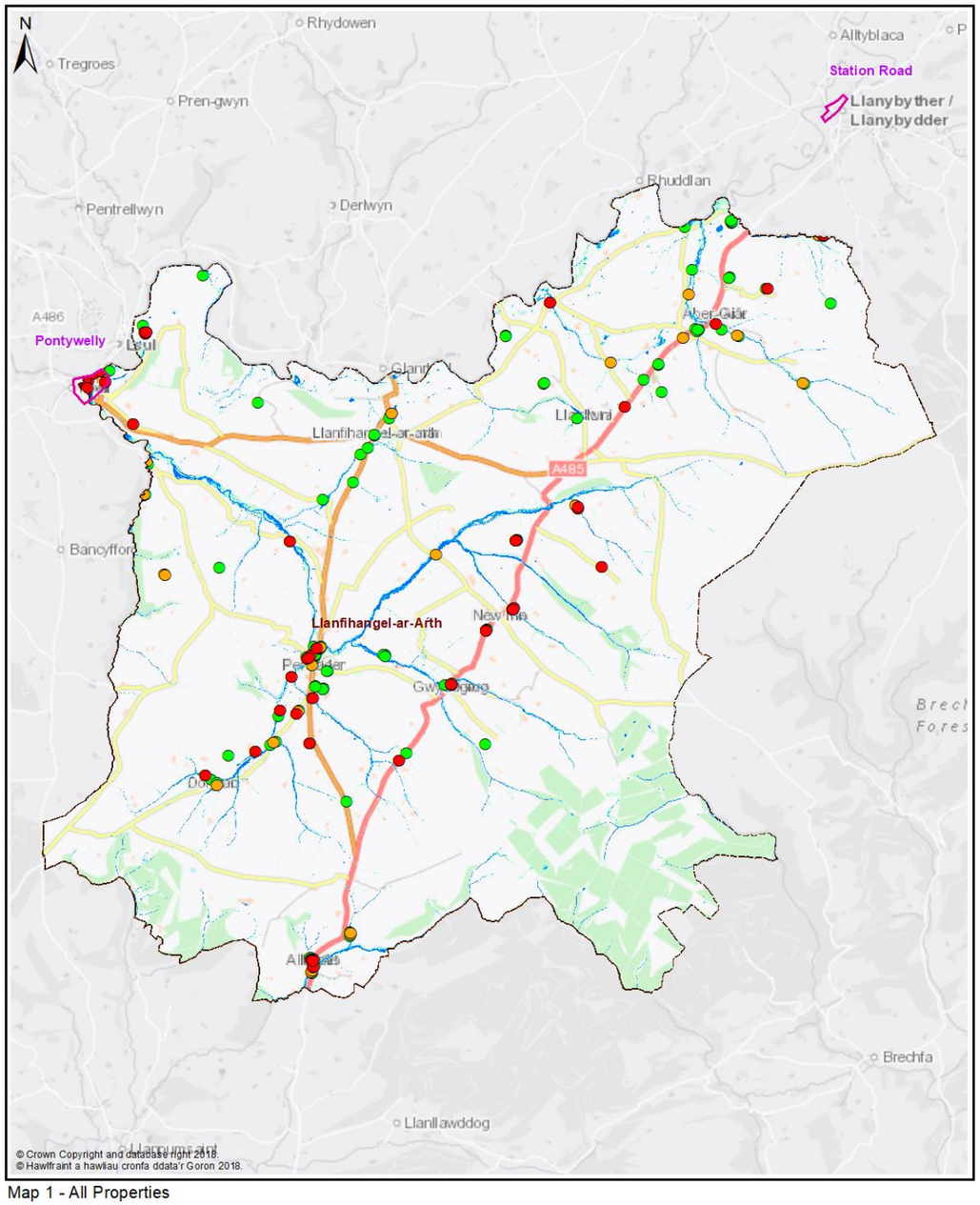
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities:

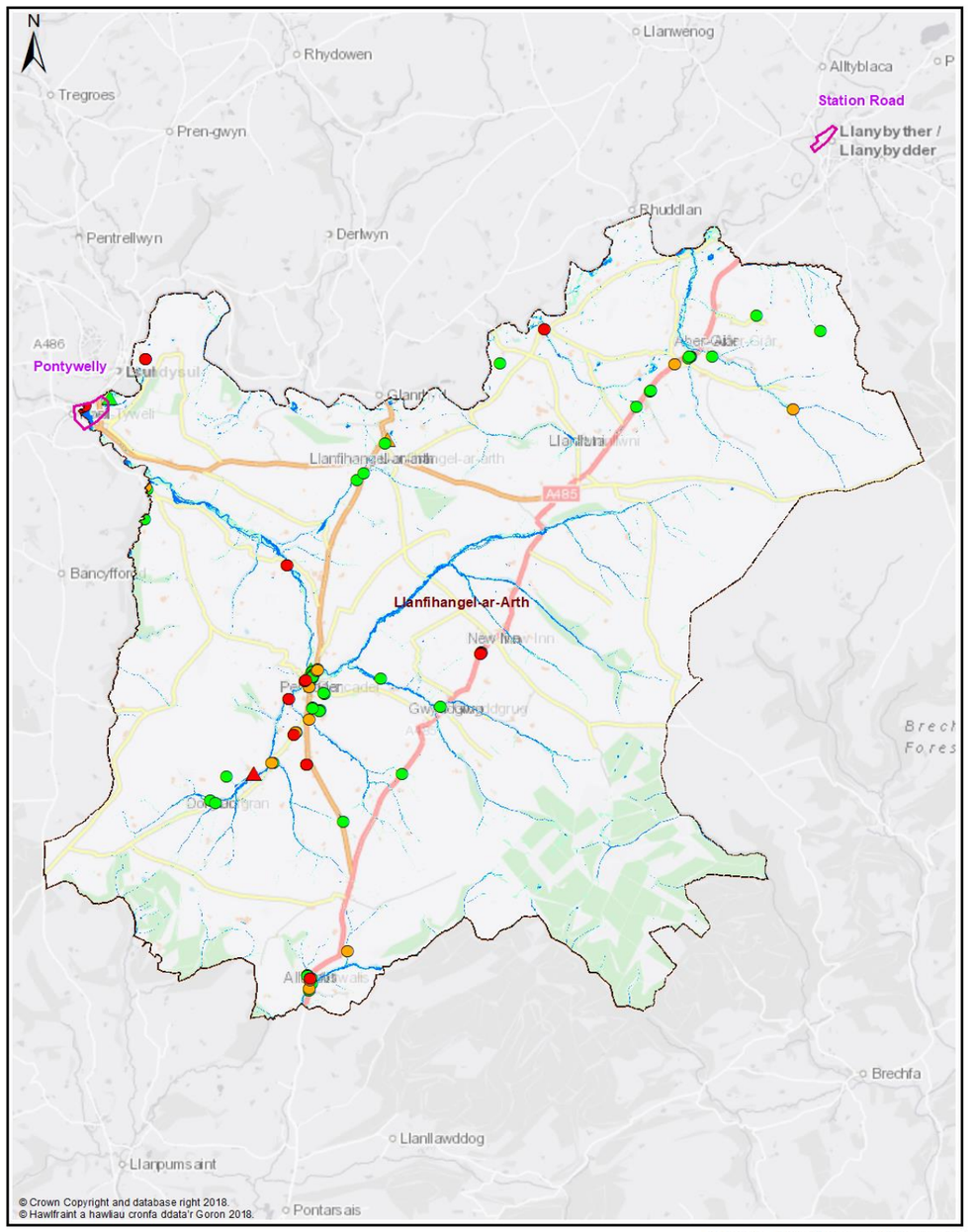
DCWW has identified flood risk at the following location:

- Pencader

NRW will continue to take the lead and manage the flood risk from Rivers Afon Teifi, Talog and Tyweli.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

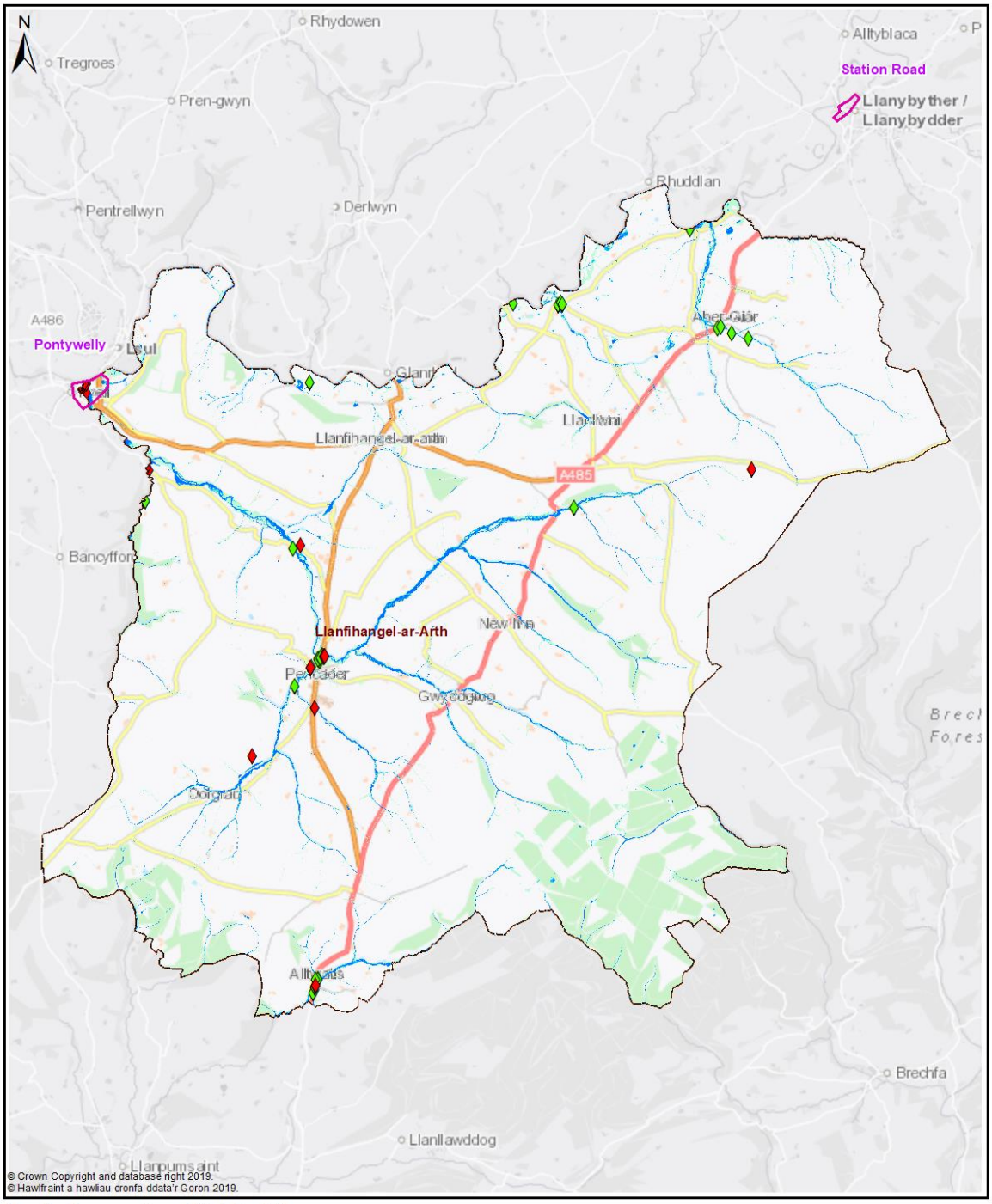
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llanfihangel -ar-Arth

0 0.75 1.5 3 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llanfihangel-ar-Arth

0 0.75 1.5 3 Km

Llanfihangel-ar-Arth - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area	High	Ongoing	Med
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M31	Investigate opportunities to reduce runoff from adjacent moorland / hillsides	Med	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.34 Llangadog

Community Council(s):	Llangadog Llanddeusant Myddfai
Councillor:	Andrew James
Population:	1,912 people
Area:	192.50 km^2
Population Density:	10 people/km^2

Area Description

Llangadog Ward is a vast rural area on Carmarthenshire's western border between the River Tywi and the foothills of the Brecon Beacons National Park. It contains the town of Llangadog with smaller settlements including Bethlehem, Capel Gwynfe, Felindre, Llanddeusant, Myddfai, Pont Meredith & Twynllanan.

The general geography of the area consists of the steep mountains and moorlands of the Brecon Beacons National Park leading to the pastoral farmland and several woodland areas. Includes the two tallest peaks in Carmarthenshire, Picws Du and Fan Foil. The area contains numerous small tributaries of the main River Tywi.

The Main Rivers are the Afon Tywi, Afon Bran and Afon Sawdde.

Flood History

- Glanrhyd Railway Bridge collapse at Afon Tywi in 1987 leading to loss of life.
- Flooding at Nant Dyrfal east of Llangadog.
- Repeated flooding to property and council asset at Afon Llechach.
- Flooding to Cilgwyn Manor from Afon Ydw.
- Flooding from Afon Sawdde, Afon Bran and Afon Tywi around Llangadog.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	67	11	0
Medium Risk	111	25	1
Low Risk	248	56	2

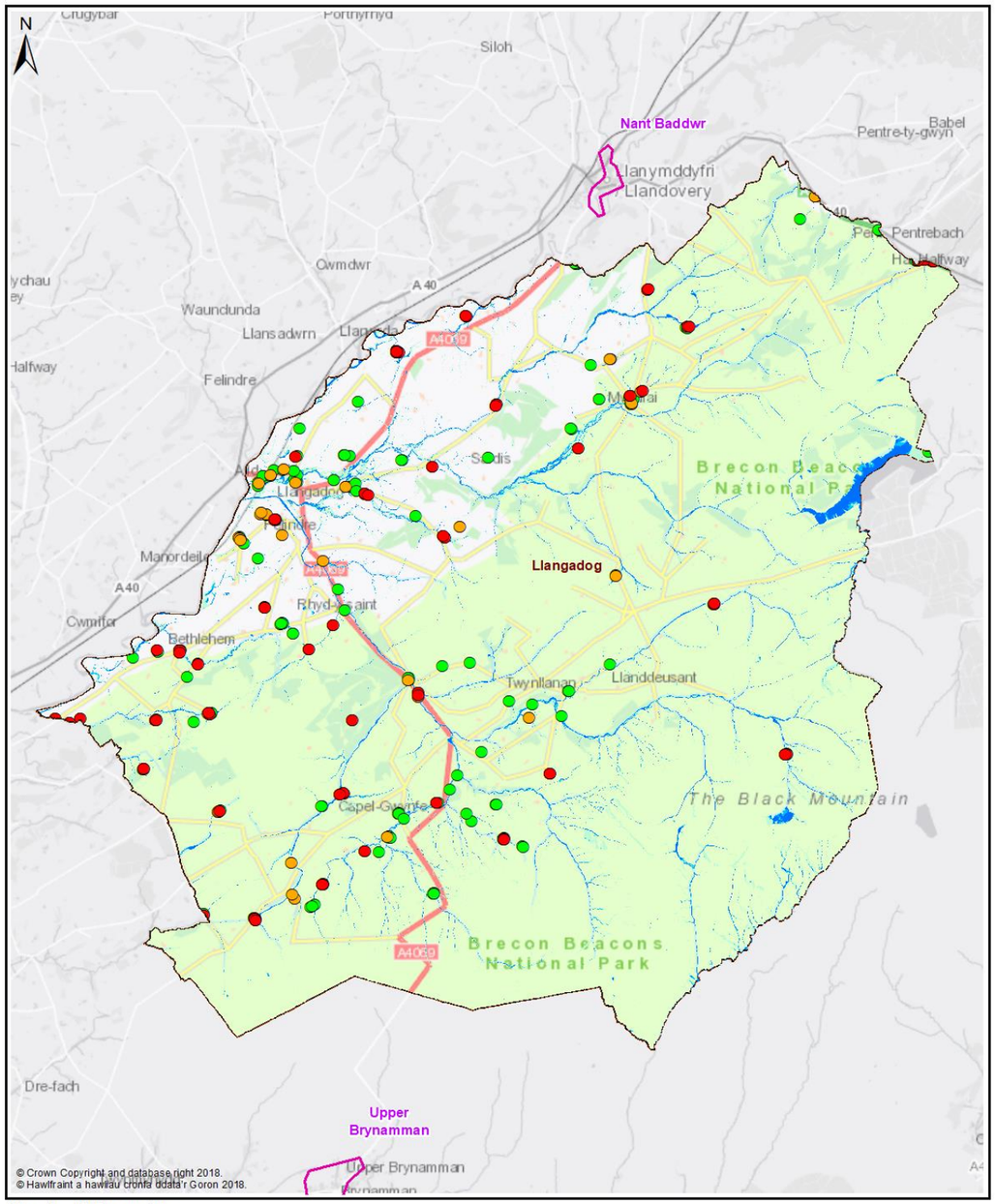
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

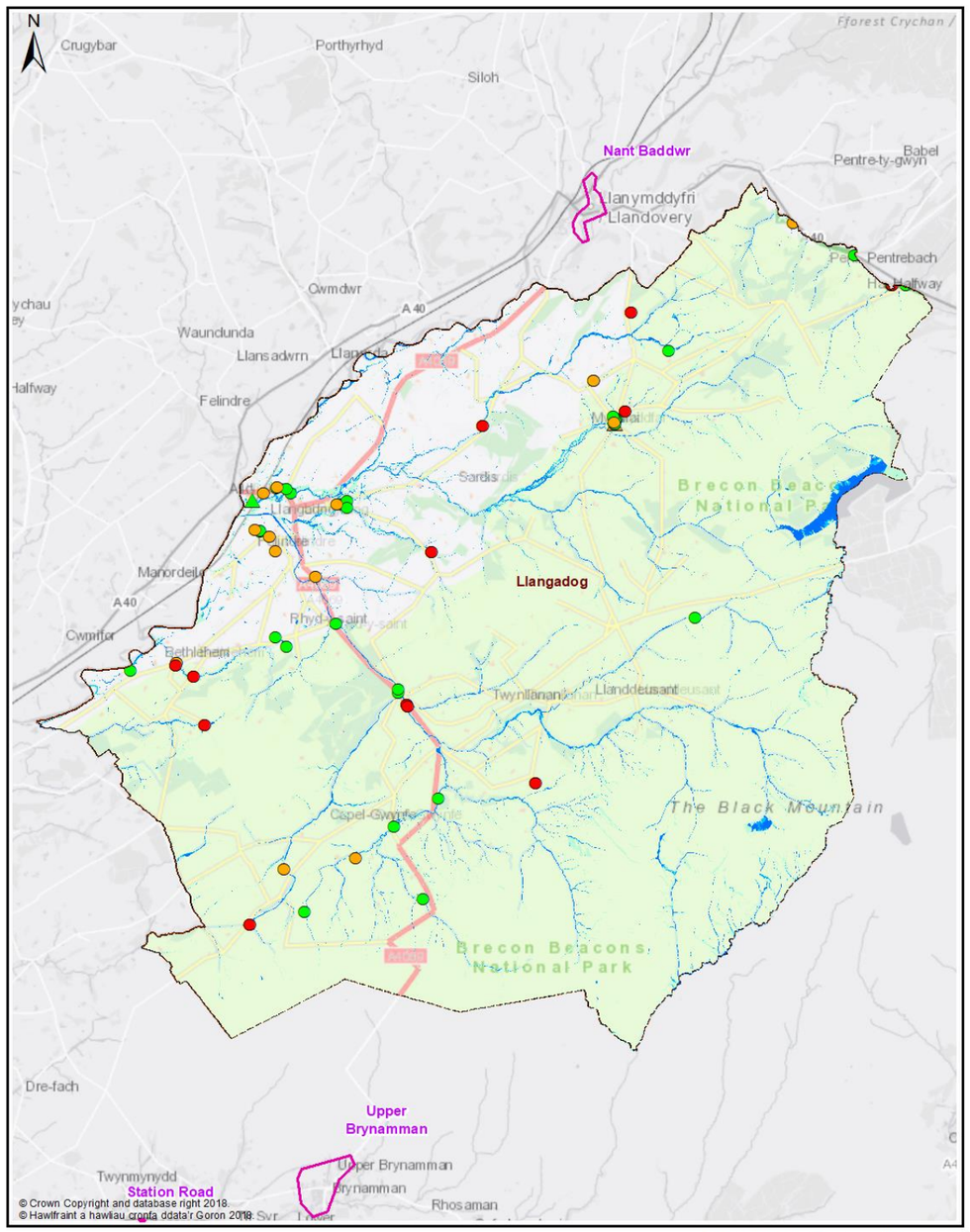
DCWW has identified flood risks at the following locations:

- Llangadog
- Myddfai

NRW will continue to take the lead and manage the flood risk from the Rivers Afon Tywi, Bran and Sawdde.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

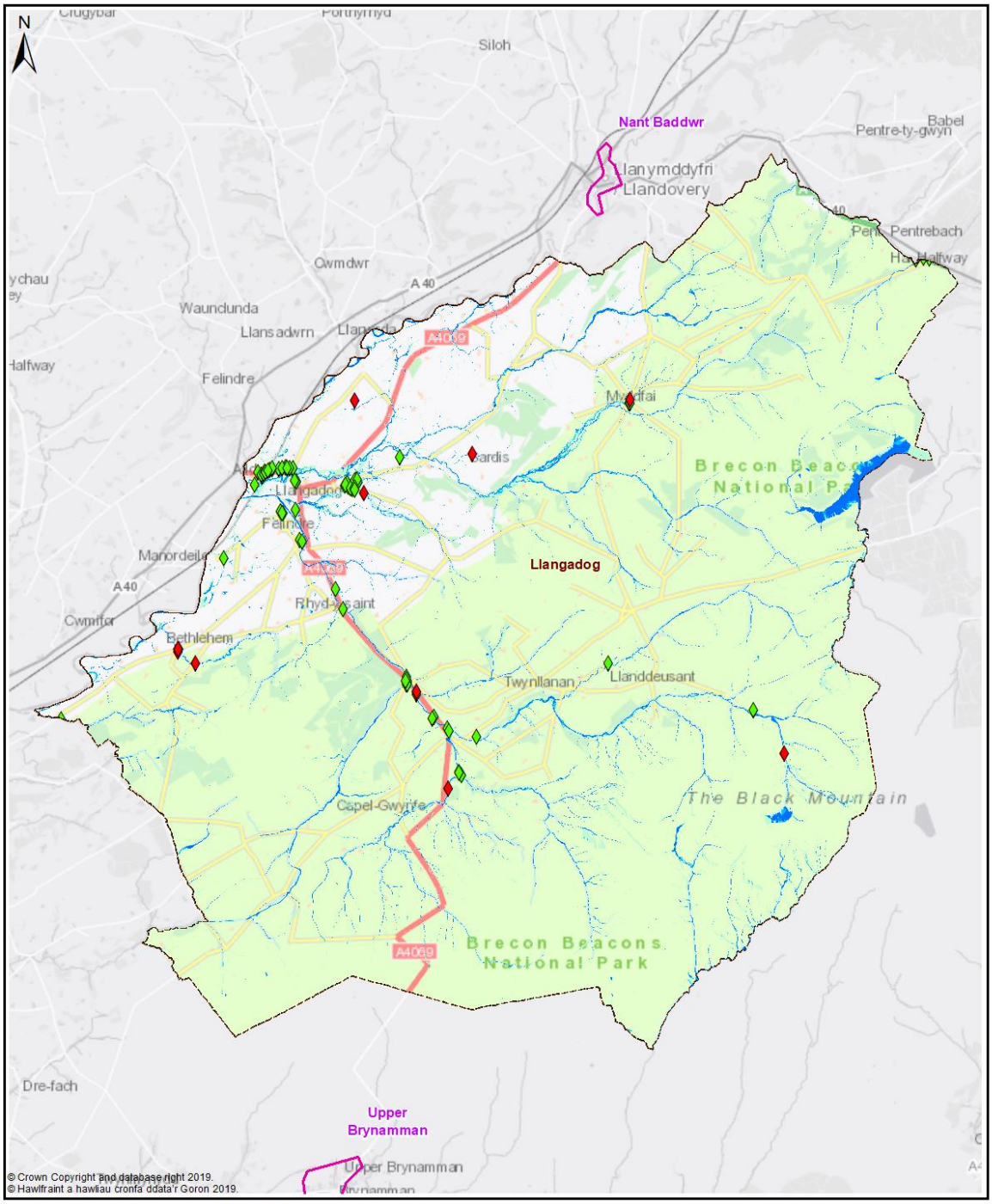
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llangadog

0 1.25 2.5 5 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llangadog

0 1.25 2.5 5 Km

Llangadog - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M31	Investigate opportunities to reduce runoff from adjacent moorland / hillsides	Med	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.35 Llangeler

Community Council(s):	Llangeler
Councillor:	Ken Howell
Population:	3,408 people
Area:	60.1 km^2
Population Density:	57 people/km^2

Area Description

Largely rural ward approximately 24 km north of Carmarthen, contains the settlements of Llangeler, Rhos, Saron, Drefach, Felindre, Cwmpengraig, Pentrecwrt and Pontyweli.

Significant development exists along the Rivers Esgair and Bargoed associated with woollen mills. The Esgair Valley itself is wooded. The surrounding land is open pasture. The Teifi River forms the northern boundary of this ward.

Land use is predominately pastoral agriculture.

The main fluvial source is the River Teifi and Tyweli, which are Main River. The risk from Main Rivers is not within the scope of this report as it is managed by NRW.

Flood History

- Flooding from Teifi and Tyweli (both Main Rivers) at Pontyweli.
- Flooding from the Esgair in the Drefach Felindre/ Cwmpengraig area.

Policy Units in Ward

There is one Policy Unit identified in this Ward:

- Pontyweli

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	109	45	0
Medium Risk	162	72	0
Low Risk	294	134	1

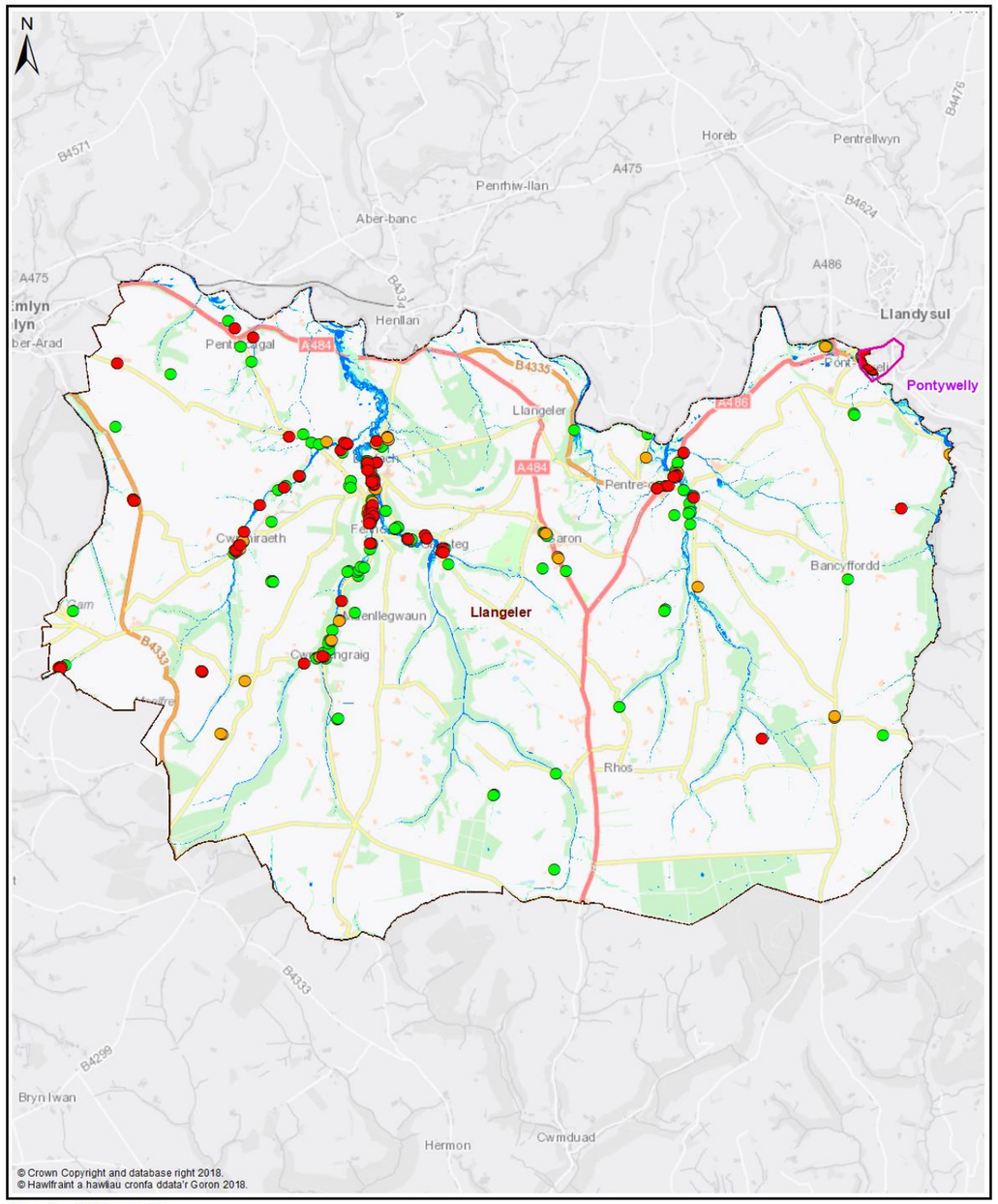
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

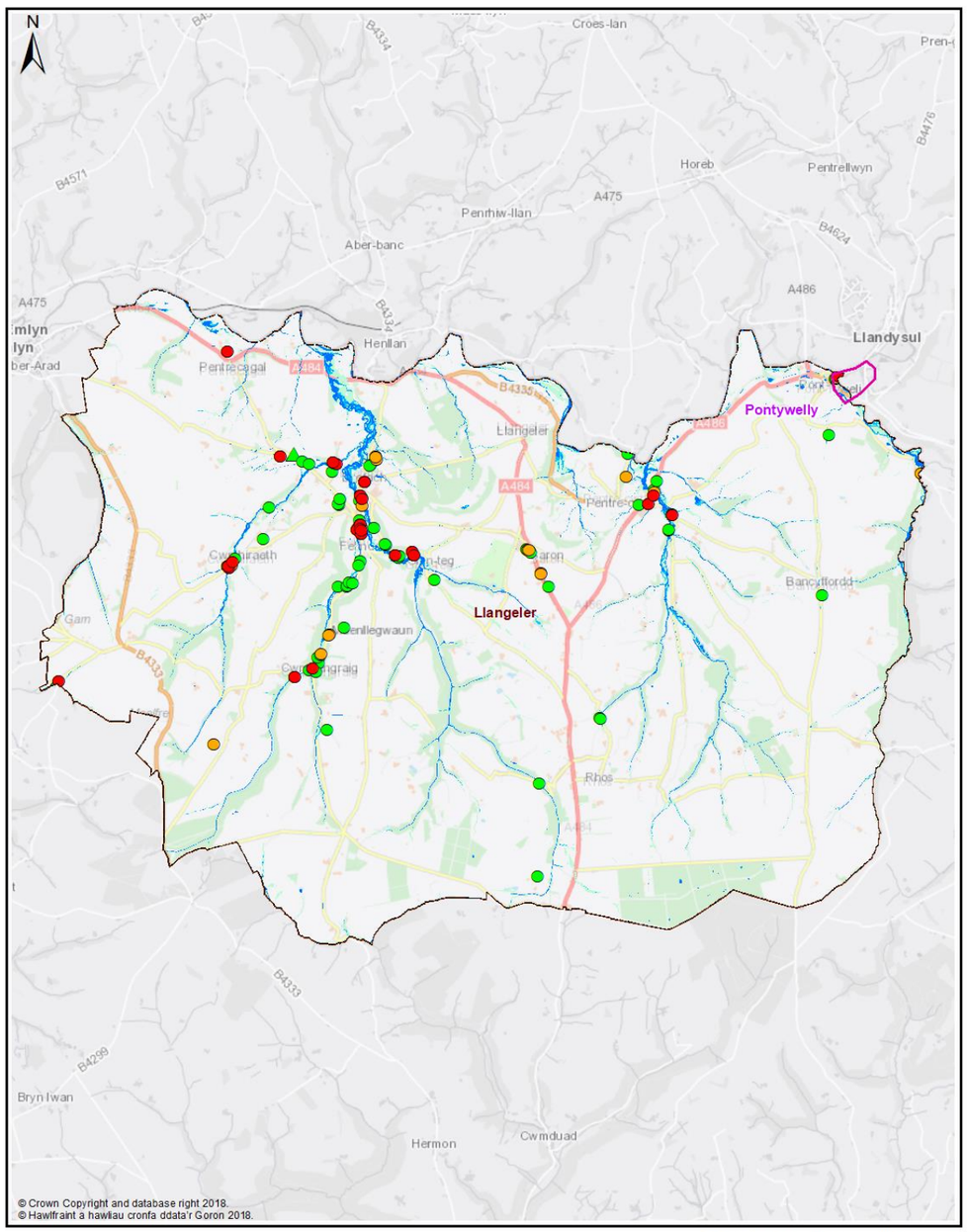
DCWW has identified flood risk at the following locations

- Pentrecagal
- Pentrecwrt
- Saron, Llandysul
- Velindre

NRW will continue to take the lead and manage the flood risk from the Tyfi Tyweli and Bargoed Rivers.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

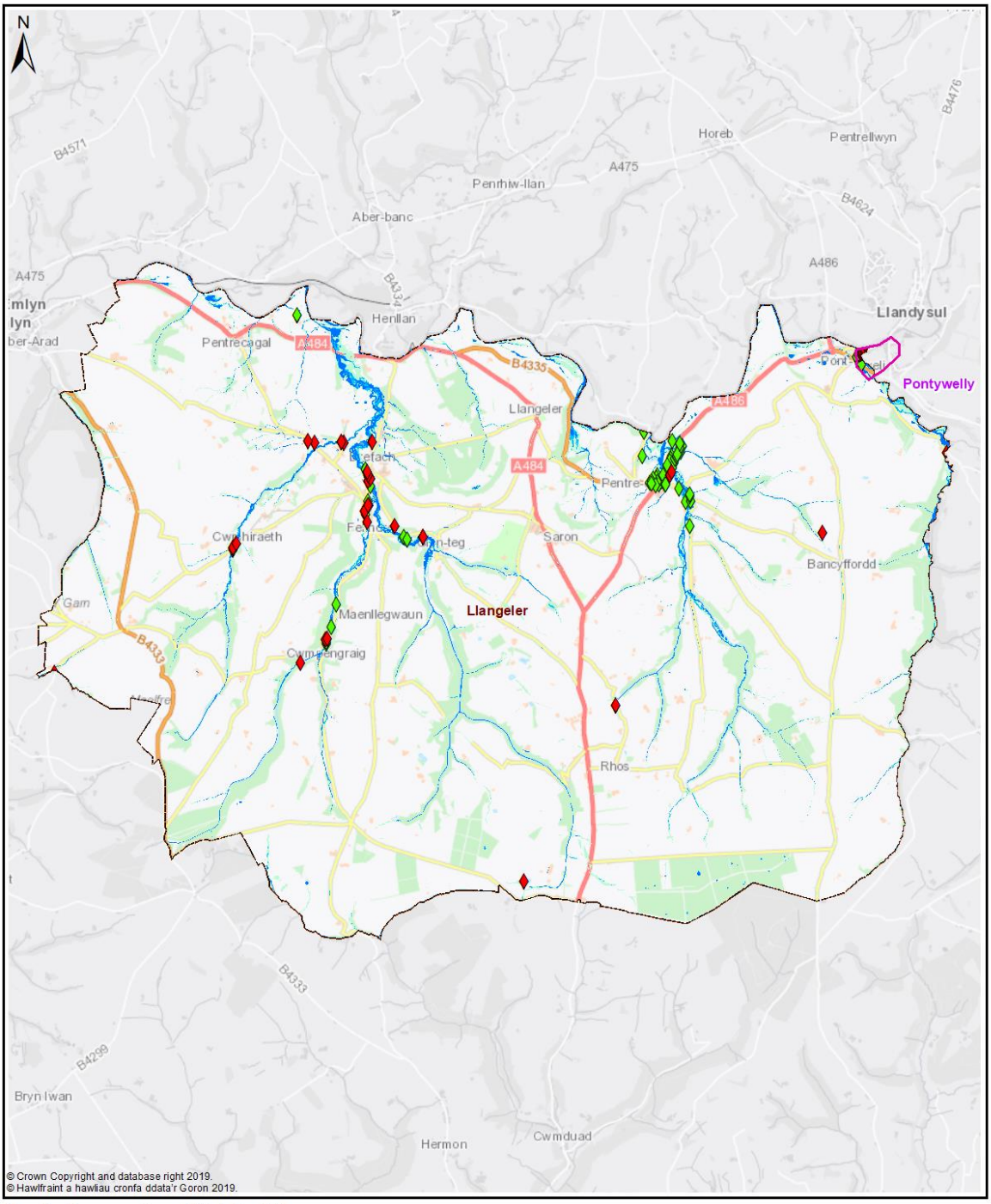
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llangeler

0 0.75 1.5 3 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llangeler

0 0.75 1.5 3 Km

Llangeler - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area	High	Ongoing	Med
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M31	Investigate opportunities to reduce runoff from adjacent moorland / hillsides	Med	Med	Med
M33	1 Policy Units identified for further review of potential alleviation actions	High	Ongoing	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.36 Llangennech

Community Council(s):	Llangennech
Councillor:	Gwyneth Thomas Gwyn Hopkins
Population:	5130 people
Area:	12.7 km^2
Population Density:	people/km^2

Area Description

Area to the north east of Llanelli adjacent to the Loughor estuary. Llangennech is at risk of flooding from several sources. Parts of Llangennech are low lying and subject to tidal flooding with the railway embankment provides a low level of protection. Land use in the catchment is predominately pastoral agriculture with forestry in the Morlais Valley.

The River Morlais also presents a significant risk to Llangennech. The Mwrwg River ordinary watercourse also presents a significant flood risk. A bypass culvert diverts storm flows away from the village to the Morlais River. Tidal flooding and Main River flooding are managed by NRW.

Flood History

Station Road in 2014 due to tide overtopping the railway line.

Station Road in 2011 due to partial blockage of the Mwrwg River railway culvert.

Bridge **I**nn from the Mwrwg River and surface water.

Policy Units in Ward

There is one Policy Unit identified in this Ward:

- Llangennech

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	57	27	2
Medium Risk	127	87	2
Low Risk	320	237	4

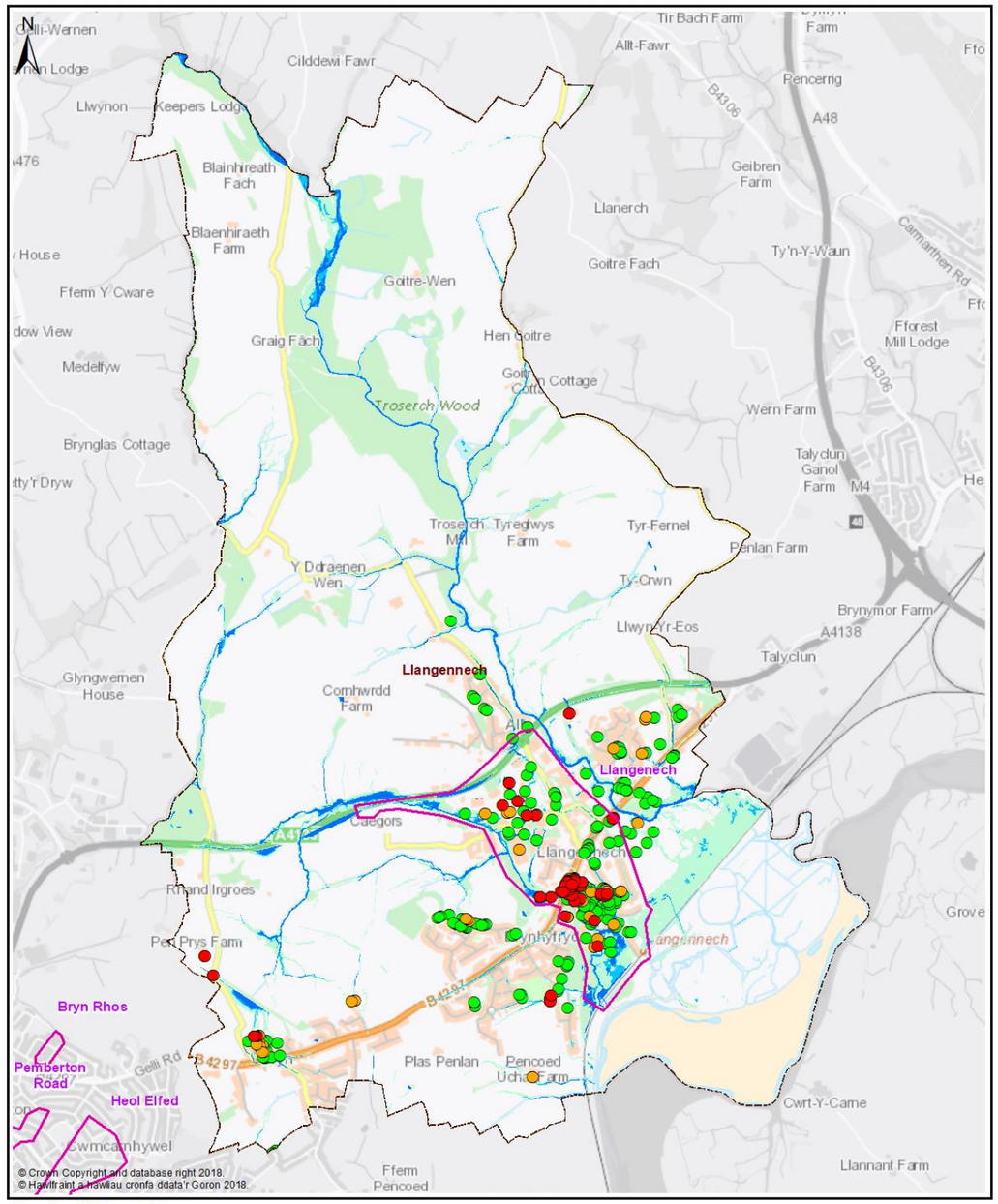
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities DCWW

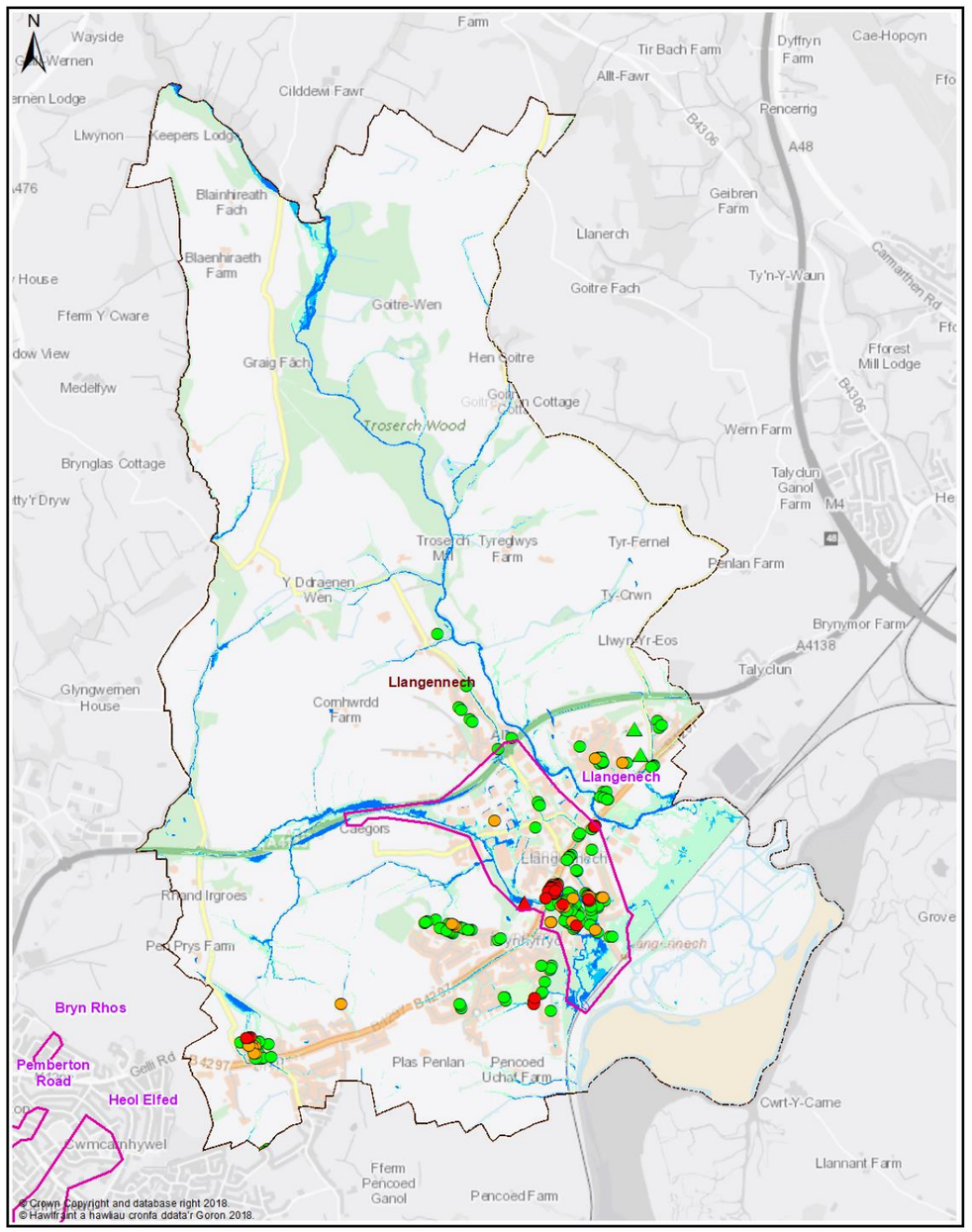
DCWW has identified flood risk at the following locations:

- Brynmead, Bryn, Llanelli
- Llysyfelin, Llangennech
- Station Road, Llangennech

NRW will continue to manage Flood Risk from the Loughor and Morlais Rivers and tidal sources.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

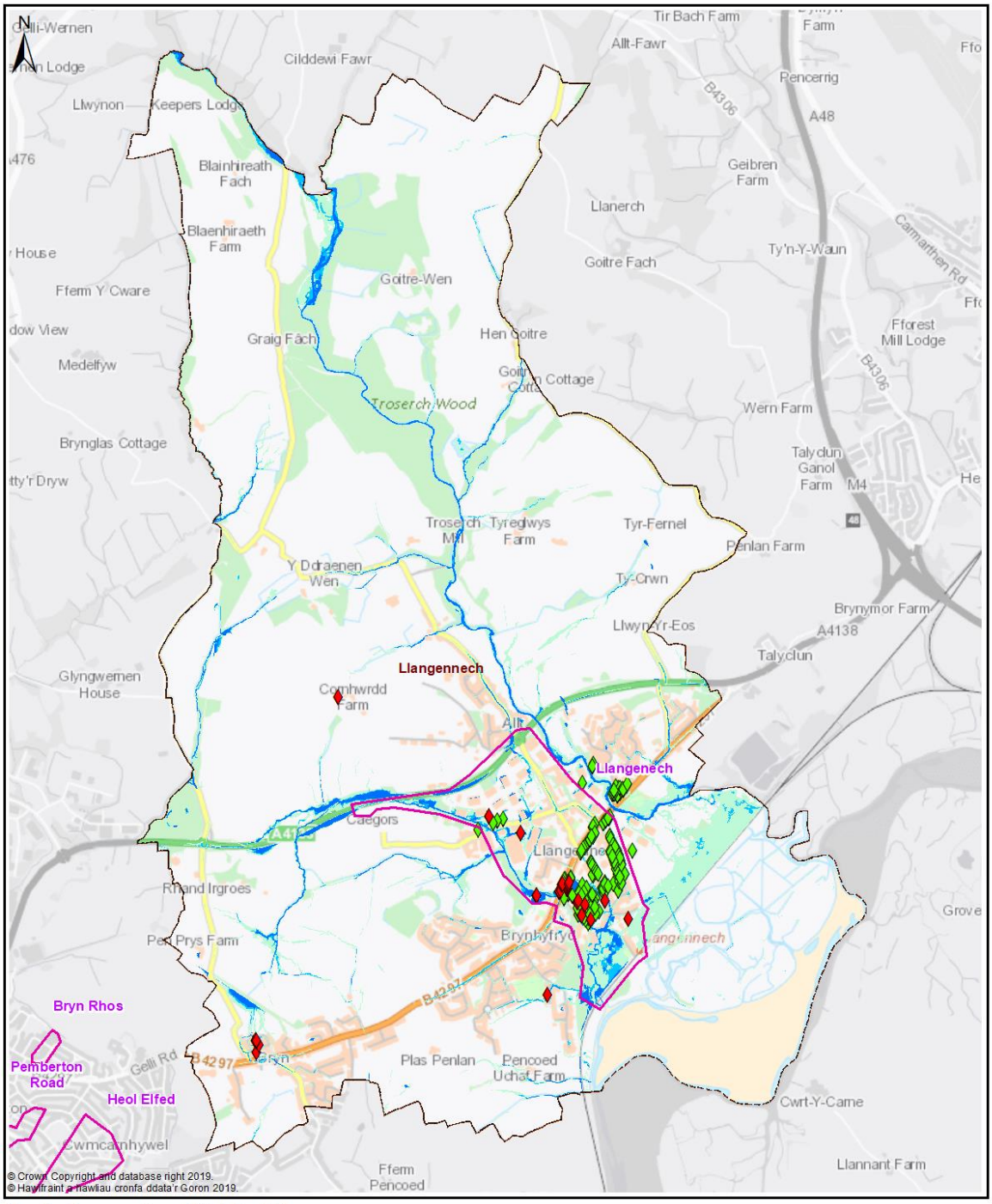
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llangennech

0 0.325 0.65 1.3 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llangennech

0 0.325 0.65 1.3 Km

Llangennech - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area	High	Ongoing	Med
M22	Investigate options to reduce flood risk to properties within the overall community	High	Ongoing	Med
M22	Investigate options to reduce flood risk to community services	Med	Ongoing	Low
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Med
M33	Llangennech - Policy Unit identified for further review of potential alleviation actions	Med	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers / tide	Med	Ongoing	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.37 Llangunnor

Community Council(s):	Llangunnor
Councillor:	Dewi Elwyn Williams
Population:	2,506 people
Area	23.32 km^2
Population Density	107 people/km^2

Area Description

Llangunor Ward is largely rural, comprising the areas of Pensarn, Tregunor and Llangunor located south of the River Towy. Pensarn is an area of mostly commercial use on the Towy flood plain, defended by flood defence walls. Tregunor is a large area of residential use above Pensarn, outside the Towy flood zone. Outside the urbanised areas land use is predominately pastoral agriculture with grassland for dairy.

Flood History

Pensarn flooded directly from the River Towy in 1987 as the flood defence wall was overtopped.

Further incidents post 1987 resulted from a culvert allowing water to pass under the flood defence wall. This affected the Stephens Way area of Pensarn.

2018 saw significant flooding as a result of Storm Callum, again in Pensarn. 14 business and 9 residential dwellings were flooded internally. The flood defence wall at the north of Pensarn leaked then overtopped as the River Towy rose. Flooding in the majority of Pensarn was attributed surface water not being able to discharge while the River Towy was in flood.

Policy Units in Ward

There is one Policy Unit identified in this Ward:

- Pensarn

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	42	7	0
Medium Risk	71	25	0
Low Risk	221	122	1

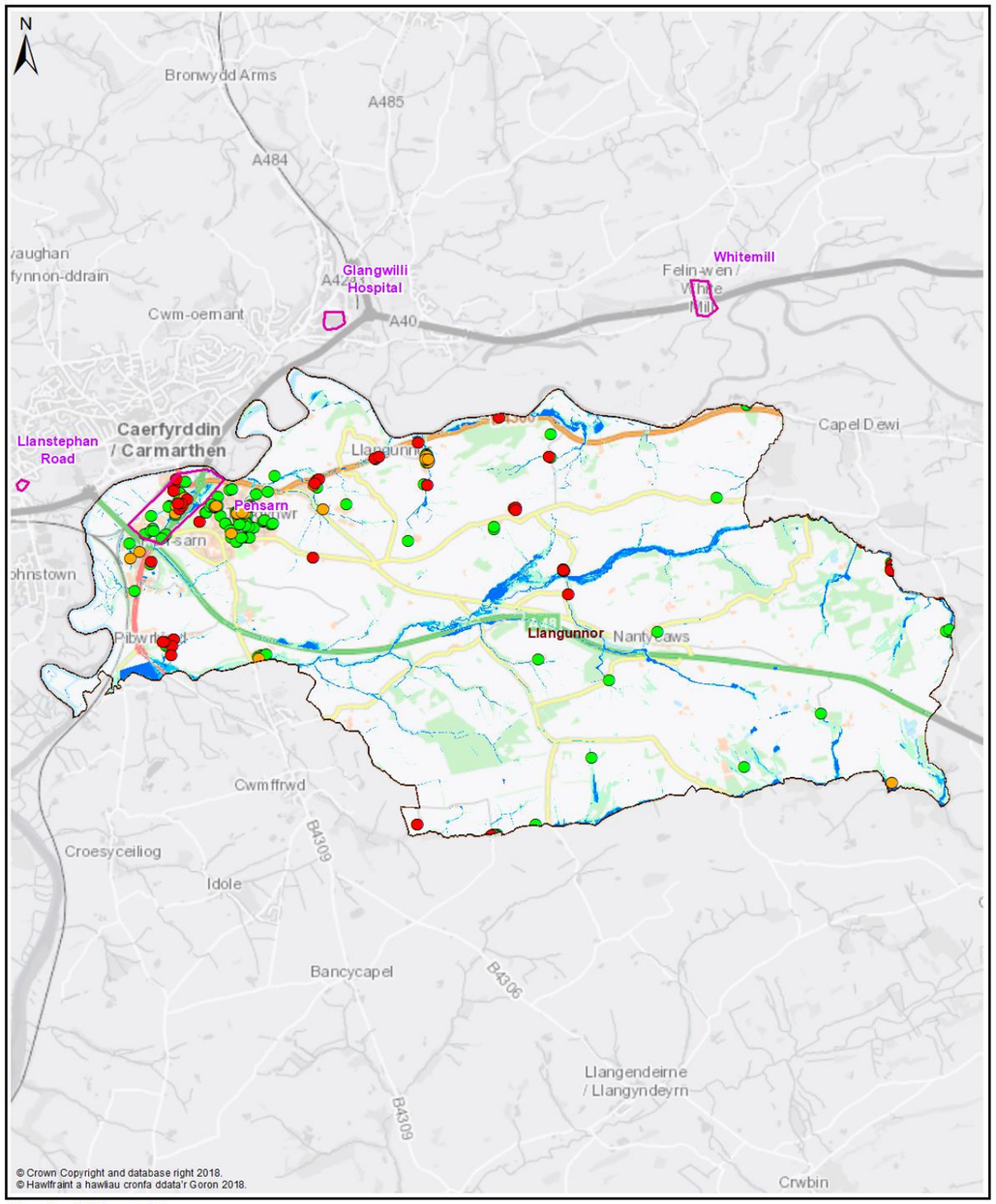
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

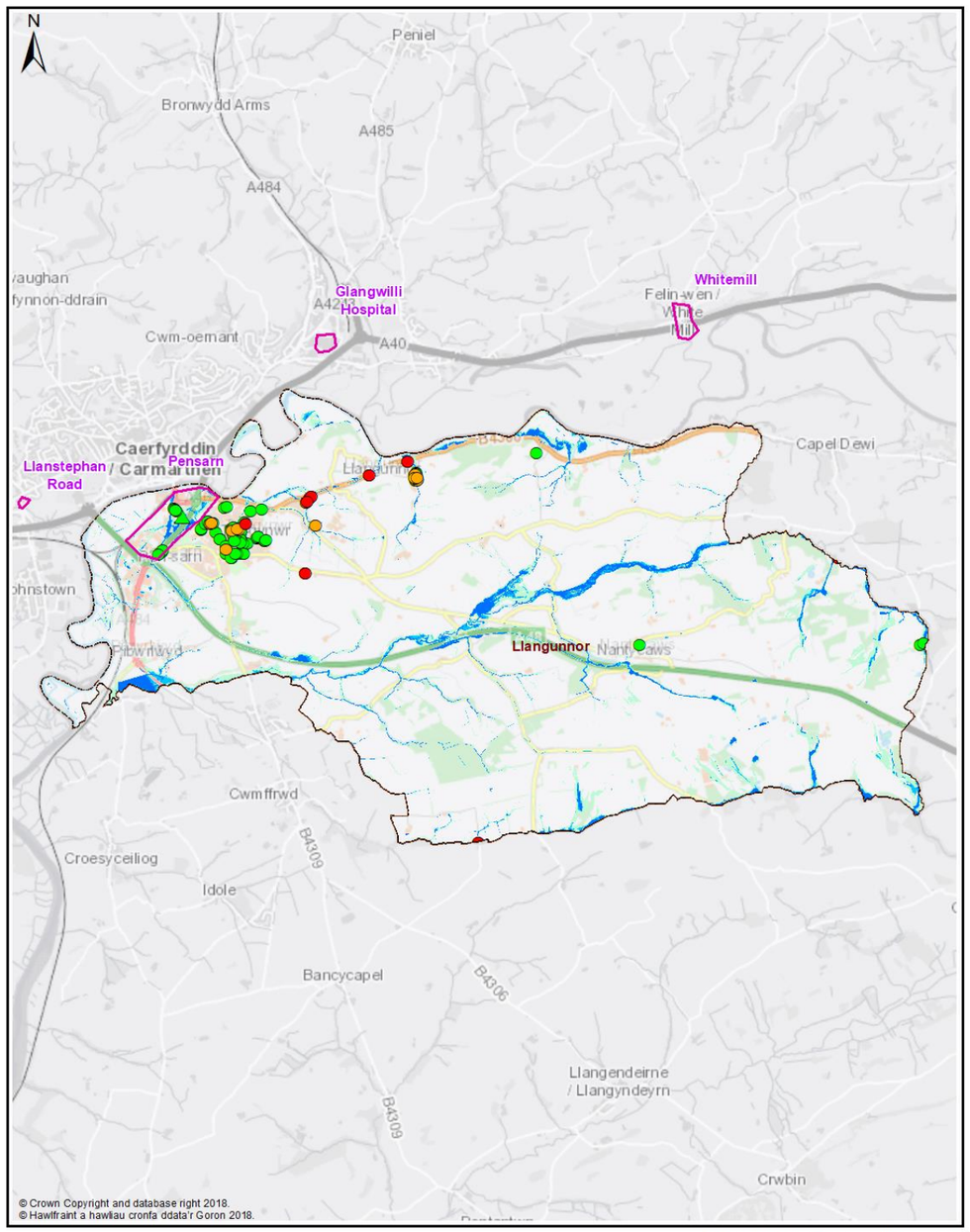
DCWW has identified flood risk at the following locations

- Croesyceiliog, Carmarthen
- Penymorfa Lane, Carmarthen

NRW will continue to take the lead and manage the flood risk from the River Towy.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

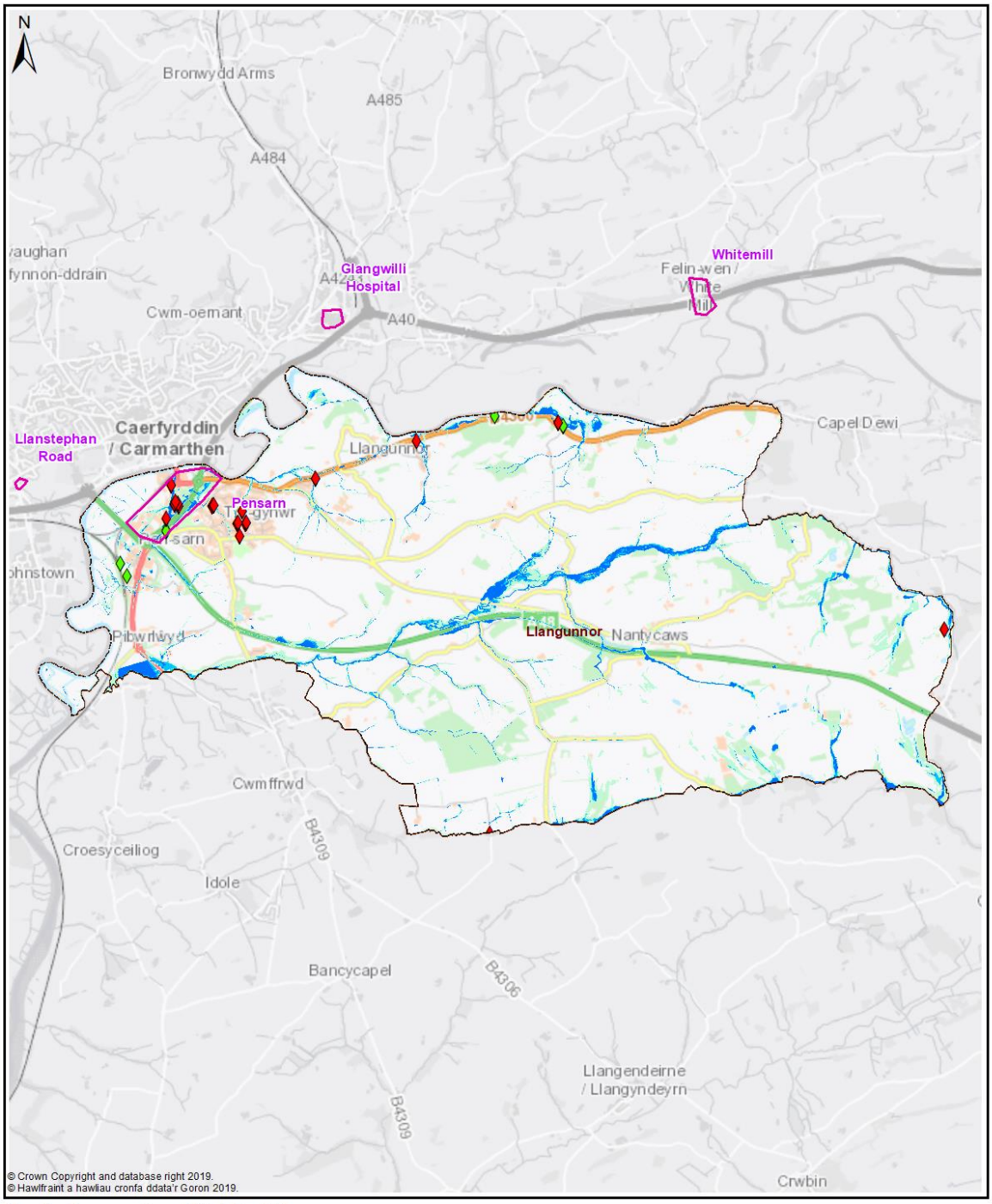
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llangunnor

0 0.5 1 2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llangunnor

0 0.5 1 2 Km

Llangunnor - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	High	Ongoing	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register.	High	Ongoing	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main rivers / Tide	Med	Ongoing	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.38 Llangyndeyrn

Community Council(s):	Llangyndeyrn
Councillor:	Tyssul Evans
Population:	3,172 people
Area:	47.04 km^2
Population Density:	67 people/km^2

Area Description

Predominately rural area approximately 8km south east of Carmarthen. Contains the settlements of Llangyndeyrn, Carway Crwbin, part of Llanddarog and the northern part of Pontyates. Former coal mining area in the Gwendraeth Valley.

Land use is predominately pastoral agriculture with limestone quarrying on the ridge running though the ward.

NRW Flood maps indicate that there is a significant flood risk to properties in Pontyates and Pont Henri from the River Gwendraeth Fawr. This is managed by NRW and is outside the scope of this report. The River Gwendraeth Fach runs through Pontantwn and Llangyndeyrn but presents limited risk to properties.

Flood History

- Main river flooding from Gwendraeth Fach at Pontyates.
- Flooding from minor watercourses in Pontyates and Pont Henri.
- Surface water flooding in Carway and Llangyndeyrn.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	59	23	1
Medium Risk	94	41	1
Low Risk	302	163	5

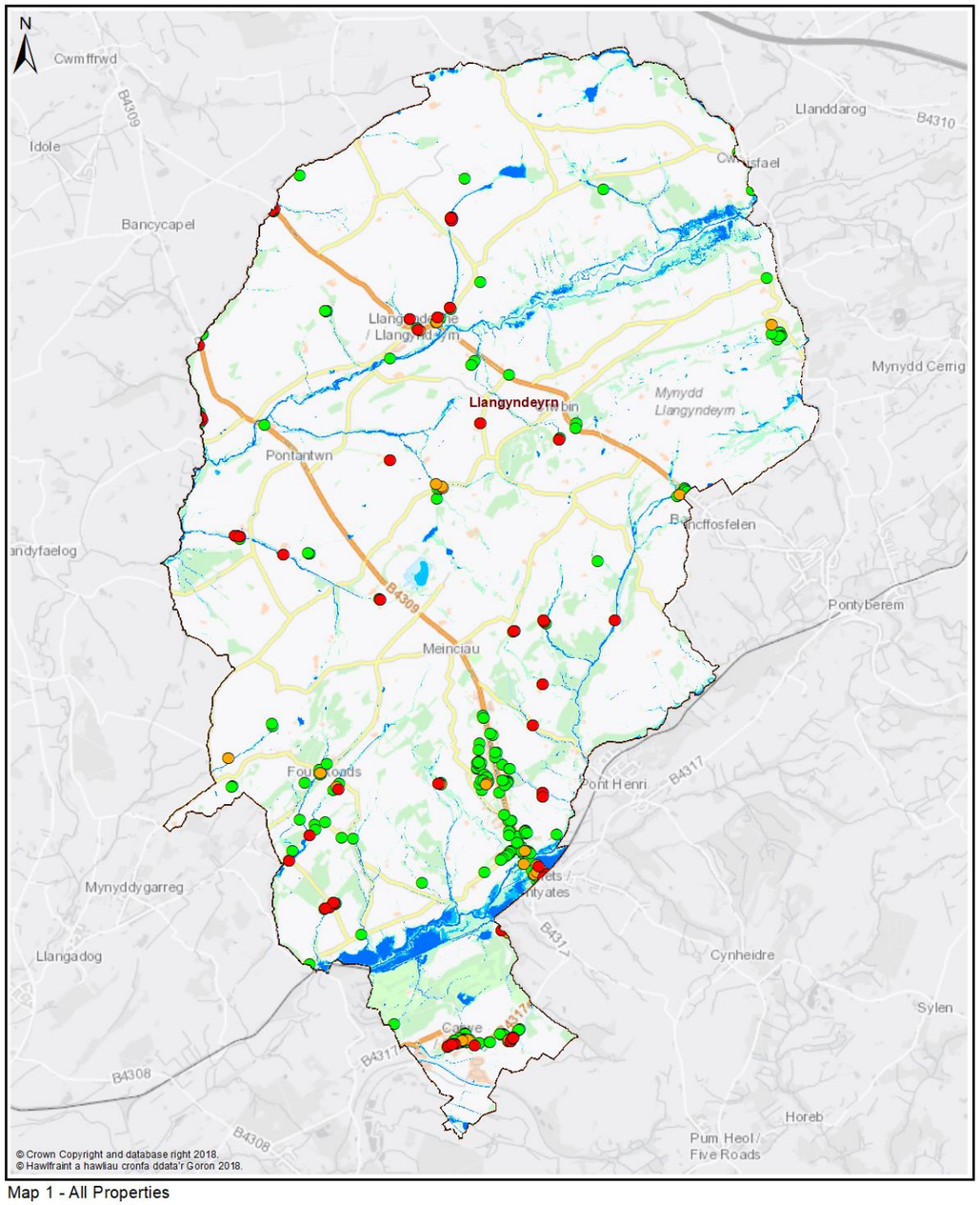
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

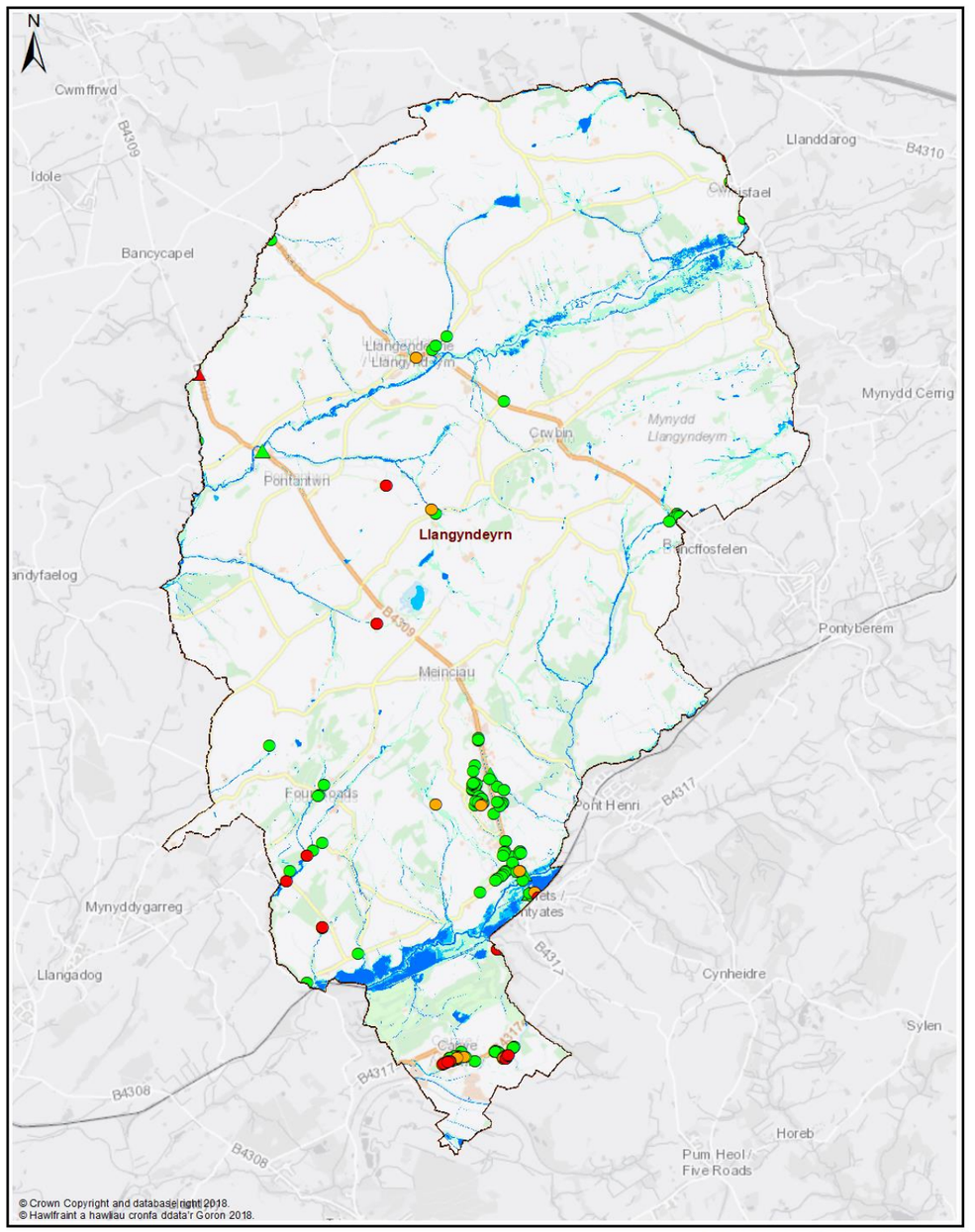
DCWW has identified flood risk in the following locations:

- Heolymeinciau, Pontyates
- Llangyndeyrn
- Maes y Wern, Carway

NRW will continue to take the lead and manage the flood risk from the Rivers Gwendraeth Fawr and Ffach.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

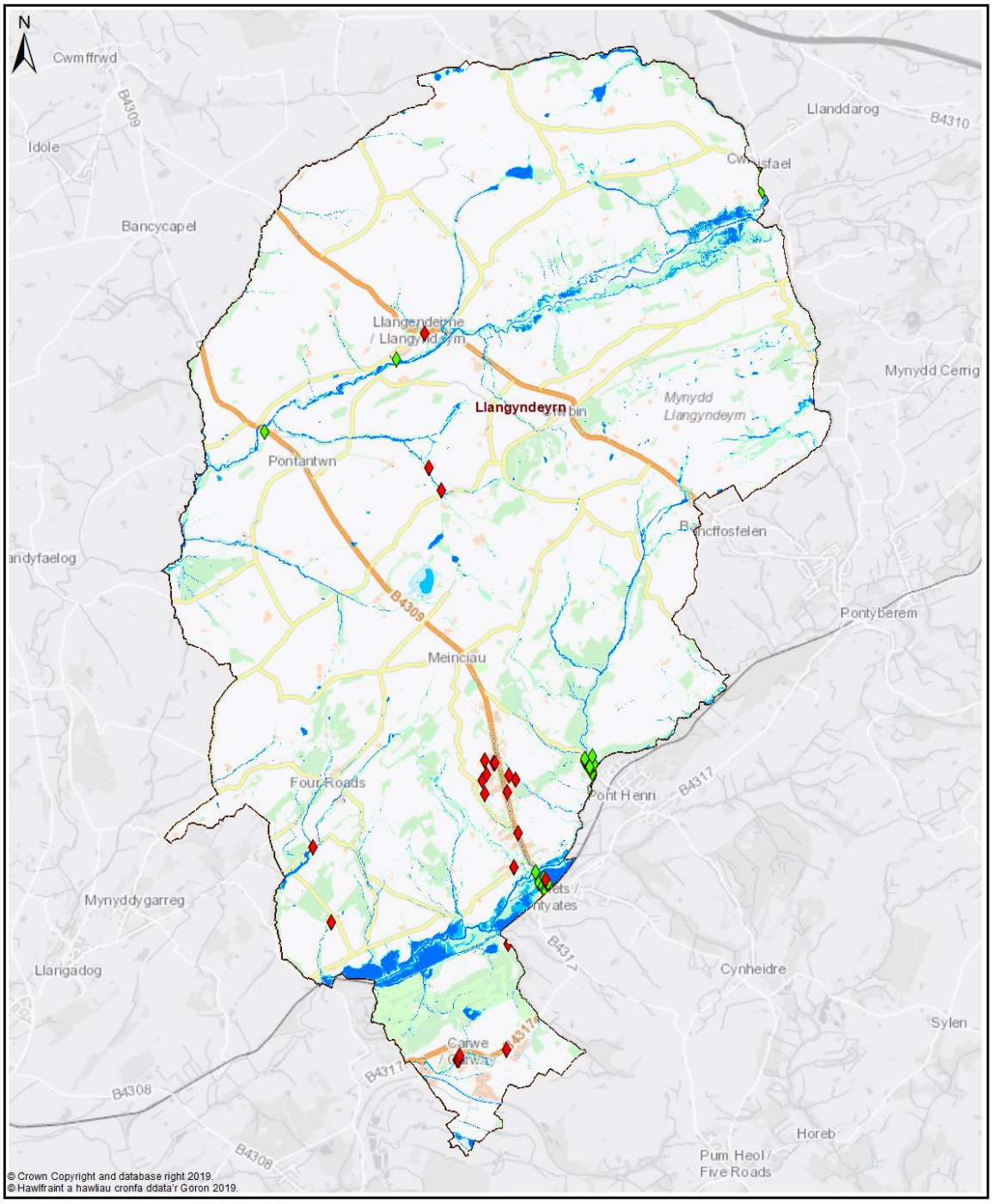
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llangyndeyrn

0 0.5 1 2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llangyndeyrn

0 0.5 1 2 Km

Llangyndeyrn - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	High	Ongoing	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main rivers / Tide	Med	Ongoing	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.39 Llannon

Community Council(s):	Llannon
Councillor:	Emlyn Dole
	Kim Thomas
Population:	5,328 people
Area:	38.36 km^2
Population Density:	139 people/km^2

Area Description

Located 24km east of Carmarthen Town. The area is predominately rural. Land use is pastoral agricultural. The north of the ward is more urbanised due to historical coal industry. Cross Hands has been greatly re-developed in the last 5 years.

The Afon Morlais dominates the ward. It is the Main River from Pont Morlais (1.2km south of Llannon). Upstream of here, it is designated as ordinary watercourse. The River Afon Gwili forms the western ward boundary and the River Gwendraeth Fawr a 1km stretch of the northern boundary.

All three watercourses are not within the scope of this report as they are managed by NRW.

Flood History

CCC has 6 recorded incidents of flooding in this ward. However, this is known to be an underestimate as historical methods of capturing flood incident data were not sufficiently robust.

- 7th December 2000 a major flooding incident in Cross Hands due to a blocked culvert at Cwm-y-Glo.
- The Gwendraeth Fawr flooded Cross Hands Park – affecting many properties and businesses along Carmarthen Road.
- Other incidents linked in private surface water drainage systems in Tumble and Cross Hands Industrial Estate.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	53	13	1
Medium Risk	106	36	1
Low Risk	294	143	1

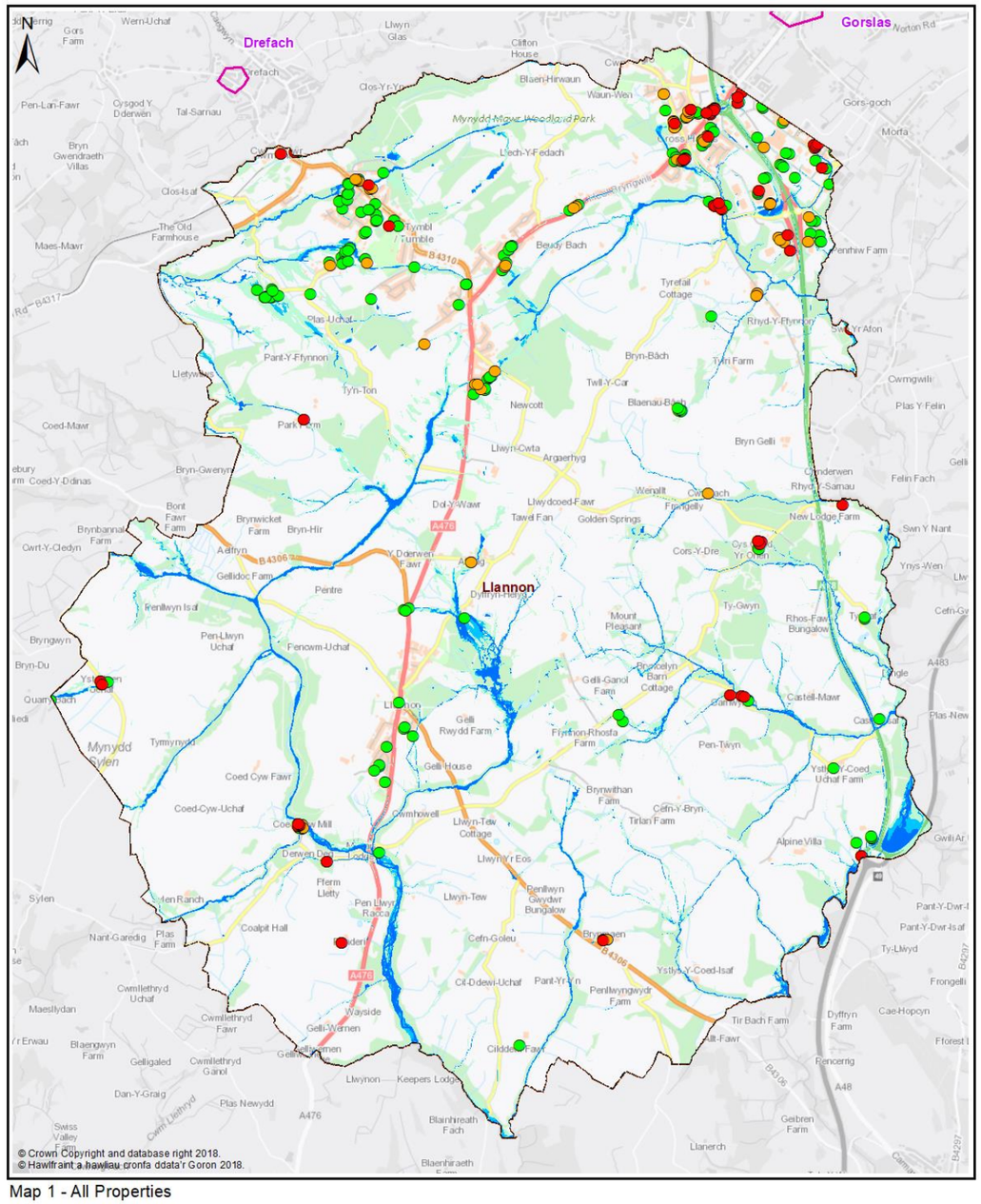
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

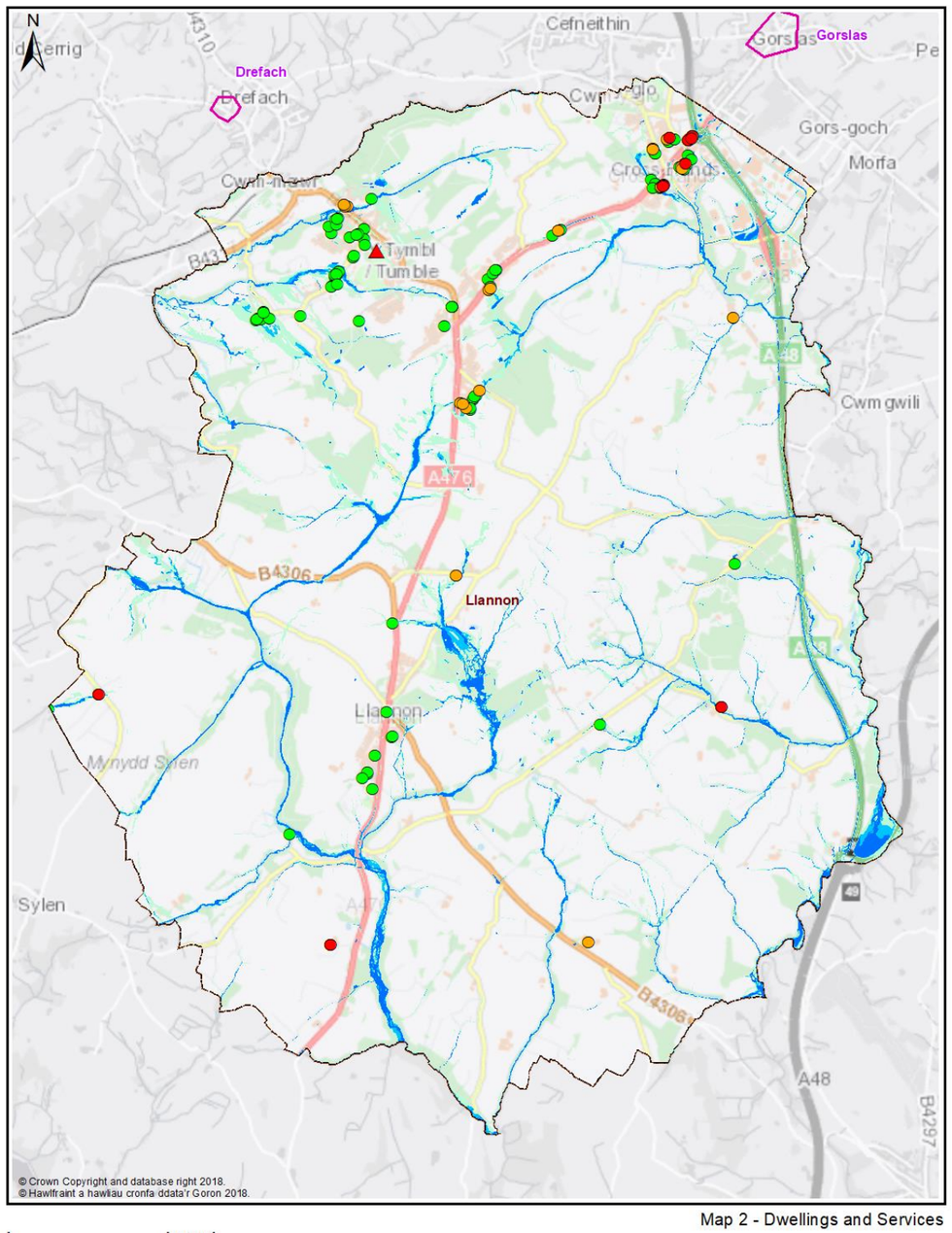
DCWW has identified flood risk in the following locations:

- Tumble

NRW will continue to take the lead and manage the flood risk from the Rivers Afon Gwili, Afon Morlais and Gwendraeth Fawr and Fach.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

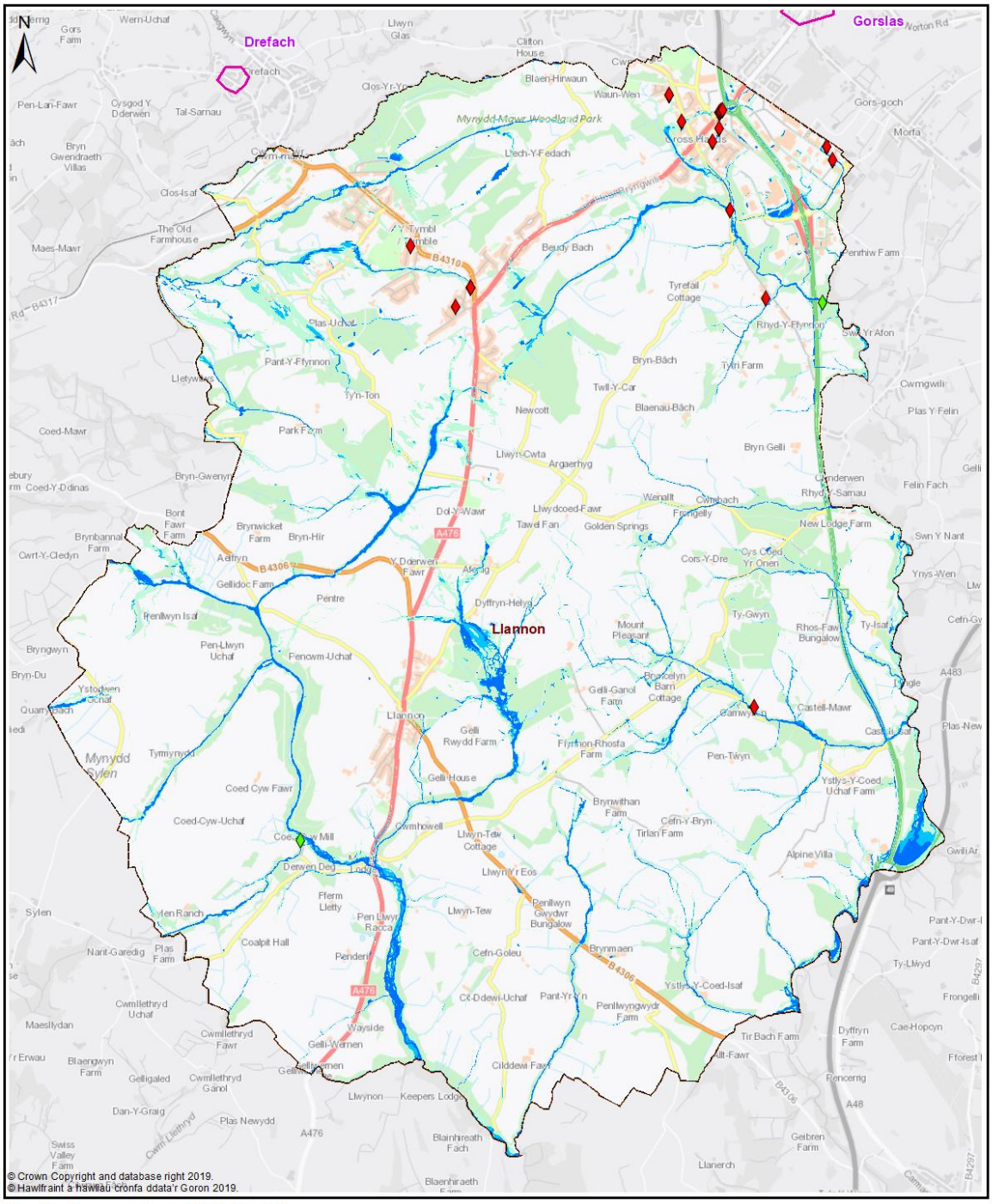
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llannon

0 0.5 1 2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llannon

0 0.5 1 2 Km

Llannon - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	High	Ongoing	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main rivers / Tide	Med	Ongoing	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate.	Med	Ongoing	Low

9.3.40 Llansteffan

Community Council(s):	Llansteffan Llangynog
Councillor:	Daf Davies
Population:	1,985 people
Area	66.2 km^2
Population Density	30 people/km^2

Area Description

Rural / coastal area approximately 13km south of Carmarthen comprising the settlements of Llansteffan, Llanybri and Llangynog.

Llansteffan is located at the mouth of the River Tywy and is at risk of flooding from tidal, Main River, ordinary watercourse and surface water. The Cottage Stream (Main River) and Nant Jack (ordinary watercourse) flow through the village of Llansteffan and both pose a flood risk.

The Cottage Stream and Towy tidal rivers are not within the scope of this report as they are managed by NRW.

Flood History

Flooding at The Green, Llansteffan is due to issues with the outfall becoming blocked. Tidal flooding at Ferry Point and isolated surface water flooding incidents occur elsewhere in the Ward.

Policy Units in Ward

There is one Policy Unit identified in this Ward.

- The Green, Llansteffan

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	30	13	1
Medium Risk	74	36	1
Low Risk	192	93	1

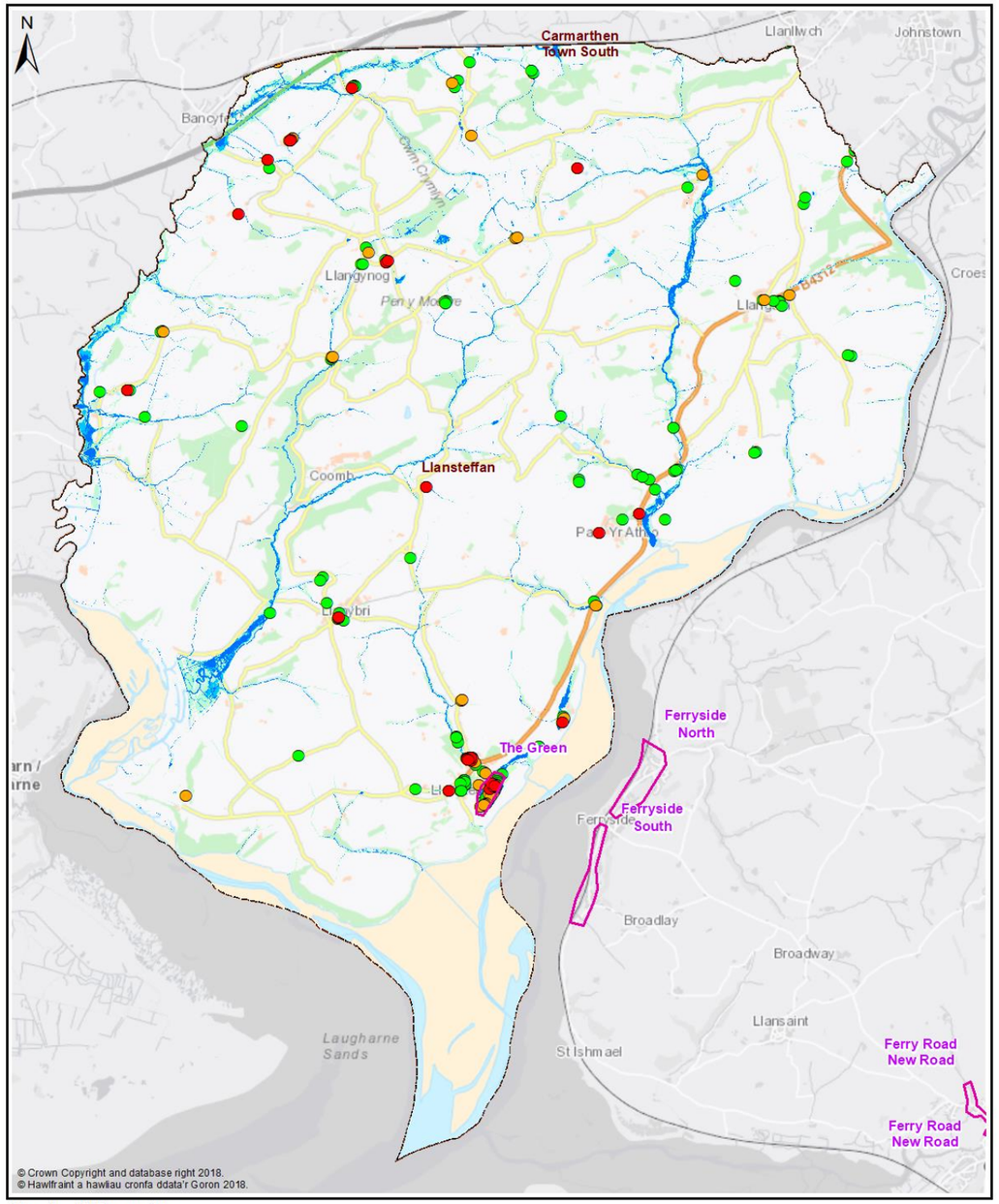
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

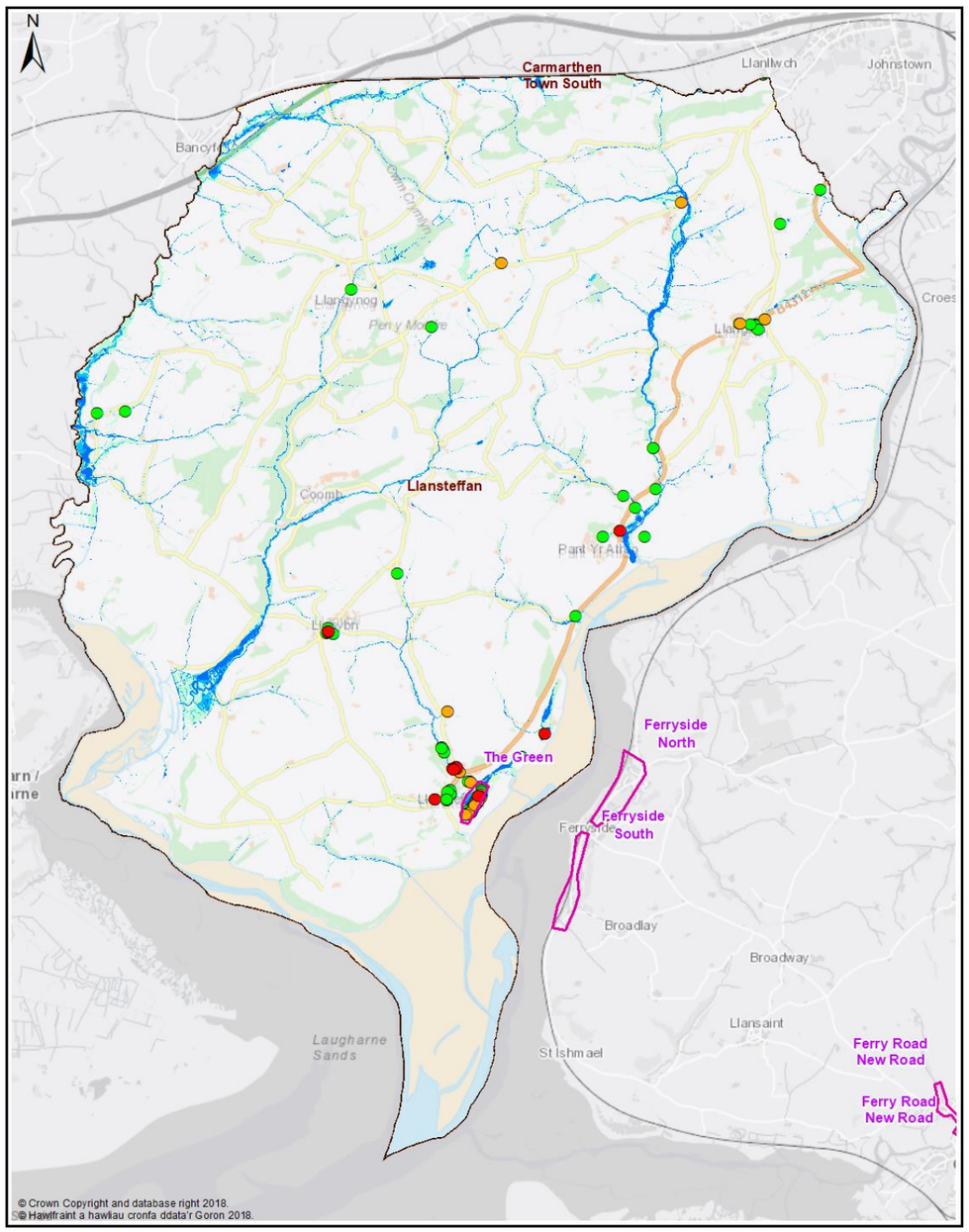
DCWW has identified flood risk at the following locations:

- Glanymor, Llansteffan
- Llangain
- Llansteffan

NRW will continue to manage flood risk from the Cottage Stream, the River Cywyn and the tidal flooding.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

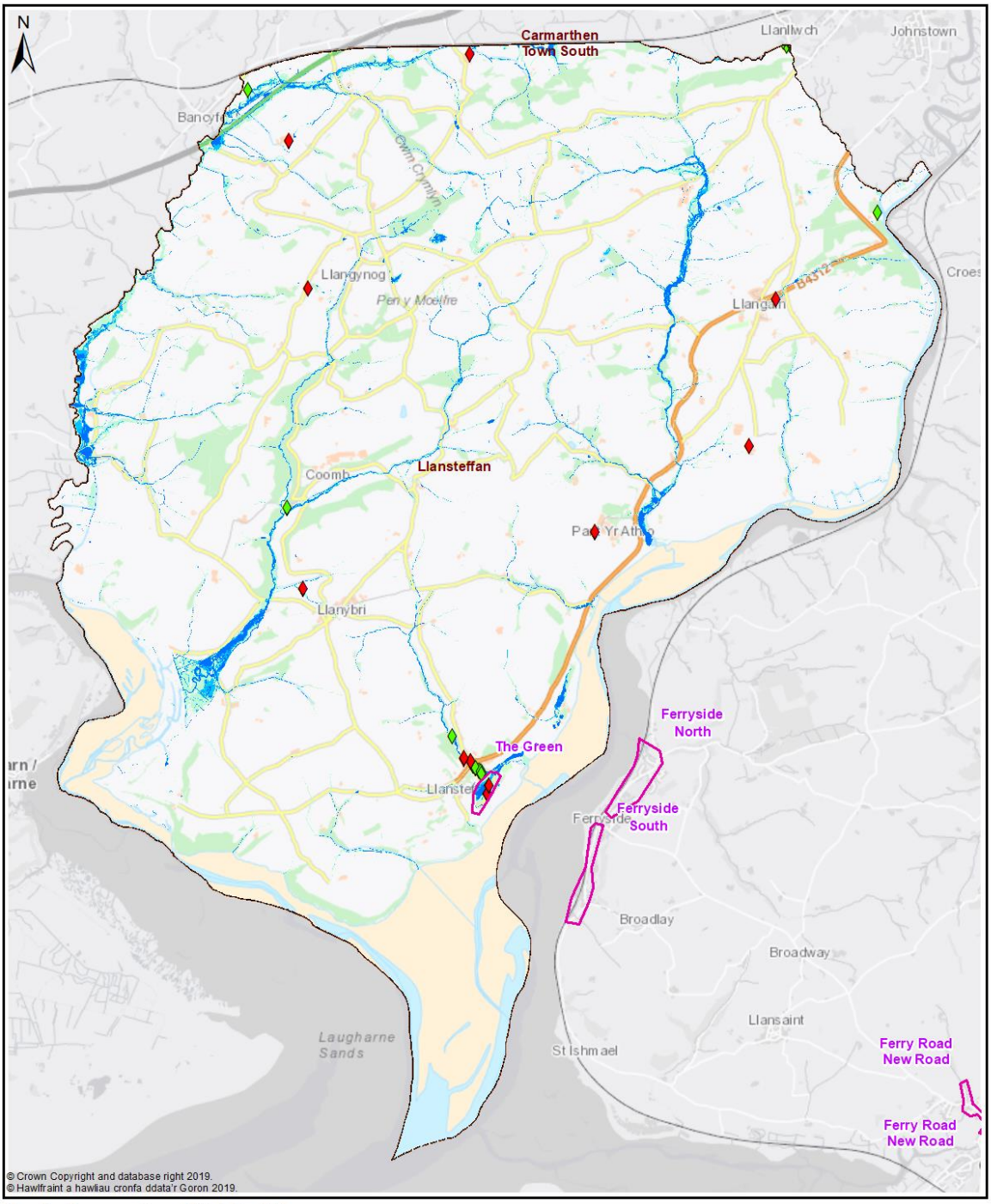
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llansteffan

0 0.5 1 2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llansteffan

0 0.5 1 2 Km

Llansteffan - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Med
M33	The Green, Llansteffan Policy Unit identified for further review of potential alleviation actions	Med	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main rivers / Tide	Med	Ongoing	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate.	Med	Ongoing	Low

9.3.41 Llanybydder

Community Council(s):	Llanybydder Pencarreg
Councillor:	Ieuan Wyn Davies
Population:	2,783 people
Area:	71.08 km^2
Population Density:	39 people/km^2

Area Description

Llanybydder ward is a rural area on Carmarthenshire's north border between the River Teifi and steep hills and valleys leading to Brechfa Forest. Llanybydder is the largest urban area with smaller settlements including Cwmann, Pencarreg, Ram, Rhydcymerau & Ty Mawr.

The area comprises steep valleys and hills and 9km^2 of Brechfa Forest to the south of the ward leading to the pastoral farmland and Teifi Valley. The tallest peaks in the Ward are Mynydd Carreg to Mynydd Llanybydder. This Ward contains numerous small watercourses. The Main Rivers are the Afon Teifi and Afon Hor.

Flood History

Flooding incidents reported or historically known are:

- Internal flooding caused by a blocked private culvert
- Isolated highway surface water flooding and surface water flooding incidents around Cwmann

No incident(s) have been reported to the Authority in the Policy Units of Station Road & Glan Duar, Llanybydder.

Policy Units in Ward

There are two Policy Units identified in this Ward:

- Treherbert Street, Cwmann
- Station Road, Llanybydder

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	58	7	1
Medium Risk	100	27	1
Low Risk	268	126	1

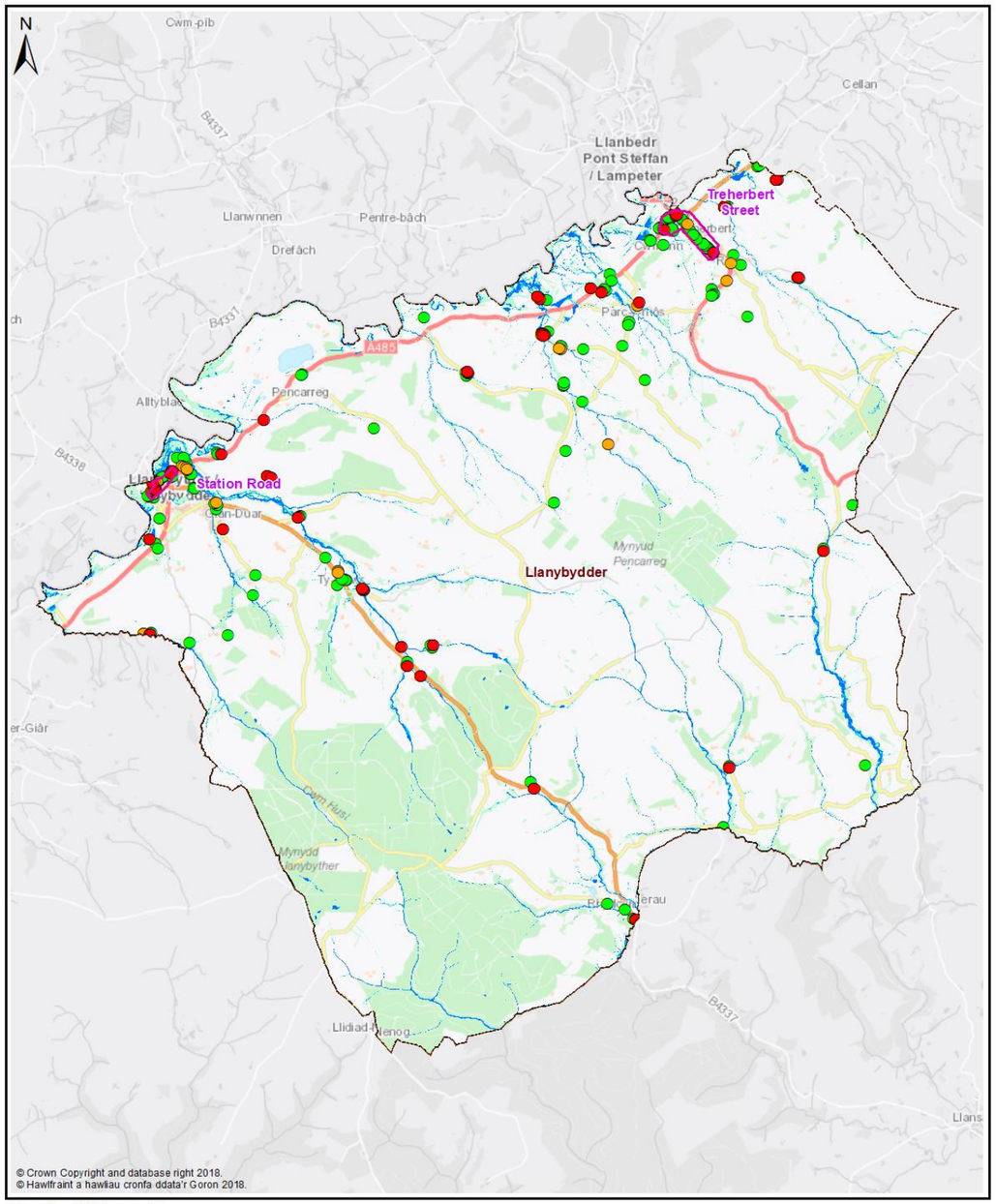
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

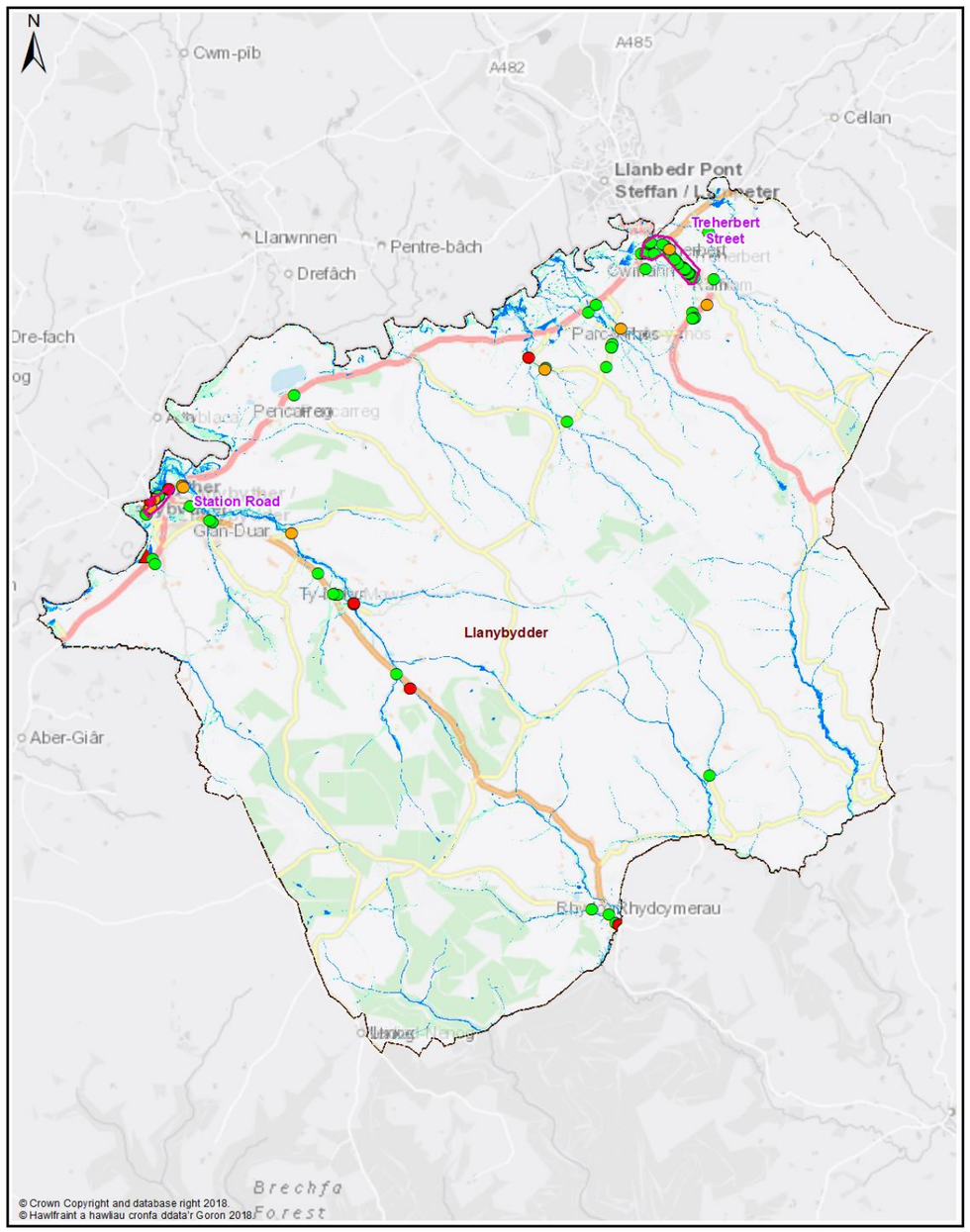
DCWW has identified flood risks at the following locations:

- Bridge Street, Llanybydder
- Rhydybont, Llanybydder
- Cwmann

NRW will continue to take the lead and manage the flood risk from the Rivers Afon Teifi, and Afon Hor.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

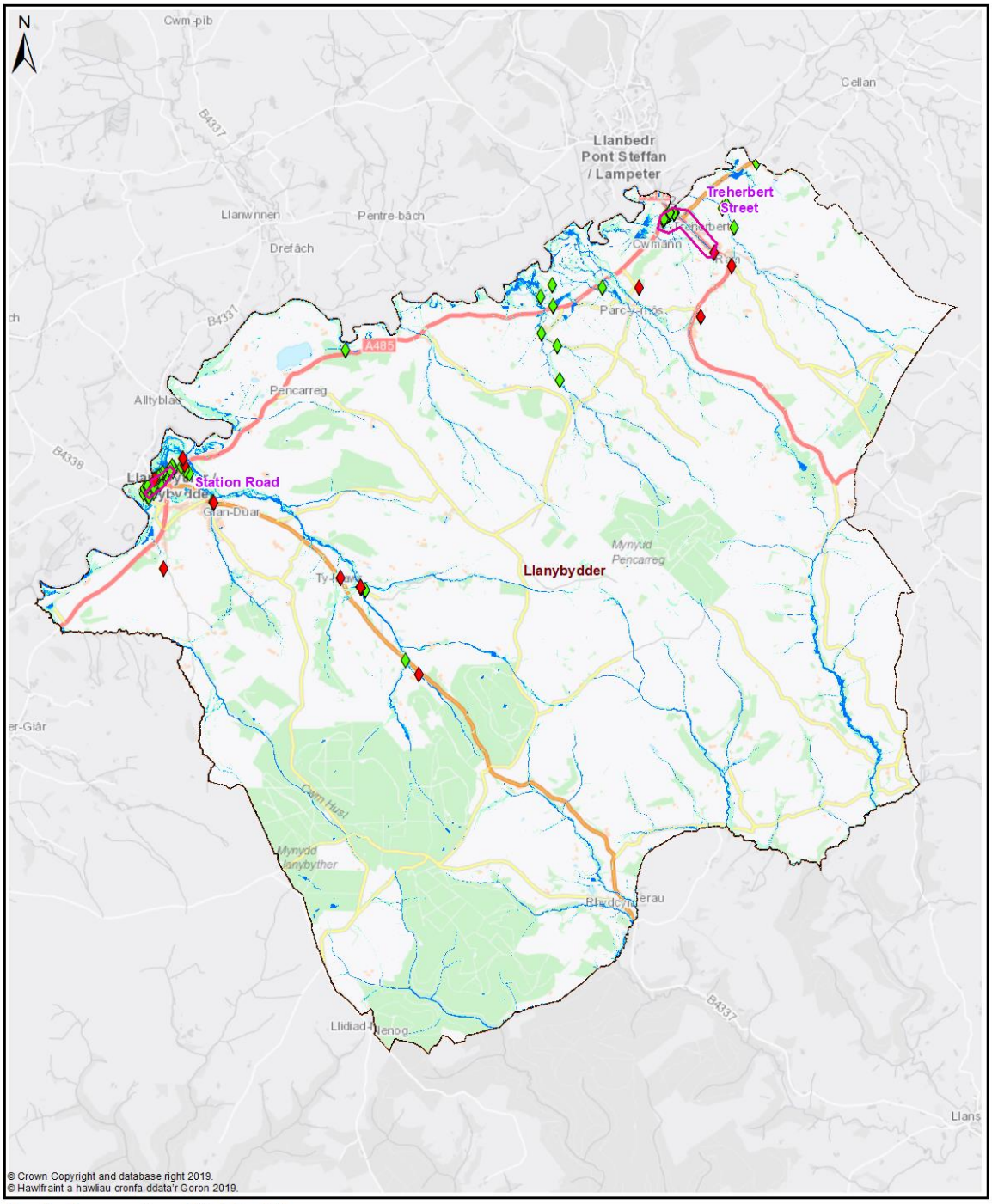
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llanybydder

0 0.75 1.5 3 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llanybydder

0 0.75 1.5 3 Km

Llanybydder - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M33	2 Policy Units identified for further review of potential alleviation action(s)	High	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers/Tide	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.42 Lleidi

Community Council(s):	Llanelli Town
Councillor:	Bill Thomas
	Jan Williams
Population:	5,410 people
Area:	1.59 km^2
Population Density:	3,409 people/km^2

Area Description

Urbanised area comprising Llanelli Town Centre and the area to the north with the River Lleidi running through the Ward. A significant feature of the River Lleidi is the presence of the two Swiss Valley reservoirs upstream that will act to attenuate flows. The River Lleidi is culverted for a considerable distance through the town centre.

The NRW flood maps indicate that the River Lleidi presents a significant flood risk flooding from this source is outside of the scope of this report since it is manged by NRW.

Flood History

Flooding history in the Lake View area from surface water / culverted watercourse.

Policy Units in Ward

There are three Policy Units identified in this Ward:

- Heol Buckley
- Llanelli Town Centre
- Lakeview

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	124	92	0
Medium Risk	189	144	1
Low Risk	397	312	1

Breakdown by Policy Unit refer to Appendix E.

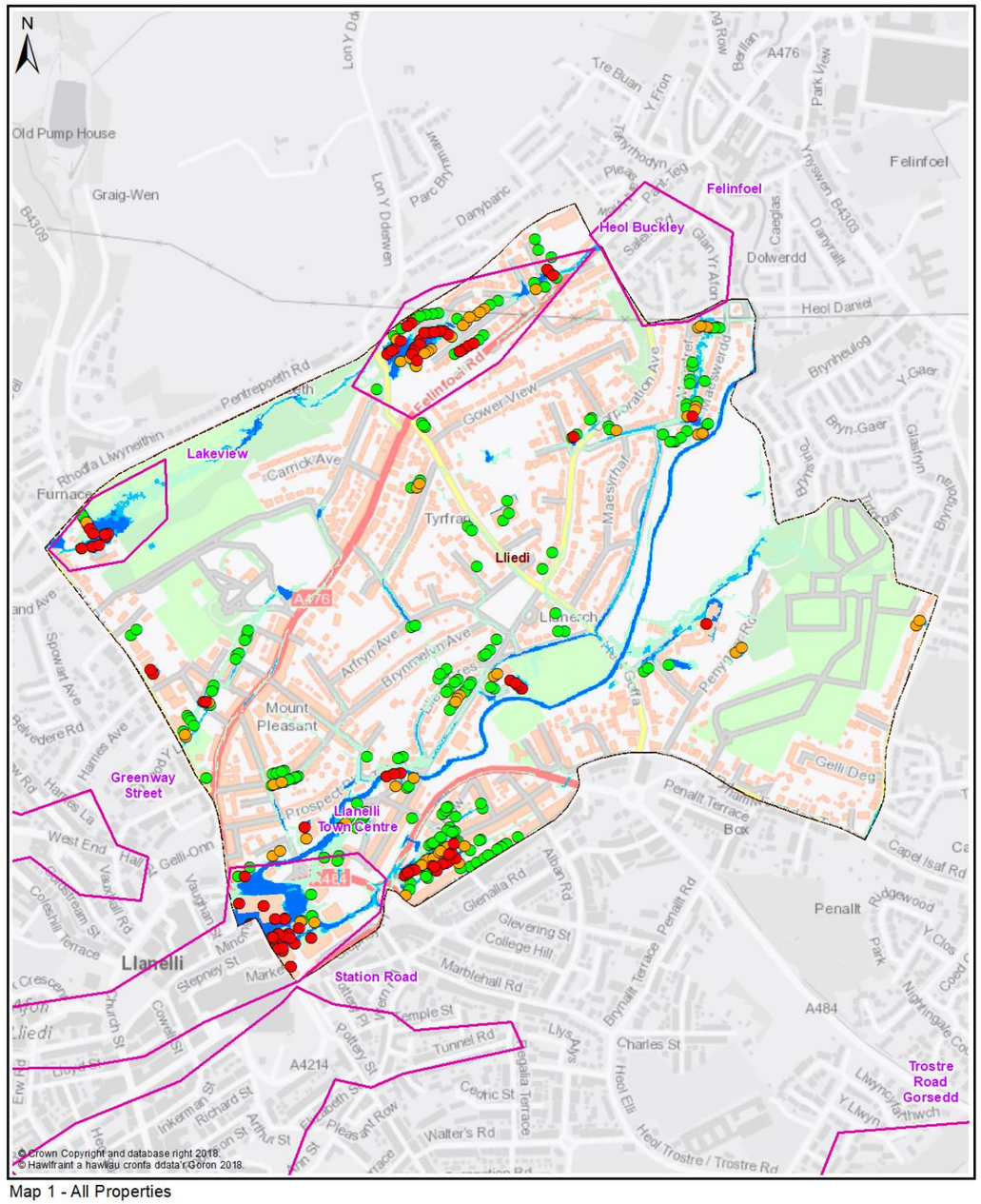
Other risk management authorities

DCWW has identified flood risk at the following locations:

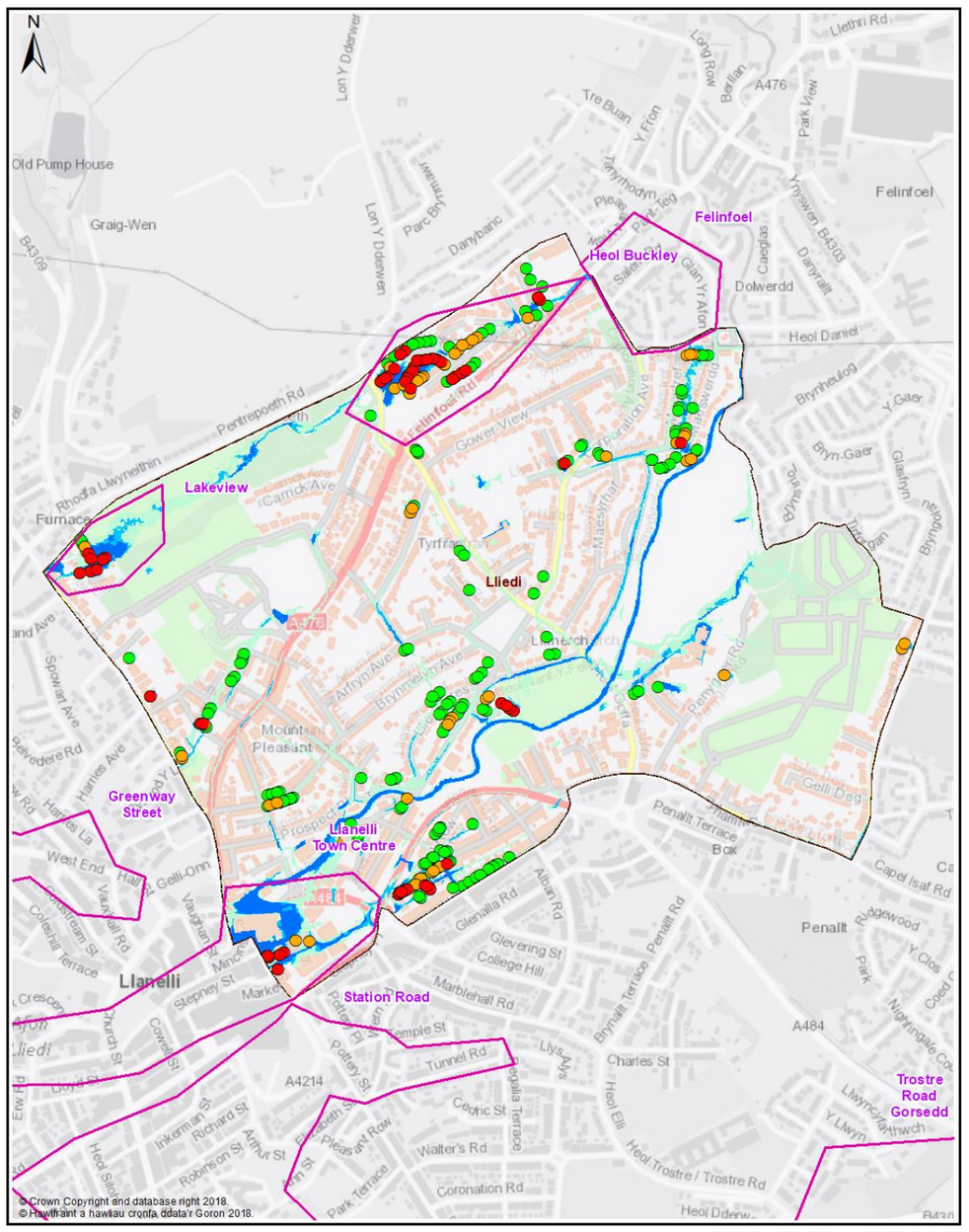
- Glasfryn Terrace, Llanelli
- Maes Golau, Llanelli
- Tyr Fran Avenue, Llanelli

At the present time DCWW are investing large sums of money in Llanelli in their Rainscape Project. CCC will continue to work in partnership with DCWW on this project.

NRW will continue to take the lead and manage the flood risk from the River Lleidi.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

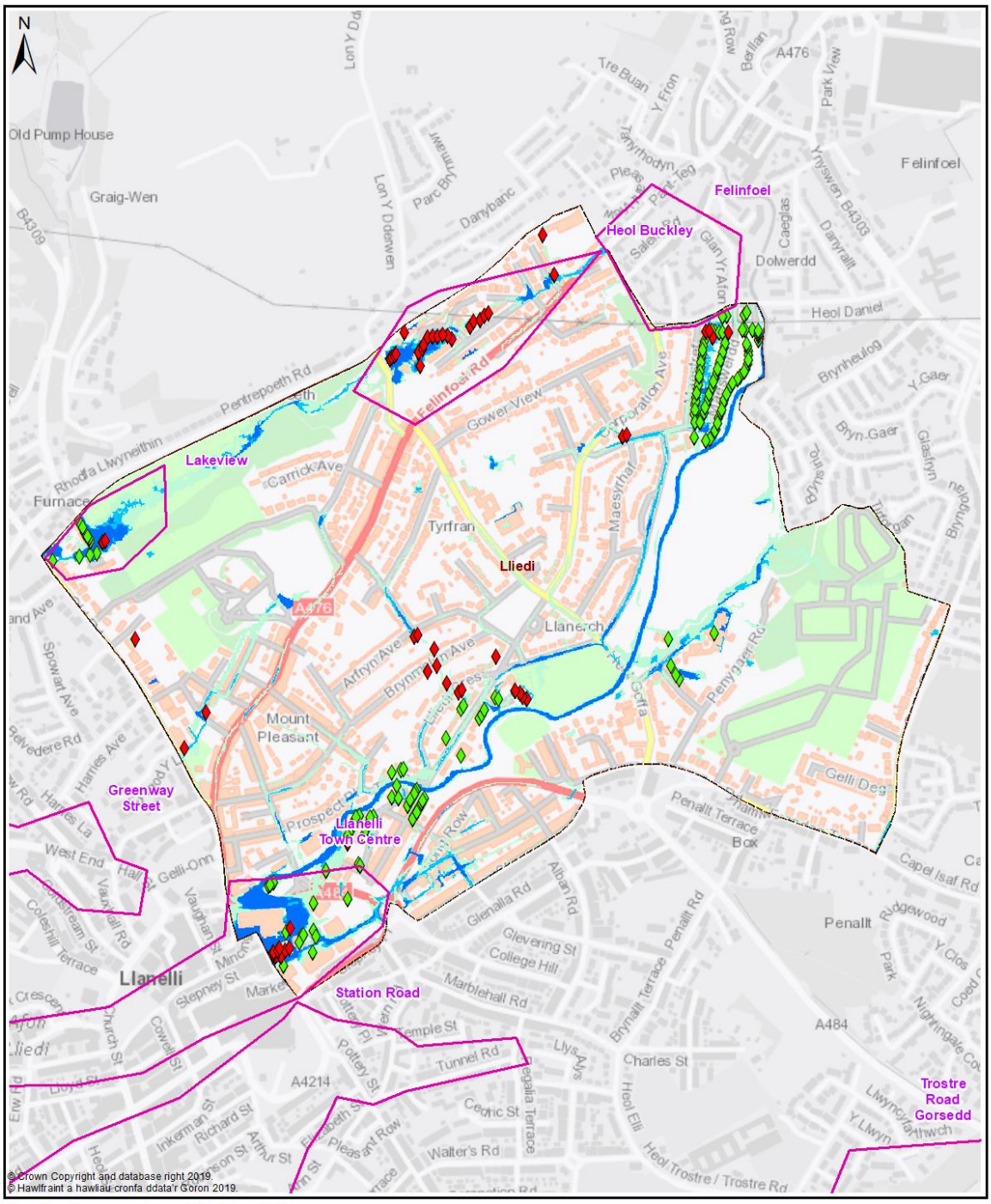
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Lliedi

0 0.125 0.25 0.5 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Lliedi

0 0.125 0.25 0.5 Km

Lliedi - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area	High	Ongoing	Med
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Low
M33	Three Policy Unit identified for further review of potential alleviation action(s)	High	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers/Tide	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.43 Llwynhendy

Community Council(s):	Llanelli Rural
Councillor:	Theresa Bowen
Population:	4,498 people
Area:	4.84 km^2
Population Density:	929 people/km^2

Area Description

Llwynhendy Ward is situated to the east of Llanelli town centre and comprises large housing developments and heavy industry in the form of the Tata tinplate and rolling mill.

The ward also contains the Wildfowl and Wetland Centre.

The main River Dafen Pill crosses the southern part of this ward but does not pose a significant flood risk in this ward.

Flood History

Surface water flooding at Bryn Rhos and Heol Elfed.

Policy Units in Ward

There are 3 No. Policy Units identified in this Ward:

- Heol Elfed
- Pemberton Road
- Bryn Rhos

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	45	34	0
Medium Risk	124	92	0
Low Risk	324	265	0

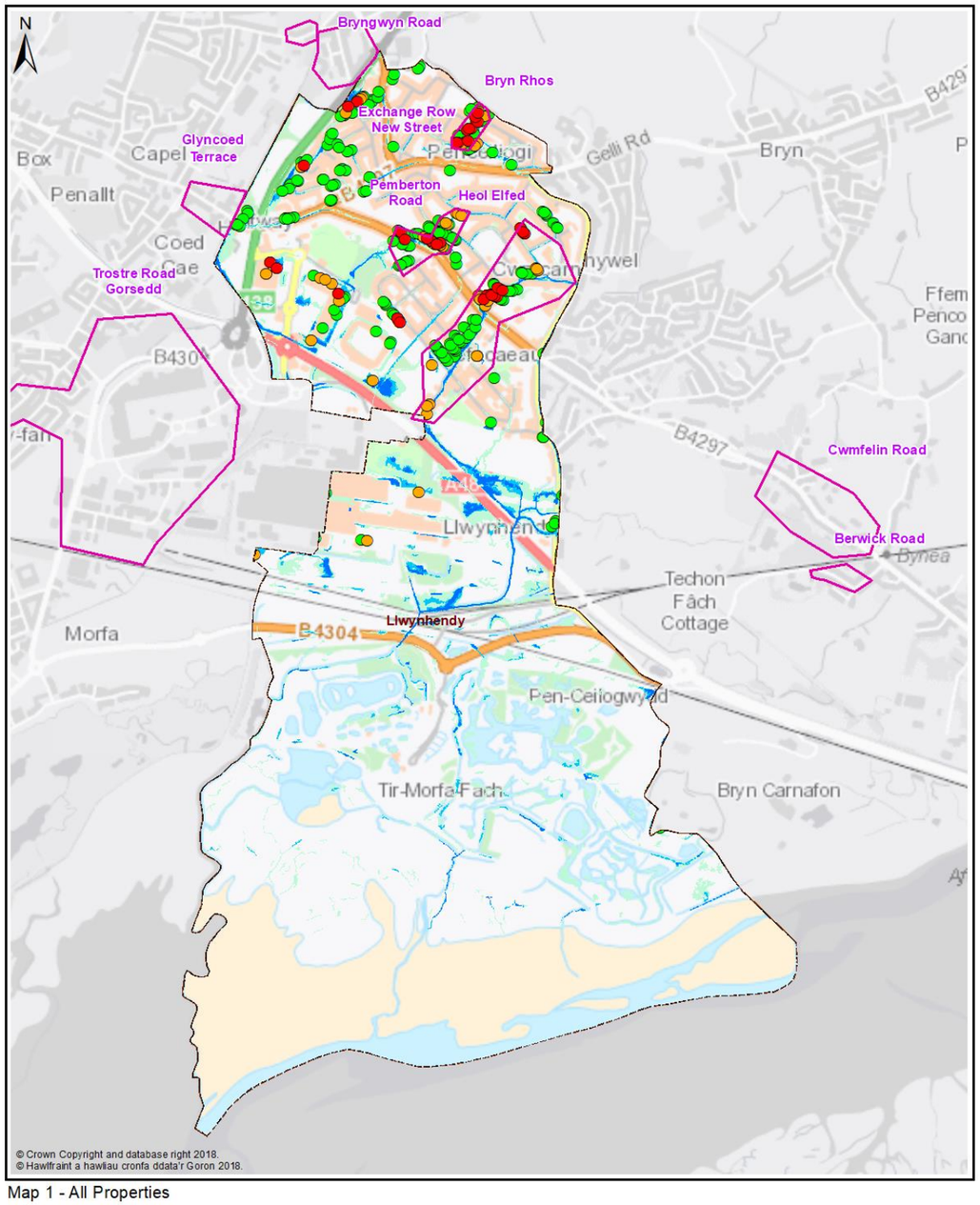
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

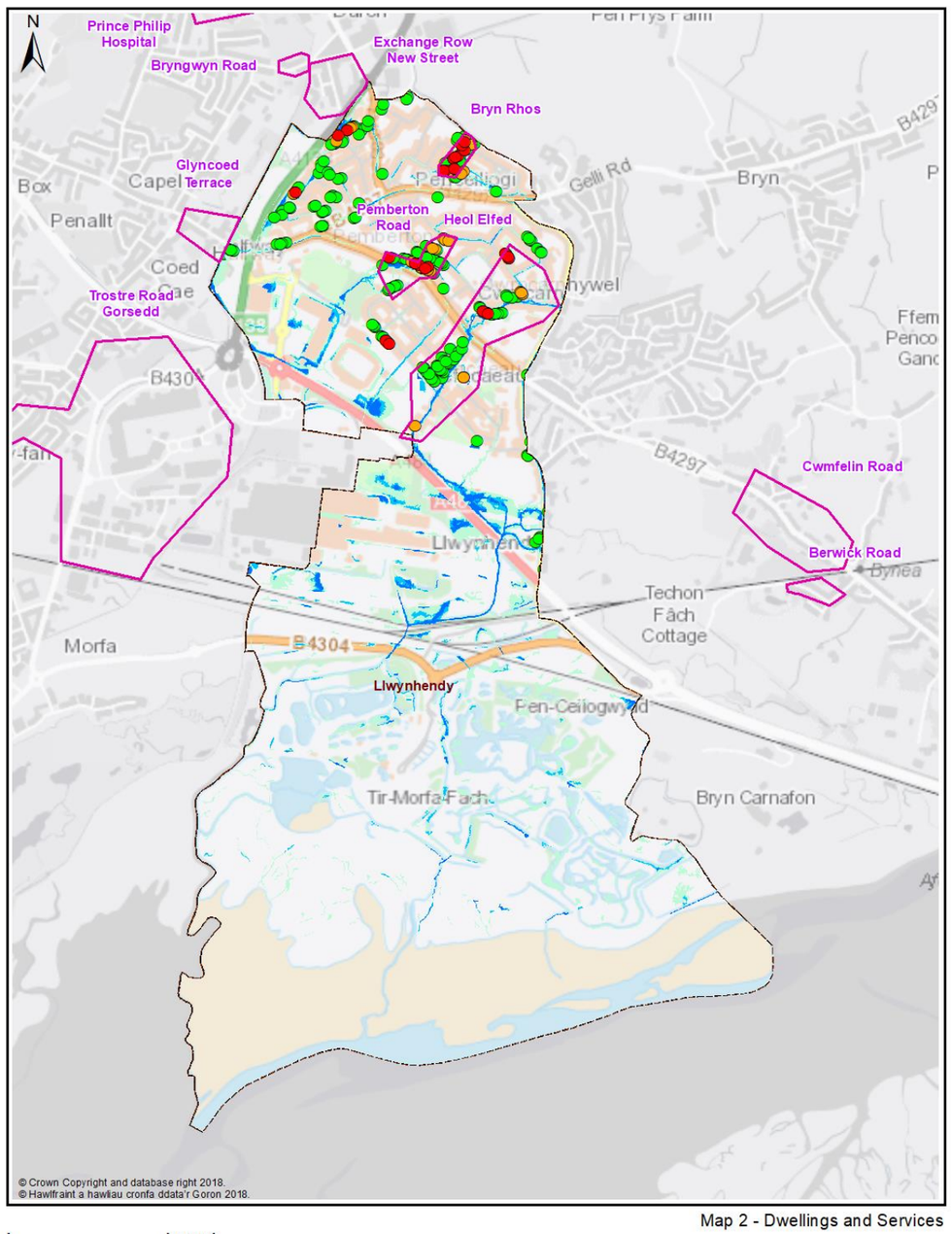
DCWW has identified flood risk in the following locations:

- Heol Hen, Llanelli
- Llwynhendy Road, Llanelli
- Parc Gitto, Llanelli
- Pemberton Park, Llanelli
- Ynyslas, Llanelli

NRW will continue to take the lead and manage the flood risk from the River Dafen Pill .



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

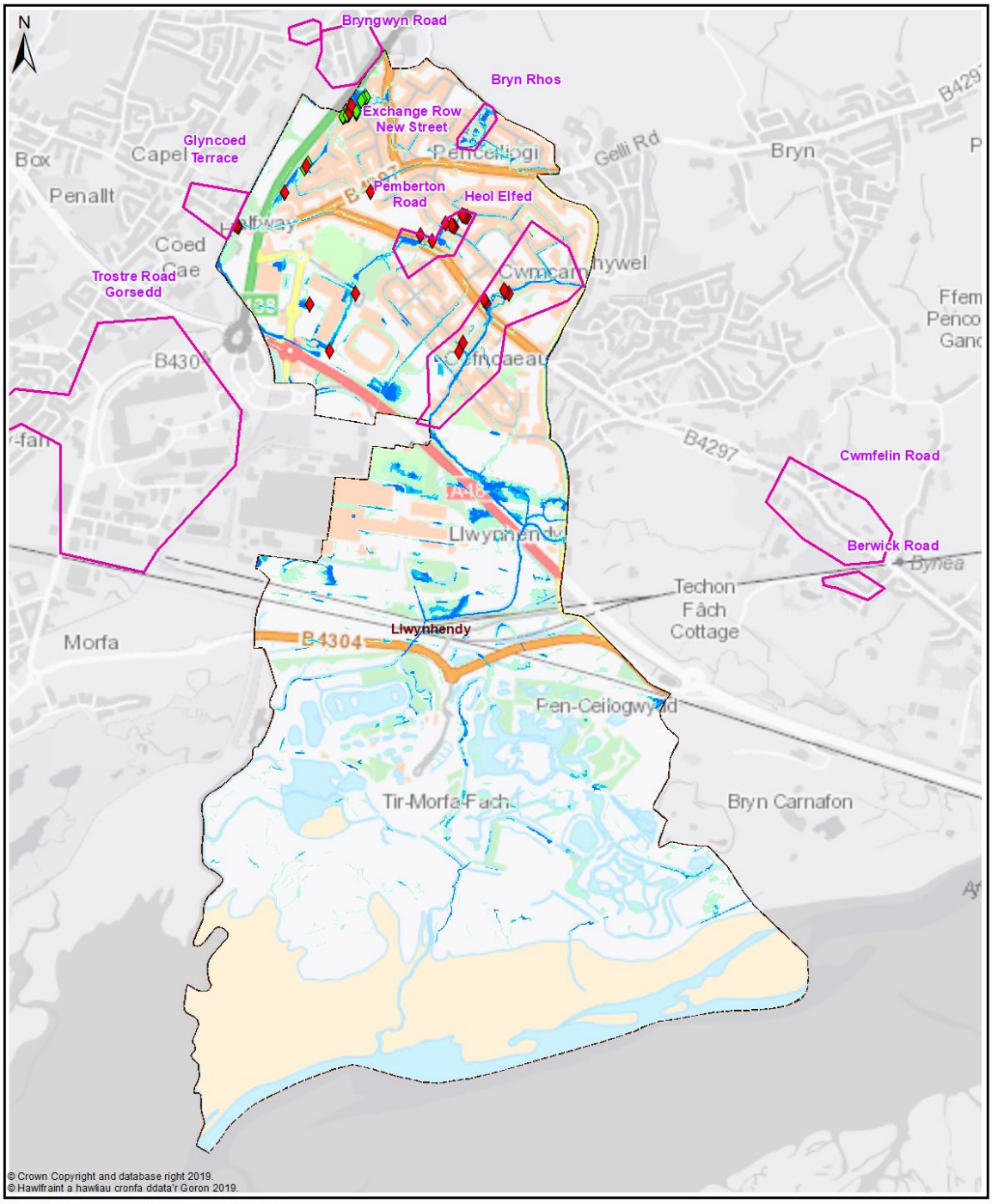
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Llwynhendy

0 0.225 0.45 0.9 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Llwynhendy

0 0.225 0.45 0.9 Km

Llwynhendy - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area	High	Ongoing	Med
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M24	Culvert inspections of existing assets & update/ maintain Asset Register	High	Ongoing	Low
M33	3 Policy Units identified for further review of potential alleviation action(s)	High	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers/Tide	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.44 Manordeilo and Salem

Community Council(s):	Talley Manordeilo and Salem
Councillor:	Joseph Davies
Population:	2238
Area:	79.95km^2
Population Density	28 people/km2

Area Description

Manordeilo and Salem Ward is a predominantly rural area to the north of Llandeilo town and contains the settlements Manordeilo, Salem, Pen y Banc, Capel Isaf and Talley.

Predominate land use is pastoral agriculture.

The River Cothi runs along the northern boundary of the Ward. Other Main Rivers in the area include the Rivers Dulais, Rhosmaen, Towey and Gurrey Fach. These give a relatively low flood risk to this area.

Flood History

Flooding at Pen Banc from the Nant Gurrey Fach (ordinary watercourse) above Main River.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	55	15	0
Medium Risk	88	28	0
Low Risk	203	65	2

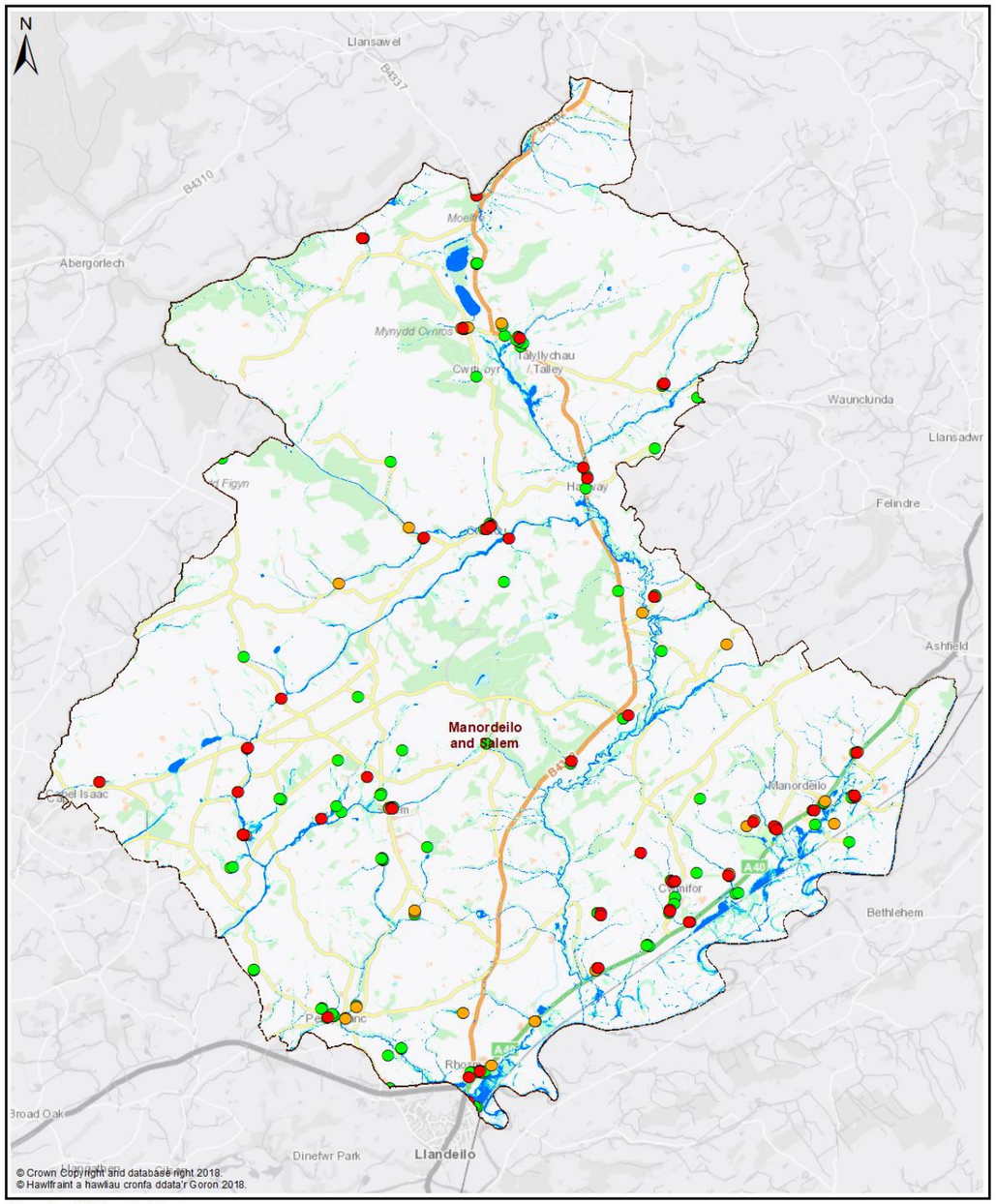
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

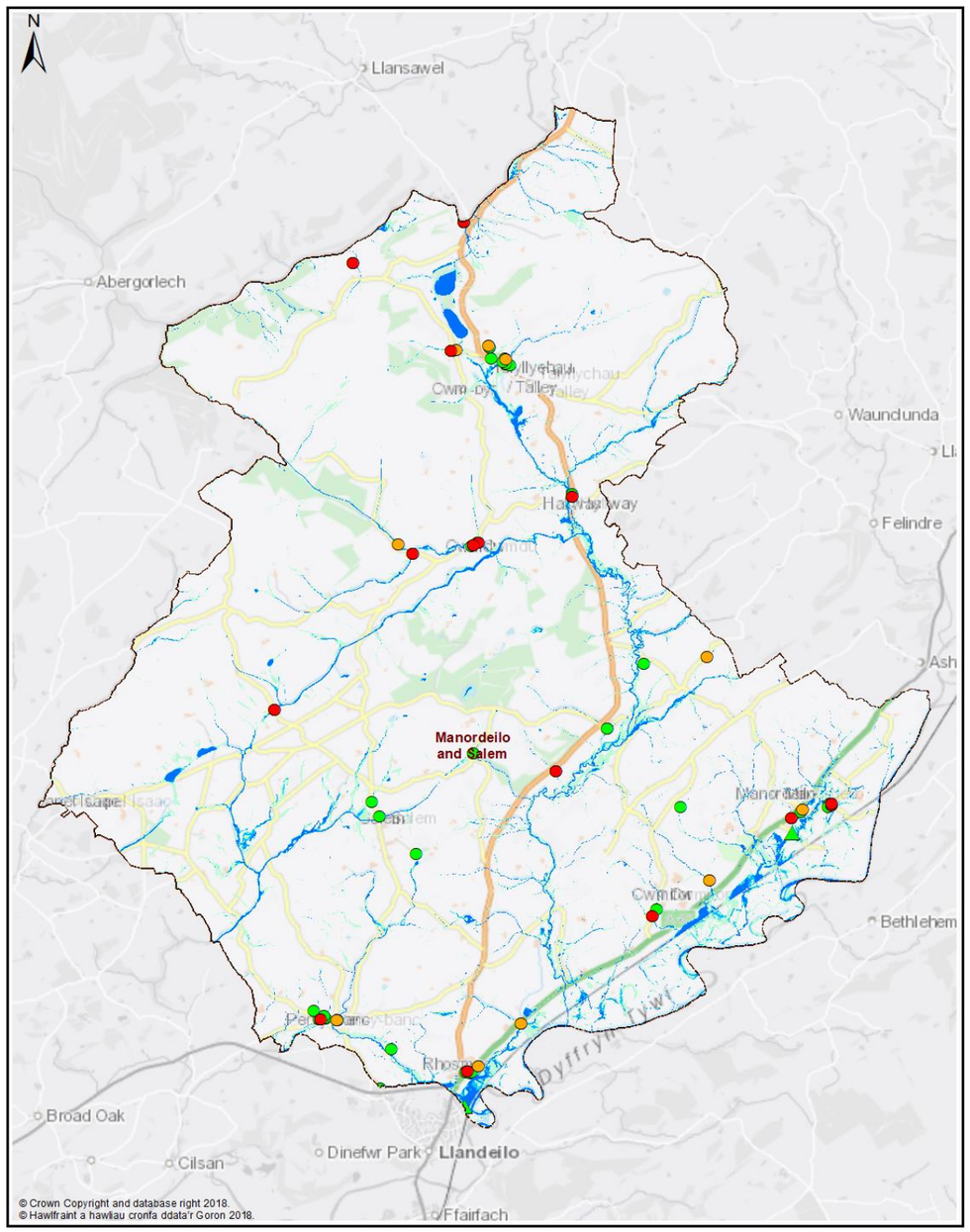
DCWW has identified flood risk in the following locations:

- Manordeilo
- Talley

NRW will continue to take the lead and manage the flood risk from the Cothi, Tywi, Gurrey Fach and Dulais RhosMain Rivers.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

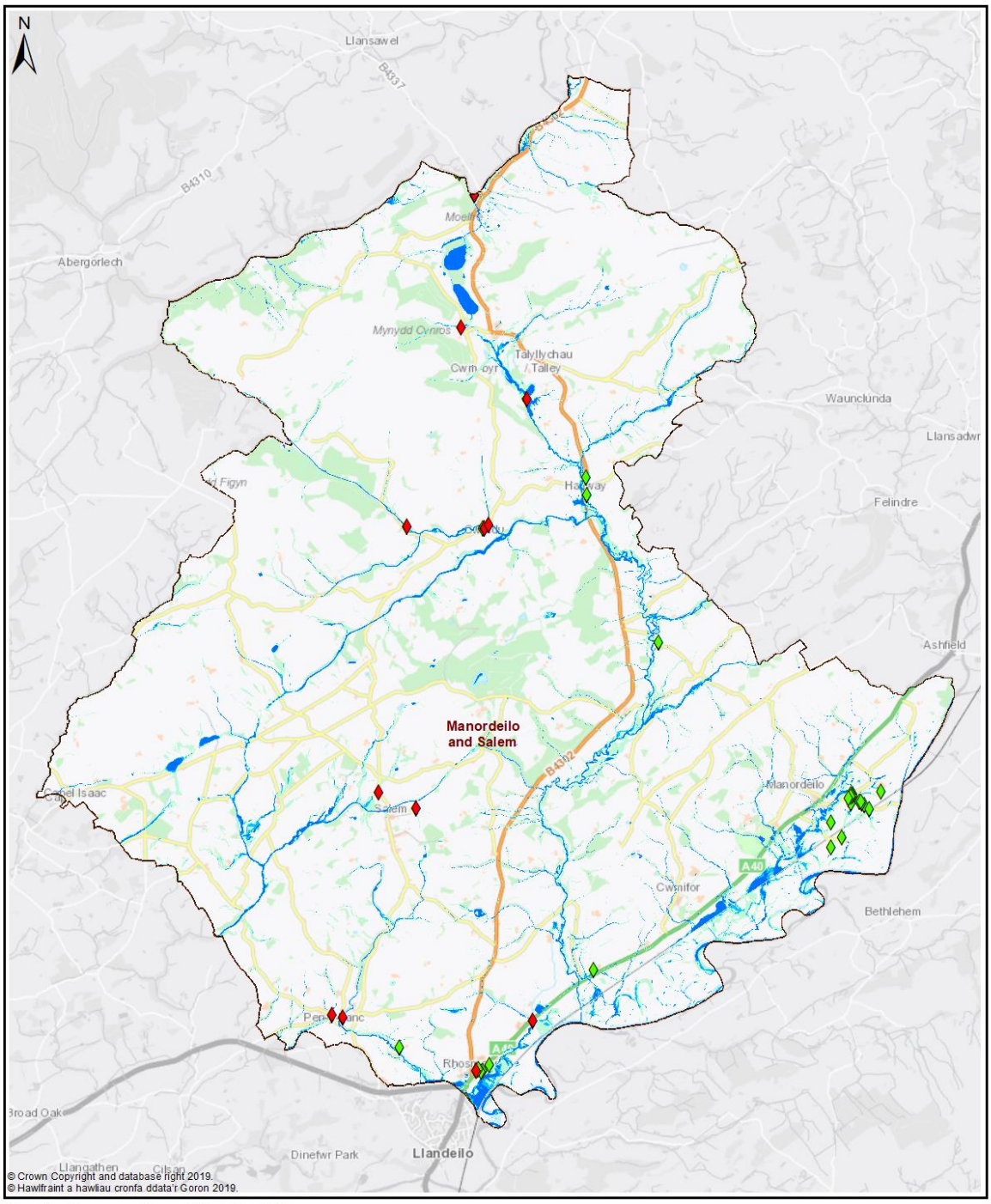
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Manordeilo and Salem

0 0.75 1.5 3 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Manordeilo and Salem

0 0.75 1.5 3 Km

Manordeilo - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Low
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers/Tide	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.45 Pembrey

Community Council(s):	Pembrey & Burry Port
Councillor:	Shirley Mathews
	Hugh Shepardson
Population:	4,303
Area:	54.52km^2
Population Density:	79 people/km^2

Area Description

Pembrey ward is located 6km west of Llanelli. The area is dominated by 10km of beach at Cefn Sidan Sands and associated flat hinterland rising to 155 mAOD of Pembrey Mountain. The watercourses here have flashy flood responses. The predominant land use in this ward is forestry.

Flood risk is dominated by the Gwendraeth Fawr and tidal flooding. High tide levels in the Gwendraeth back up in the Swanpool Drain causing flooding. Both watercourses and tidal flooding are not within the scope of this report as they are managed by NRW.

The Nant Dyfatty is an ordinary watercourse that flows from Pembrey Mountain, it passes through many private culverted sections as it flows down to its outfall.

Flood History

Pembrey canal and cycle path is a high flood risk area. A number of flooding incidents are attributed to fluvial flooding on the Nant Dyfatty.

Policy Units in Ward

There is one Policy Unit identified in this Ward:

- Furnace

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	50	38	0
Medium Risk	86	67	1
Low Risk	299	243	2

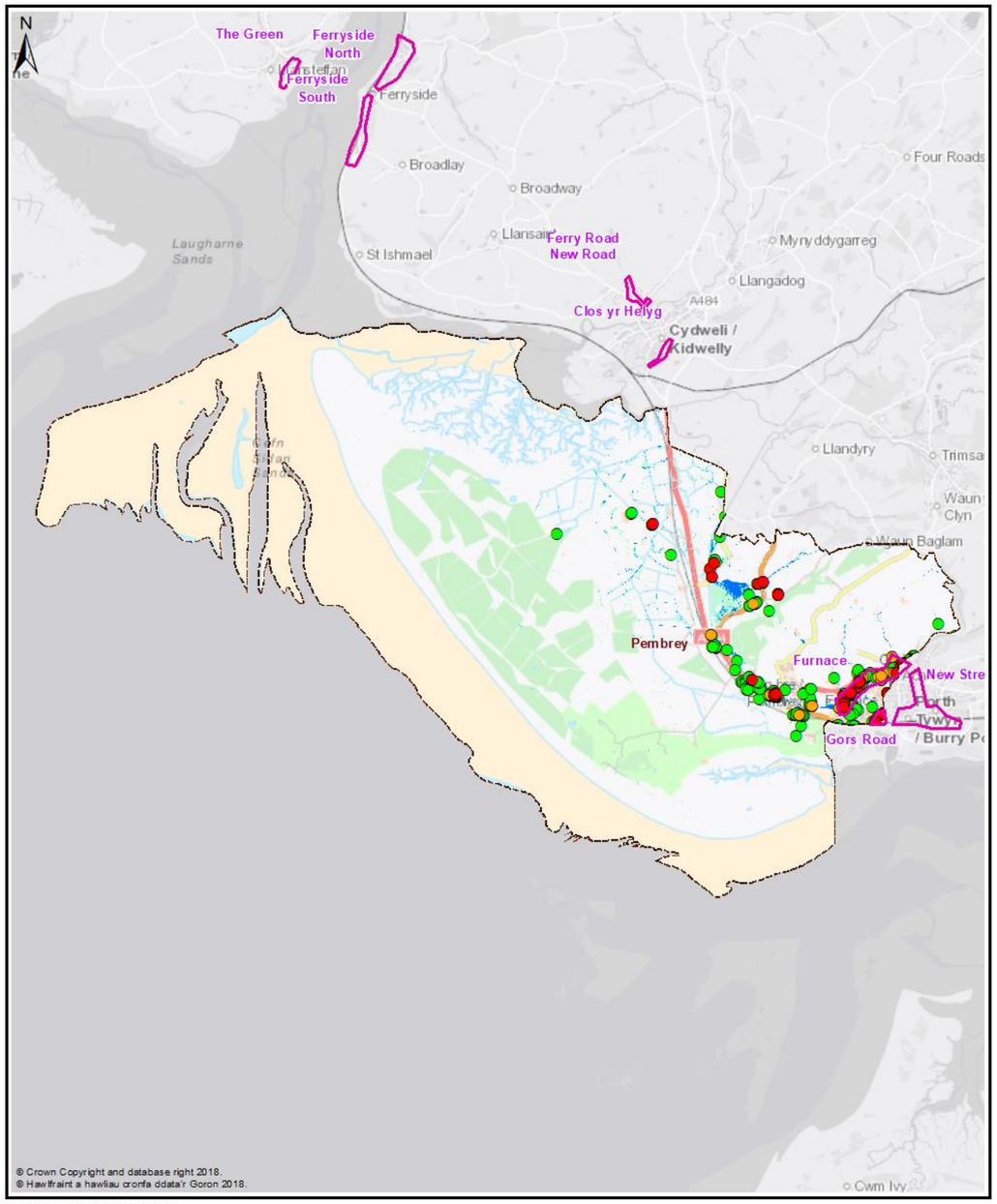
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

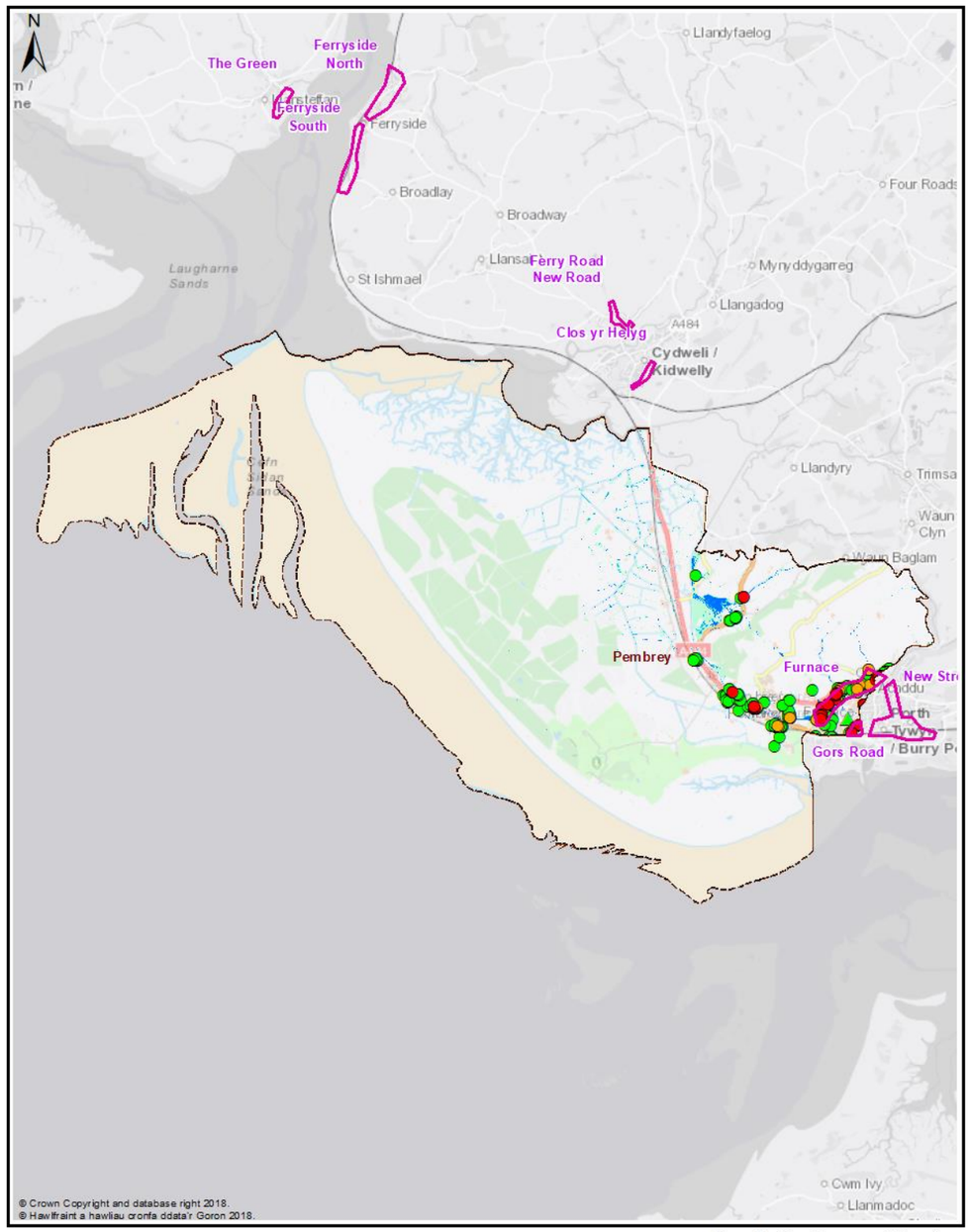
DCWW has identified flood risk in the following locations:

- Danlan Road, Pembrey
- Garreglwyd, Pembrey
- The Links, Burry Port
- Waun Sidan, Pembrey

NRW will continue to take the lead and manage the flood risk from the sea and the fluvial risk from the Gwendraeth and Swanpool drain.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

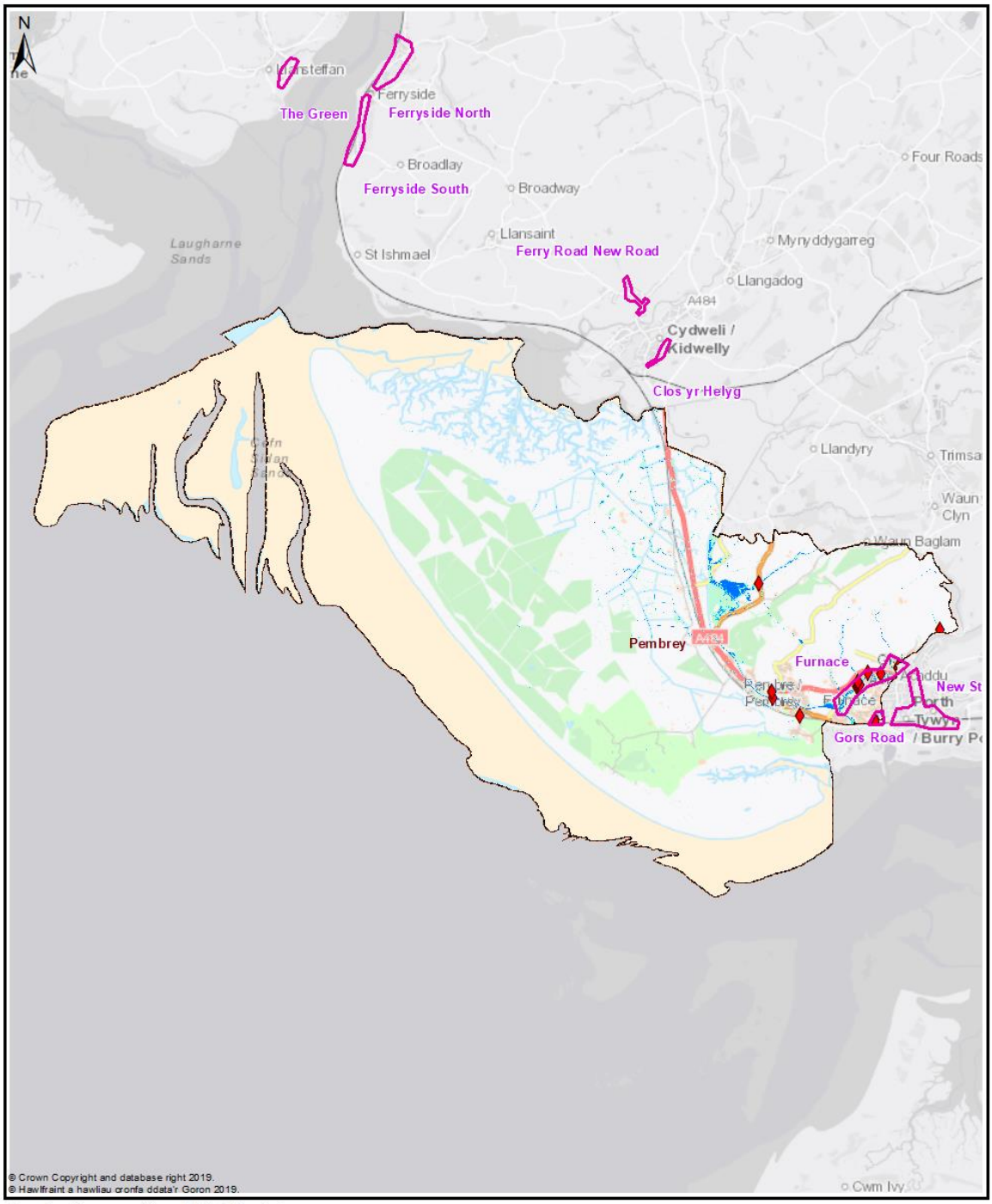
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Pembrey

0 1 2 4 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Pembrey

0 1 2 4 Km

Pembrey - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area	High	Ongoing	Med
M22	investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Low
M33	1 Policy Unit identified for further review of potential alleviation action(s).	High	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers/Tide	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.46 Penygroes

Community Council(s)	Llandybie
Councillor:	Sian Thomas
Population	2,915
Area	7.07km^2
Population Density	412 people/km^2

Area Description

Penygroes ward, located to the west of Ammanford Town is a former coal mining area with opencast activity. Other settlements in the ward include Blaenau and Caer Bryn.

Land Use is predominantly rough pasture with poorly drained areas including reclaimed opencast mining and industrial sites.

The Afon Lash forms part of the northern boundary but presents a low flood risk to this ward.

Flood History

Isolated surface water flooding.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	29	16	1
Medium Risk	48	33	1
Low Risk	142	99	2

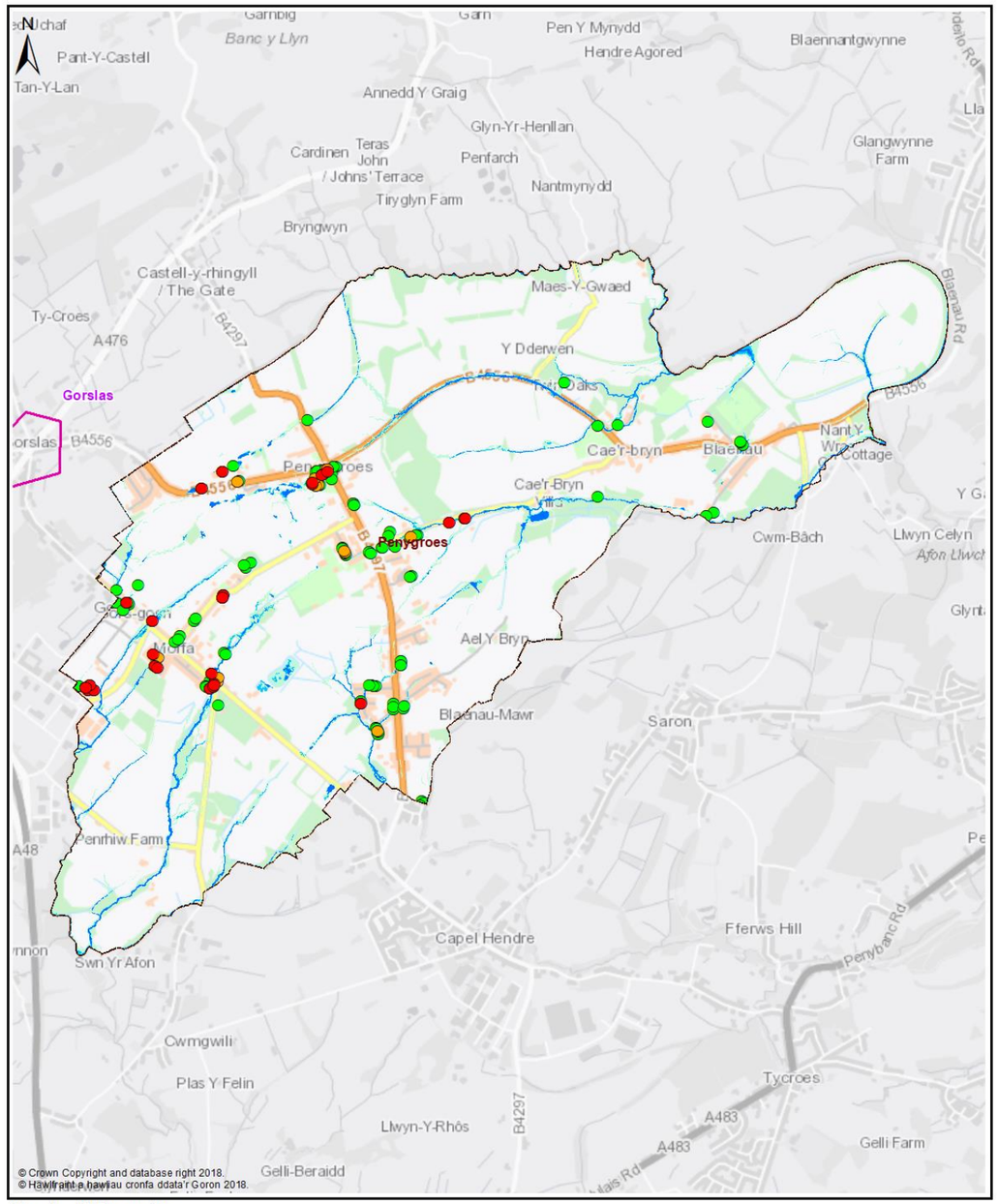
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

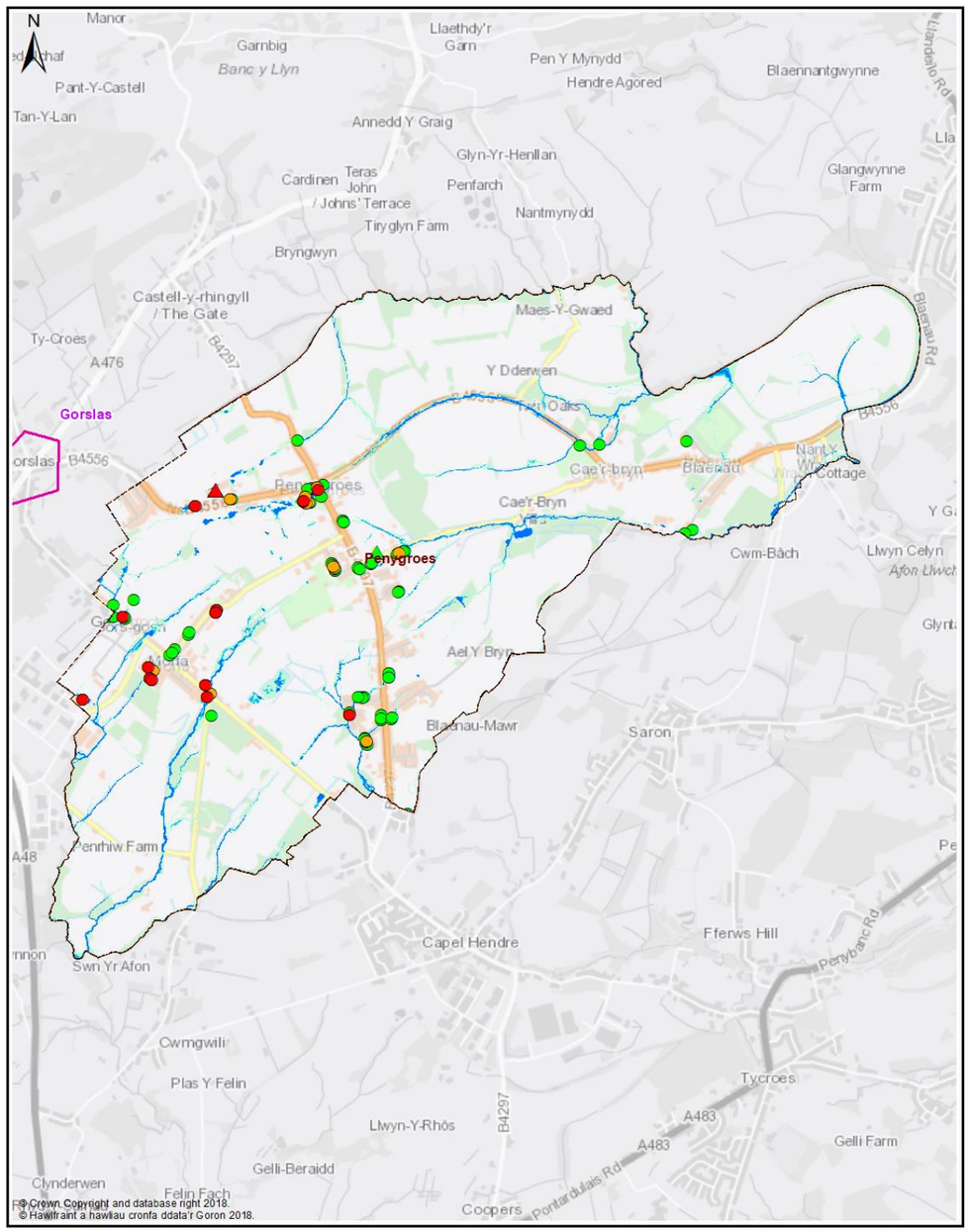
DCWW has identified flood risk in the following locations

- Thornhill Road, Cwmgwili
- Black Lion Road, Cross Hands

NRW will continue to take the lead and manage the flood risk from the Afon Lash.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

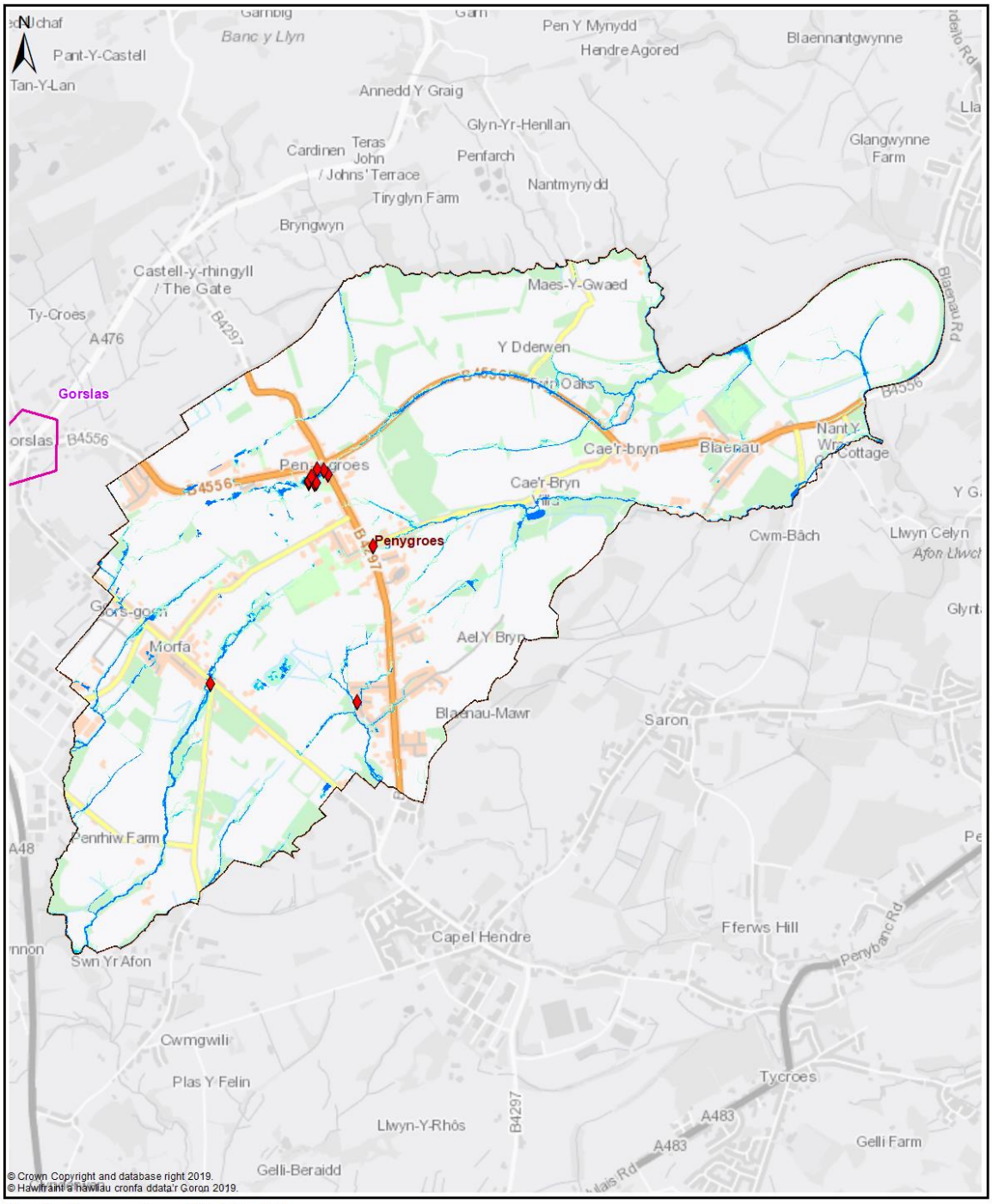
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Penygroes

0 0.325 0.65 1.3 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Penygroes

0 0.325 0.65 1.3 Km

Penygroes - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area	High	Ongoing	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.47 Pontamman

Community Council(s)	Ammanford Town
Councillor:	Colin Evans
Population:	2,732
Area	1.34 km2
Population Density	2,033 people/km2

Area Description

Pontamman ward comprises of two areas, one to the east of Ammanford Town and one to the north. Predominant land use is urban with predominately residential use.

This ward is bounded by the Main Rivers Loughor and Amman. NRW flood maps show that there is a significant flood risk from the River Loughor to this area.

This is outside the scope of this report and the flood risk is managed by NRW.

Flood History

Isolated surface water issues.

Policy Units in Ward

There is one Policy Unit identified in this Ward:

- Arthur Street

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	65	47	0
Medium Risk	113	73	0
Low Risk	247	177	0

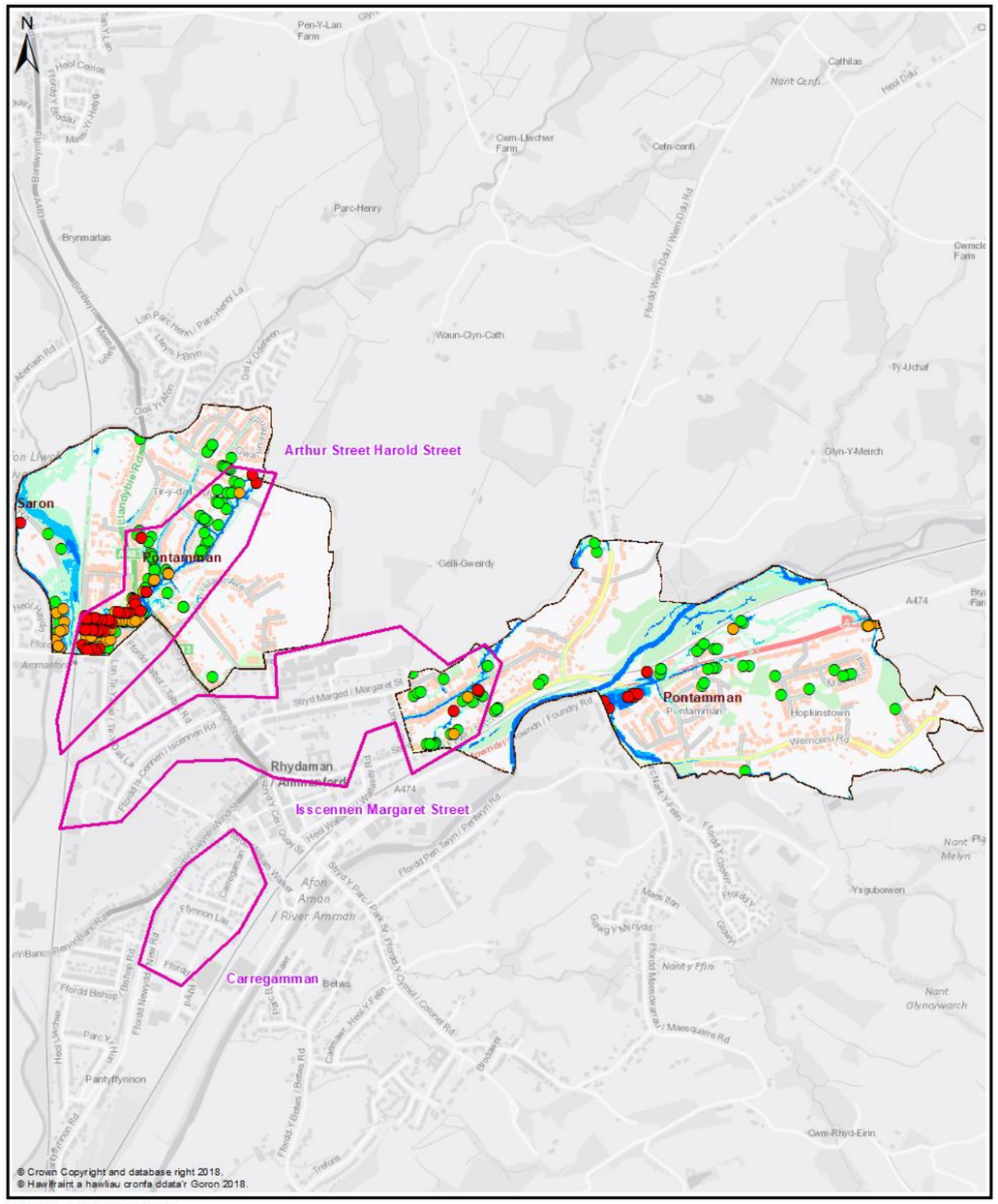
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

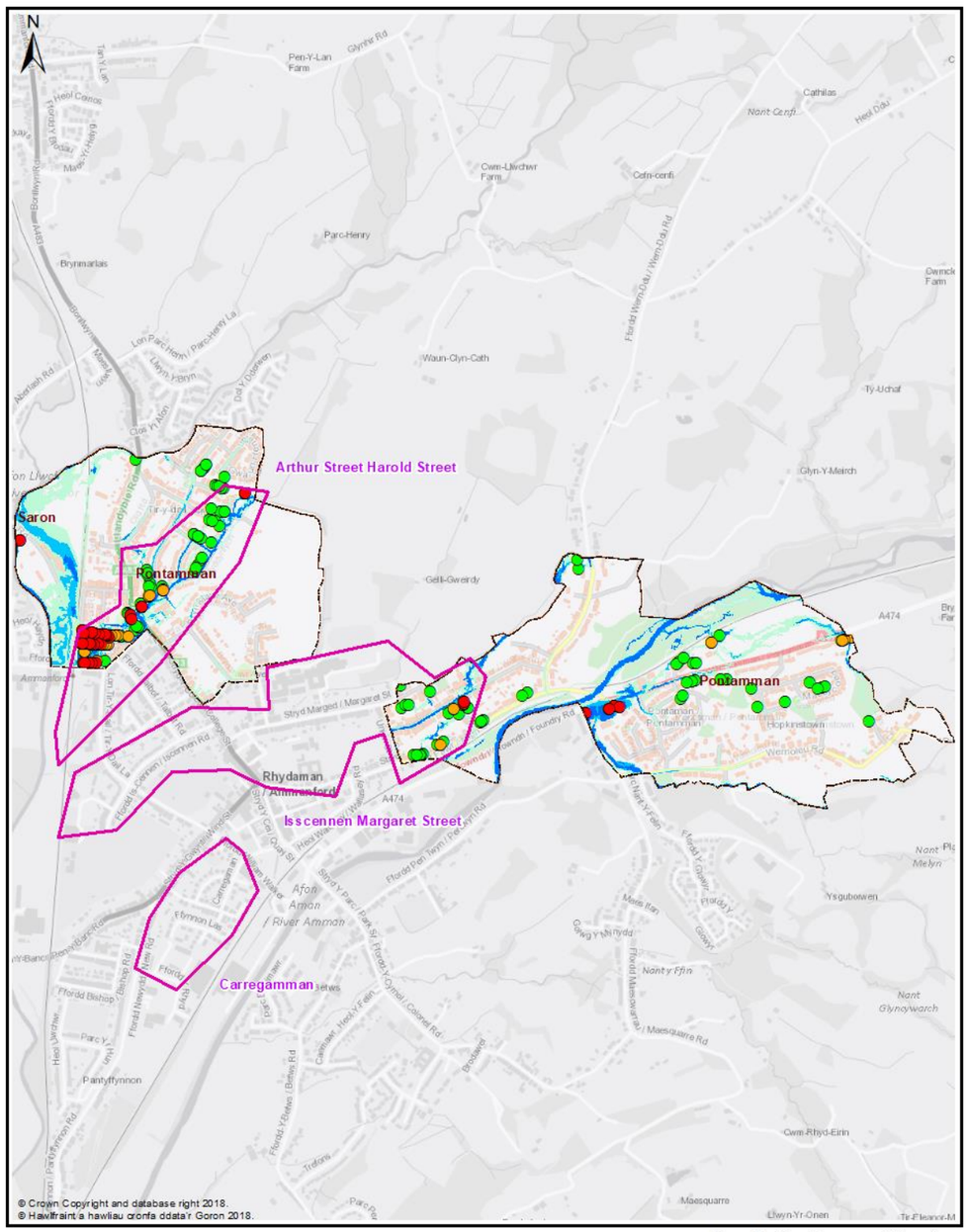
DCWW has identified flood risk at the following locations

- College Street, Ammanford
- Llandybie Road, Ammanford
- Station Road, Ammanford

NRW will continue to take the lead and manage the flood risk from the Loughor and Amman.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

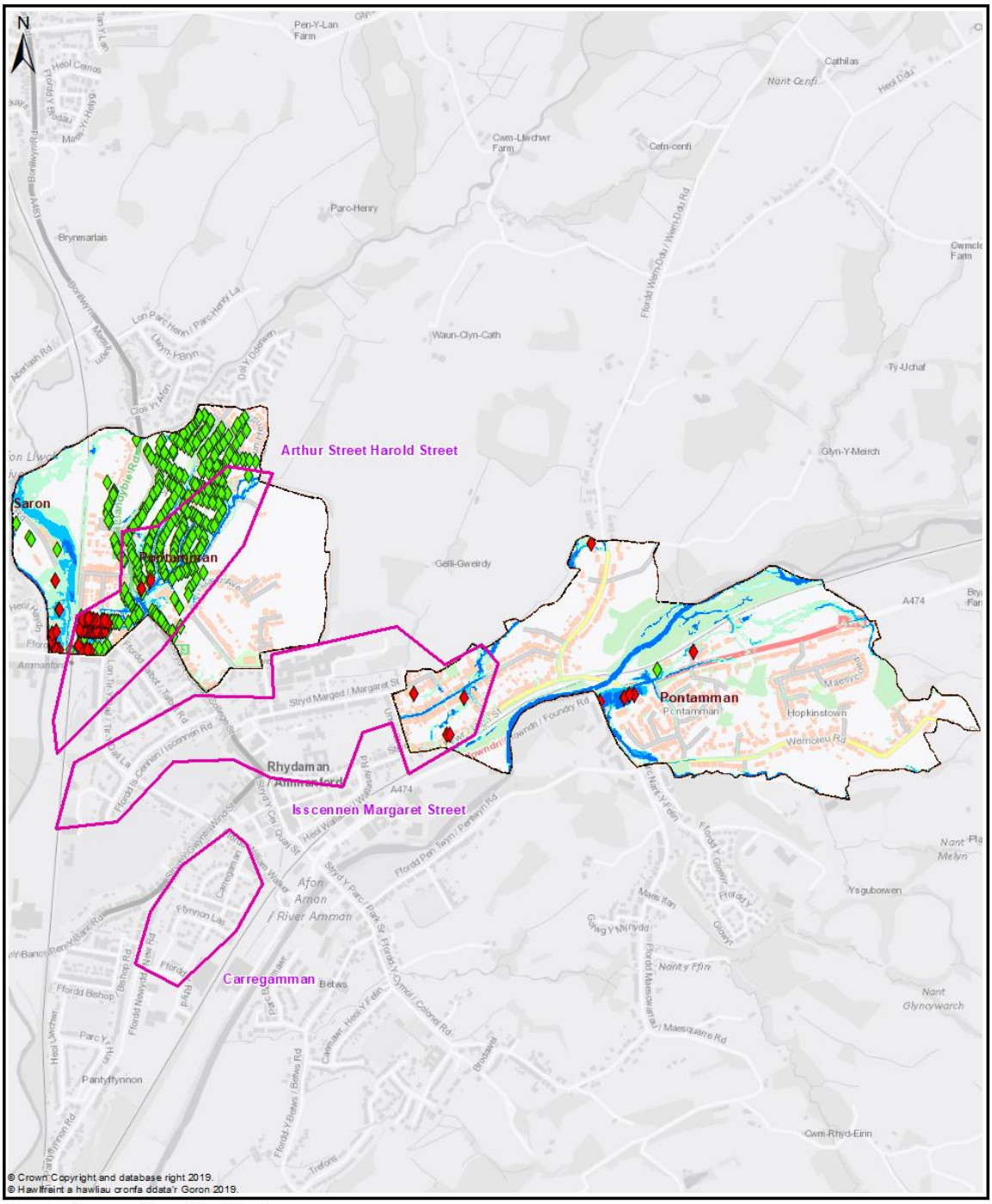
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Pontamman

0 0.2 0.4 0.8 Km

Legend

- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Pontamman

0 0.2 0.4 0.8 Km

Pontamman - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Med
M33	1 Policy Unit identified for further review of potential alleviation action(s)	High	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers/Tide	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.48 Pontyberem

Community Council(s)	Pontyberem
Councillor:	Joy Williams
Population	2,772
Area	13.3 km^2
Population Density	208 people/km^2

Area Description

Pontyberem ward is approximately 15km south east of Carmarthen Town former mining community in the Gwendraeth Valley.

The NRW flood maps indicate that the Gwendraeth Fawr presents a significant flood risk to parts of Pontyberem. Flood risk from thus source is the responsibility of NRW and is outside of the scope of this report.

Flood History

Isolated surface water flooding incidents.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	13	2	1
Medium Risk	22	4	1
Low Risk	138	79	2

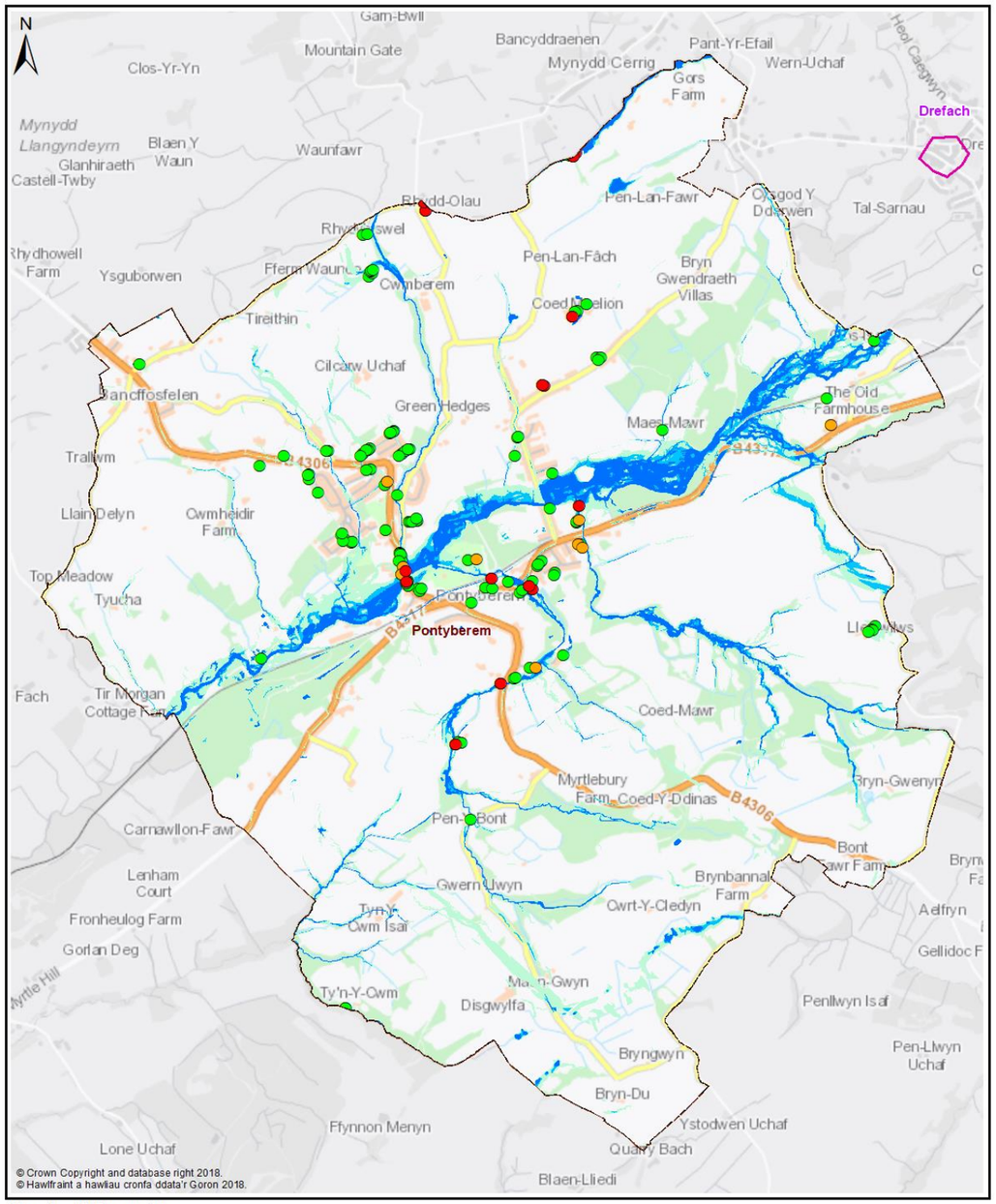
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

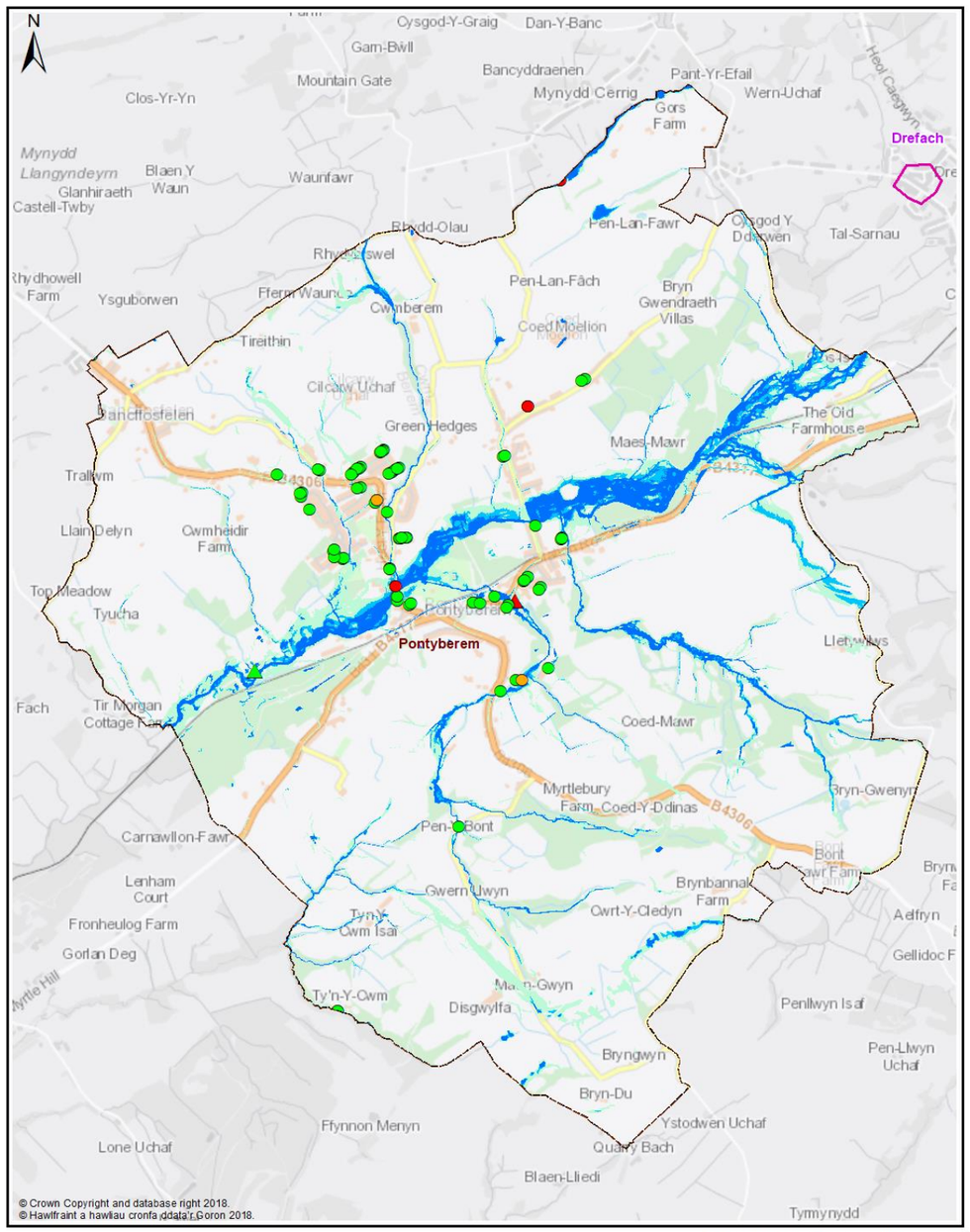
DCWW has identified flood risk in the following locations

- Bragdu, Pontyberem
- Mynachlog Terrace, Pontyberem
- Pontyberem

NRW will continue to take the lead and manage the flood risk from the Gwendraeth Fach.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

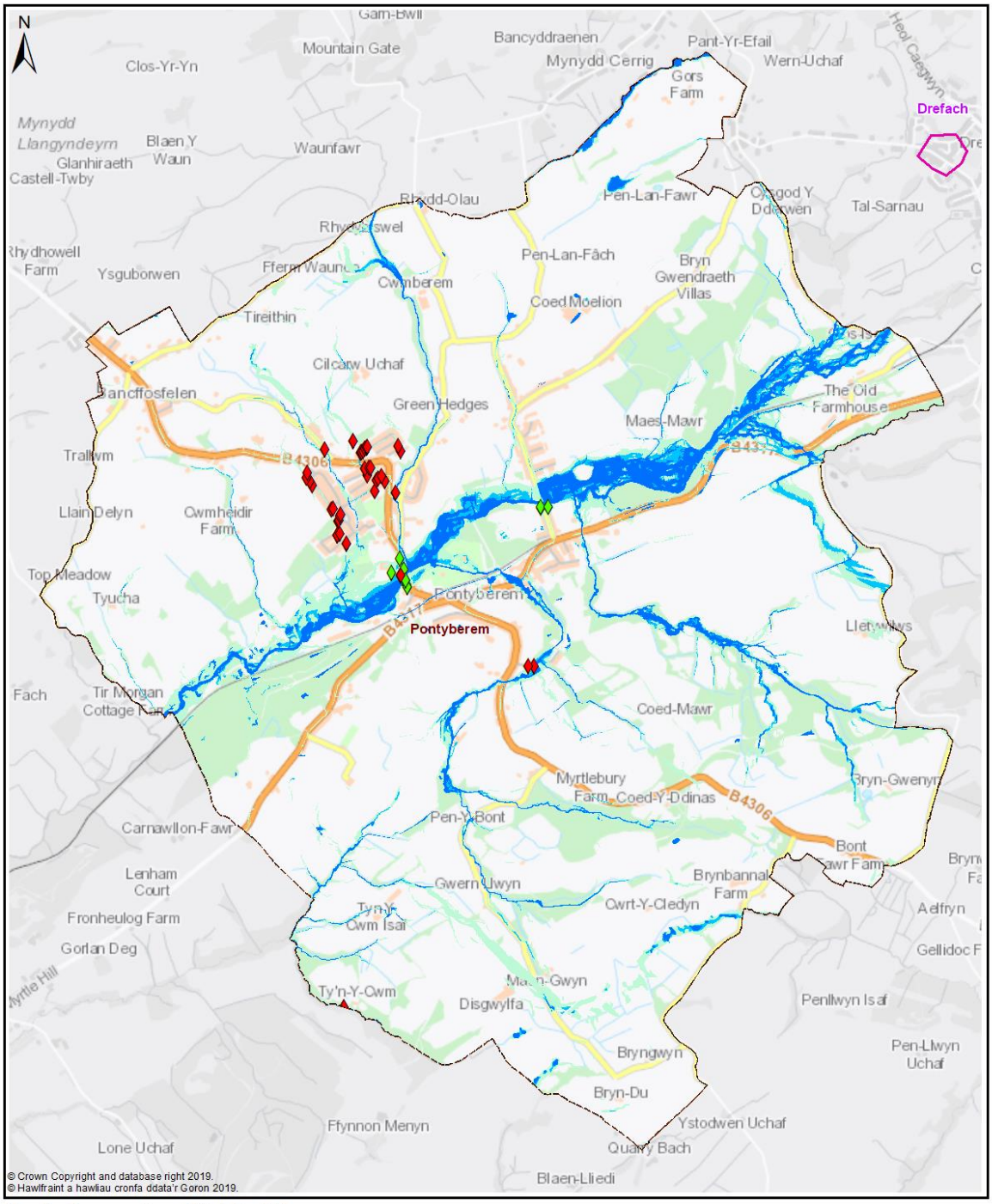
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Pontyberem

0 0.3 0.6 1.2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Pontyberem

0 0.3 0.6 1.2 Km

Pontyberem - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Low
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers/Tide	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.49 Quarter Bach

Community Council(s)	Quarter Bach
Councillor:	Glynog Davies
Population	2,875
Area	31.94km^2
Population Density	90 people/km^2

Area Description

Quarter Bach Ward is located approximately 10km east of Ammanford Town, and comprises the settlements of Upper Brynamman part of Lower Brynamman, Rhosamman Cefn-bryn-brain, Cwmllynfell and Ystrad Owen.

This ward is characterised by having mountains to the north with steep watercourses running off the hillsides. Land use is pastoral agriculture on lower slopes and moorland on higher ground.

The River Amman forms part of the southern boundary but presents a low flood risk to this ward.

Flood History

Flooding from surface water / small watercourses in upper Bynamman.

Policy Units in Ward

There are 2 No. Policy Units identified in this Ward:

- Upper Brynamman
- Ystrad Owen

Count Table (see Maps 1 & 2 below)

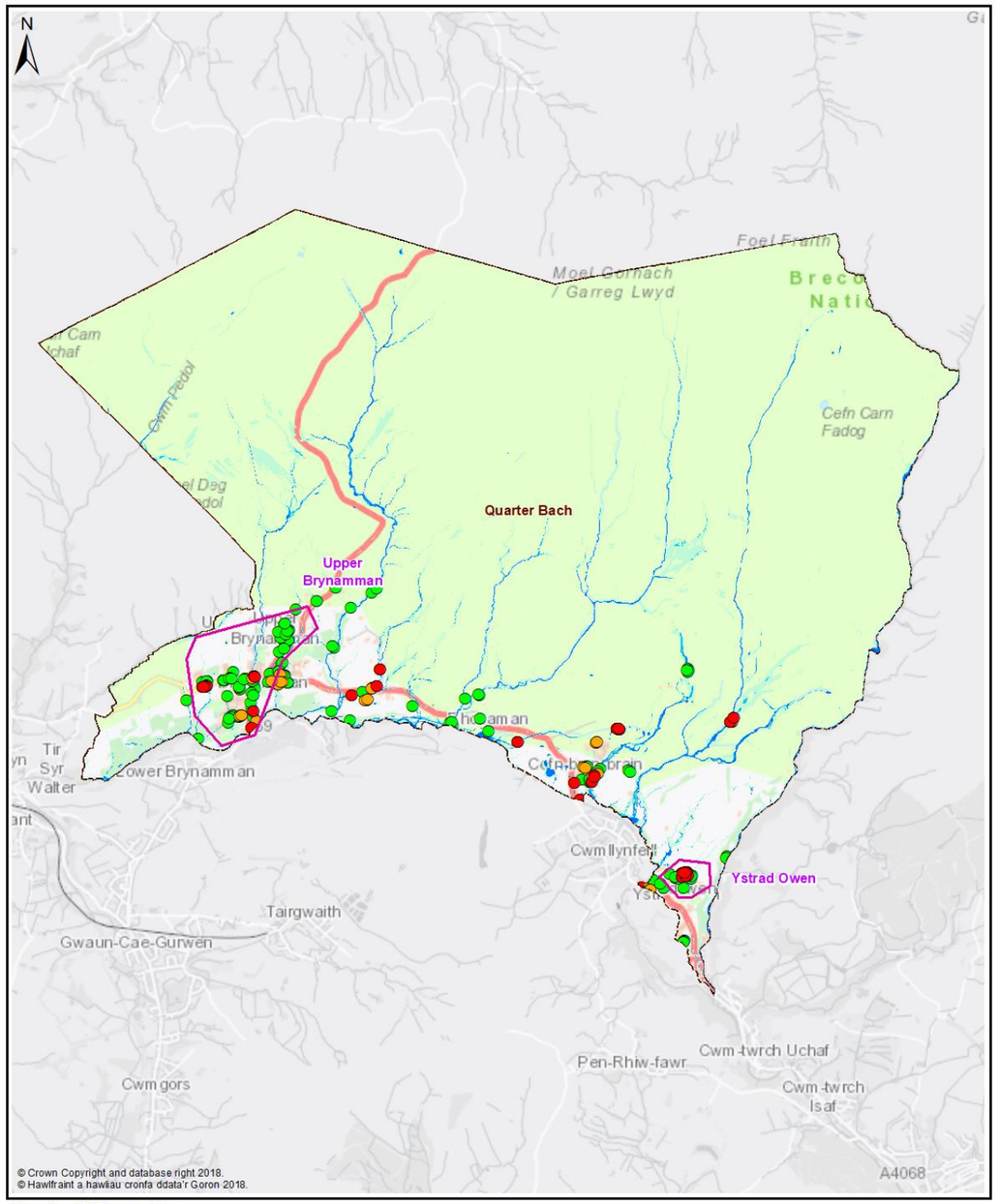
Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	35	20	0
Medium Risk	67	42	0
Low Risk	212	148	0

Breakdown by Policy Unit refer to Appendix E.

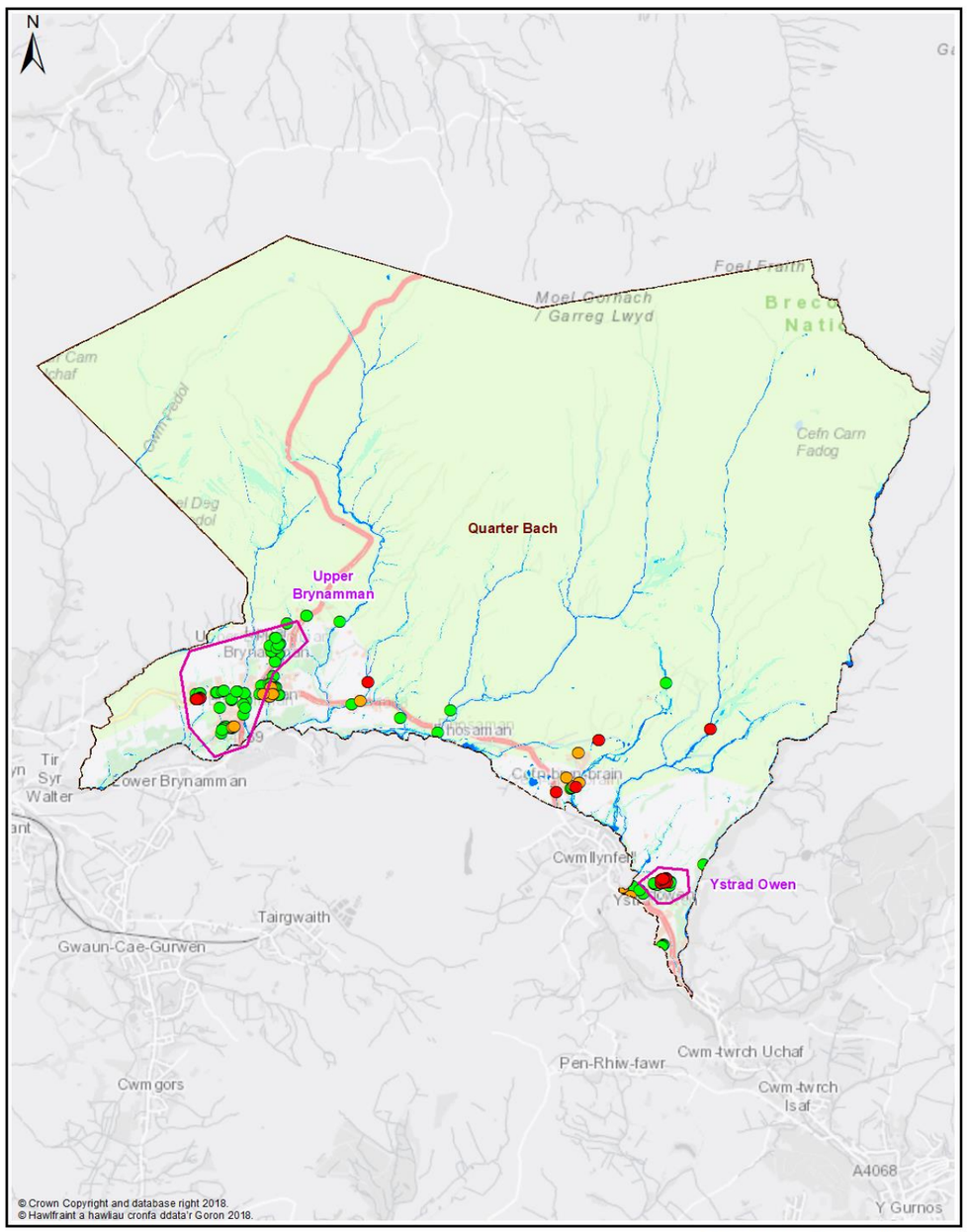
Other risk management authorities

DCWW has identified flood risk in the following locations Cwmgarw Road and Upper Brynamman.

NRW will continue to take the lead and manage the flood risk from the Amman.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

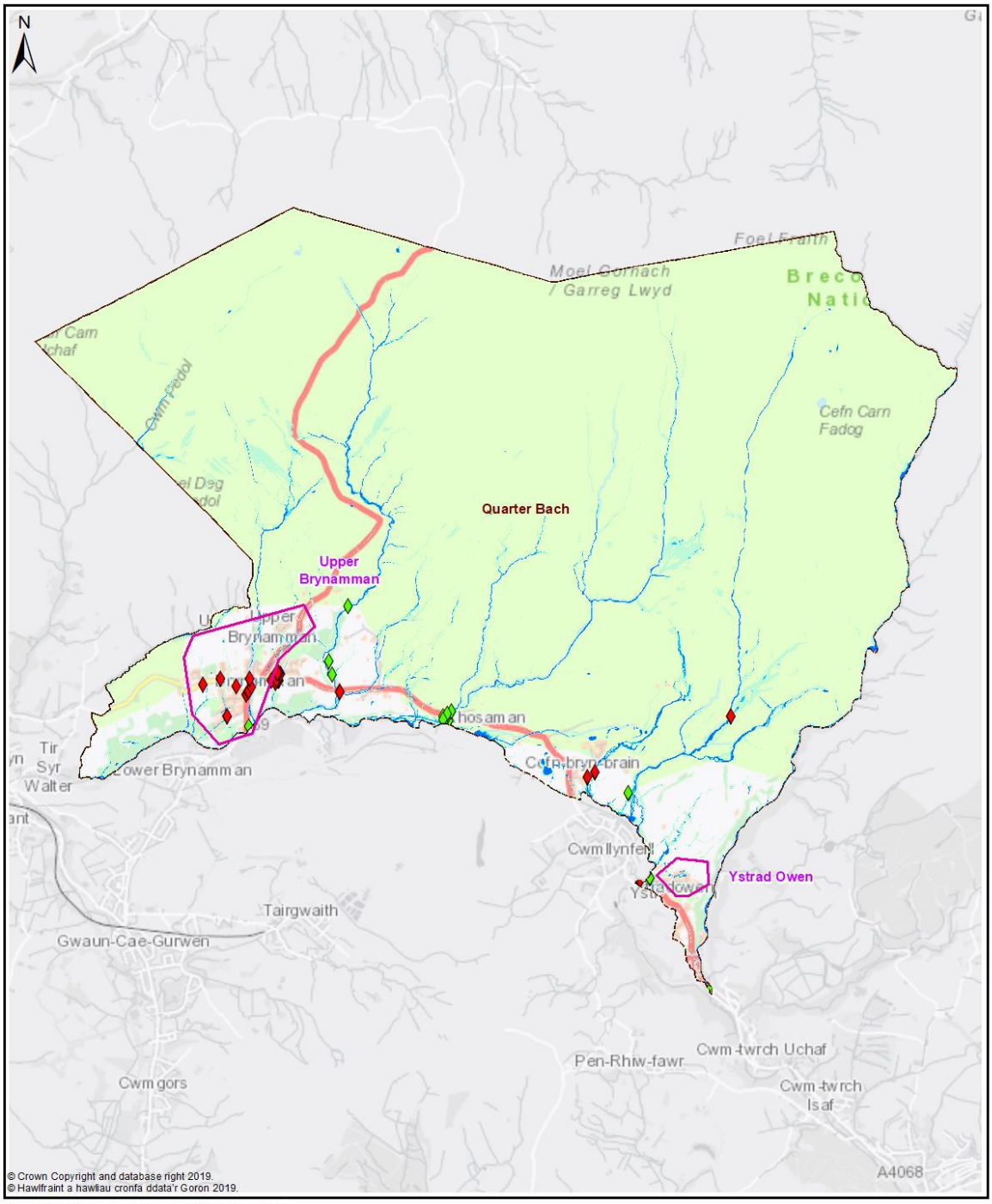
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Quarter Bach

0 0.5 1 2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Quarter Bach

0 0.5 1 2 Km

Quarter Bach - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Low
M33	2 Policy Units identified for further review of potential alleviation action(s)	High	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers/Tide	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.50 Saron

Community Council(s)	Llandybie
Councillor:	Peter Cooper
	Alun Davies
Population	4,074
Area	9.84 km^2
Population Density	414 people/km^2

Area Description

Saron ward is situated to the west of Ammanford Town and contains the settlements of Saron.

The Loughor is the Eastern Boundary of the Ward and the NRW flood map shows that the River Loughor affords a significant flood risk to this area. Flood risk from Main Rivers is not within the scope of this report as it is managed by NRW.

Flood History

Flooding at Clos Nant y Ci and Saron Road.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	61	30	1
Medium Risk	118	74	1
Low Risk	498	319	4

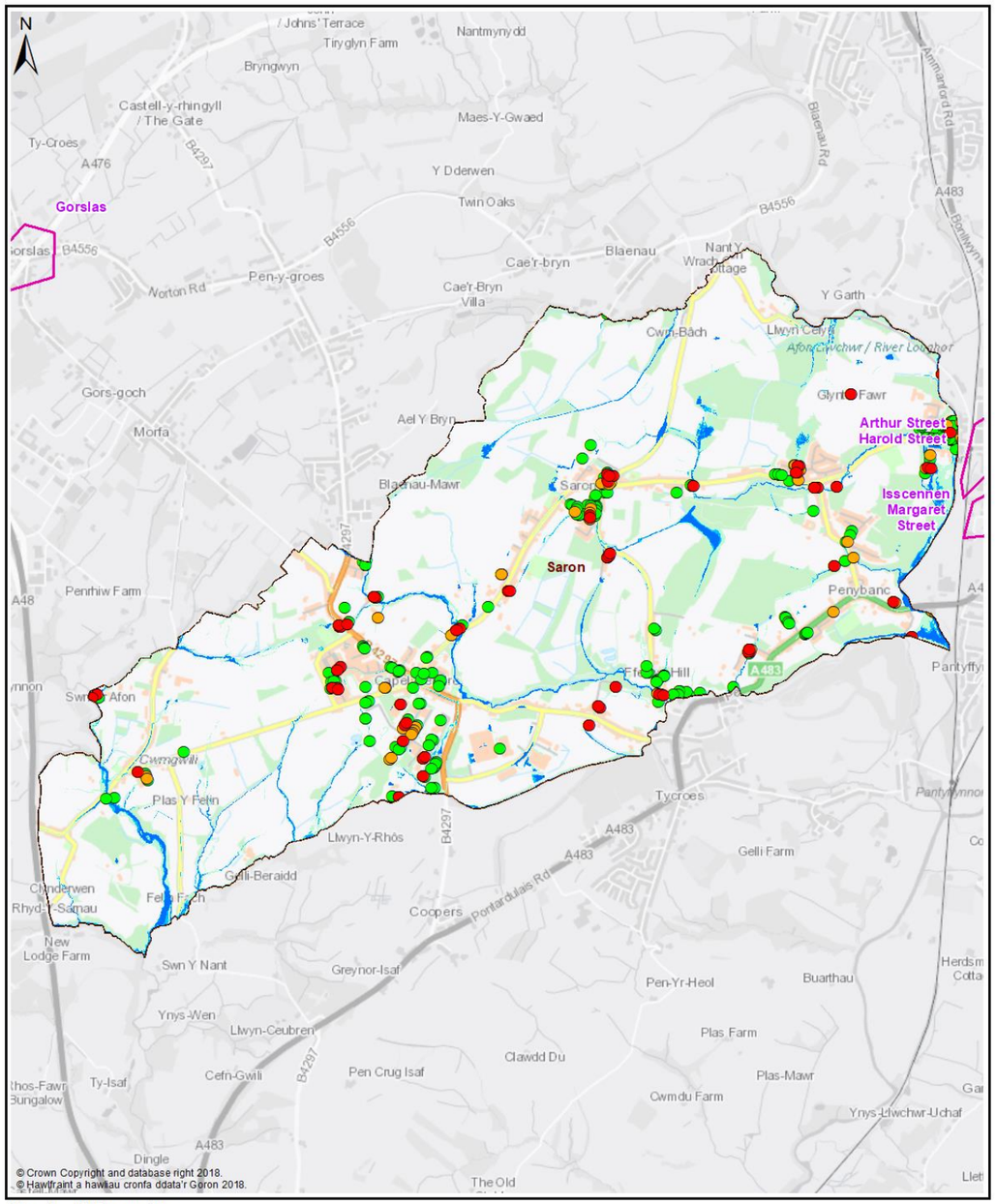
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

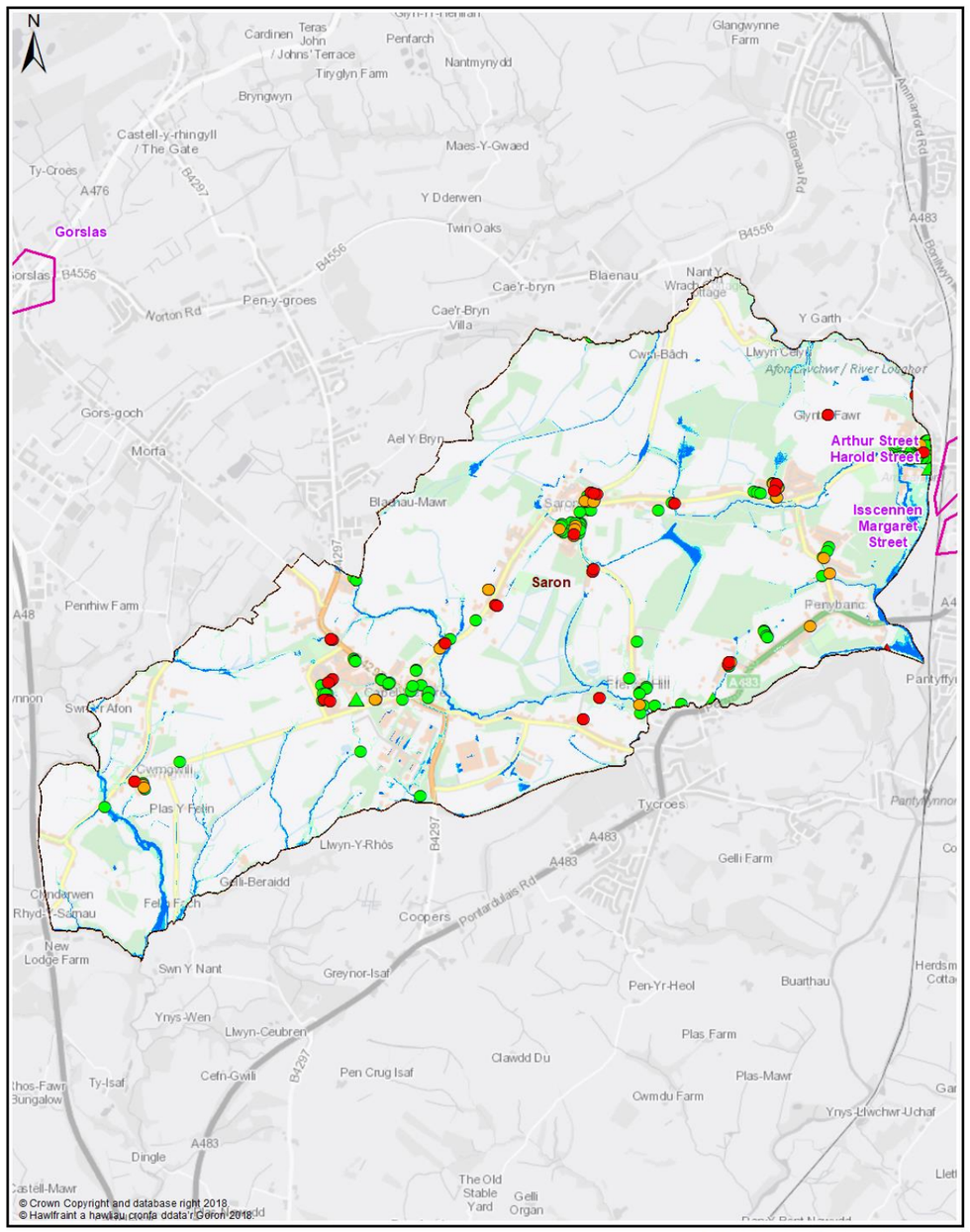
DCWW has identified flood risk in the following locations

- Capel Hendre
- Cwmgwili
- Dyffryn Road, Ammanford
- Heol Lotwen, Capel Hendre
- Saron Road, Saron
- Waterloo Road, Ammanford

NRW will continue to take the lead and manage the flood risk from the Loughor.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

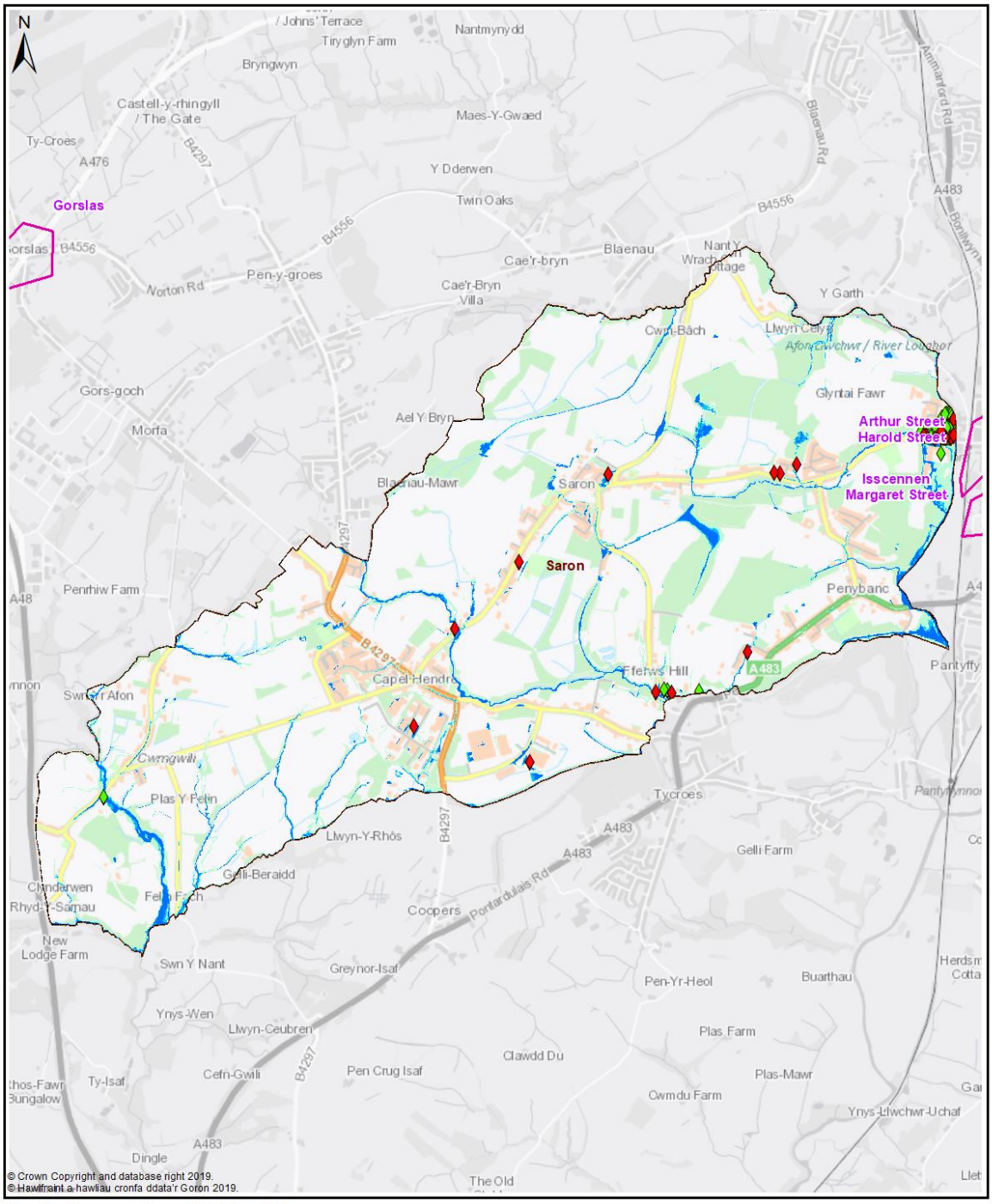
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Saron

0 0.375 0.75 1.5 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Saron - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Low
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers/Tide	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.51 St Clears

Community Council(s)	St Clears Town
Councillor:	Philip Hughes
Population	3,025
Area	30.63km^2
Population Density	99 people/km^2

Area Description

St Clears ward is a predominately rural area approximately, 15km west of Carmarthen Town. Settlements include St Clears, Pwll Trap and Bancyfelin. Land Use is predominately pastoral agriculture with the emphasis on grass land dairy.

The rivers Taf, Cynin and Dewi Fawr flow through St Clears. The Cowin flows through Bancyfelin but does not appear to pose significant risk.

NRW flood maps show that there is significant flood risk to St Clears from the Cynin and Dewi Fawr, with significant works carried out in the town in 2005. Flood risk from these sources are outside of the scope of this report as they are managed by NRW.

Flood History

Prior to 2005 St Clears experience significant flooding from the Main Rivers. Flooding from surface water occurs in the Bush House area of St Clears.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	35	14	0
Medium Risk	48	181	
Low Risk	112	60	1

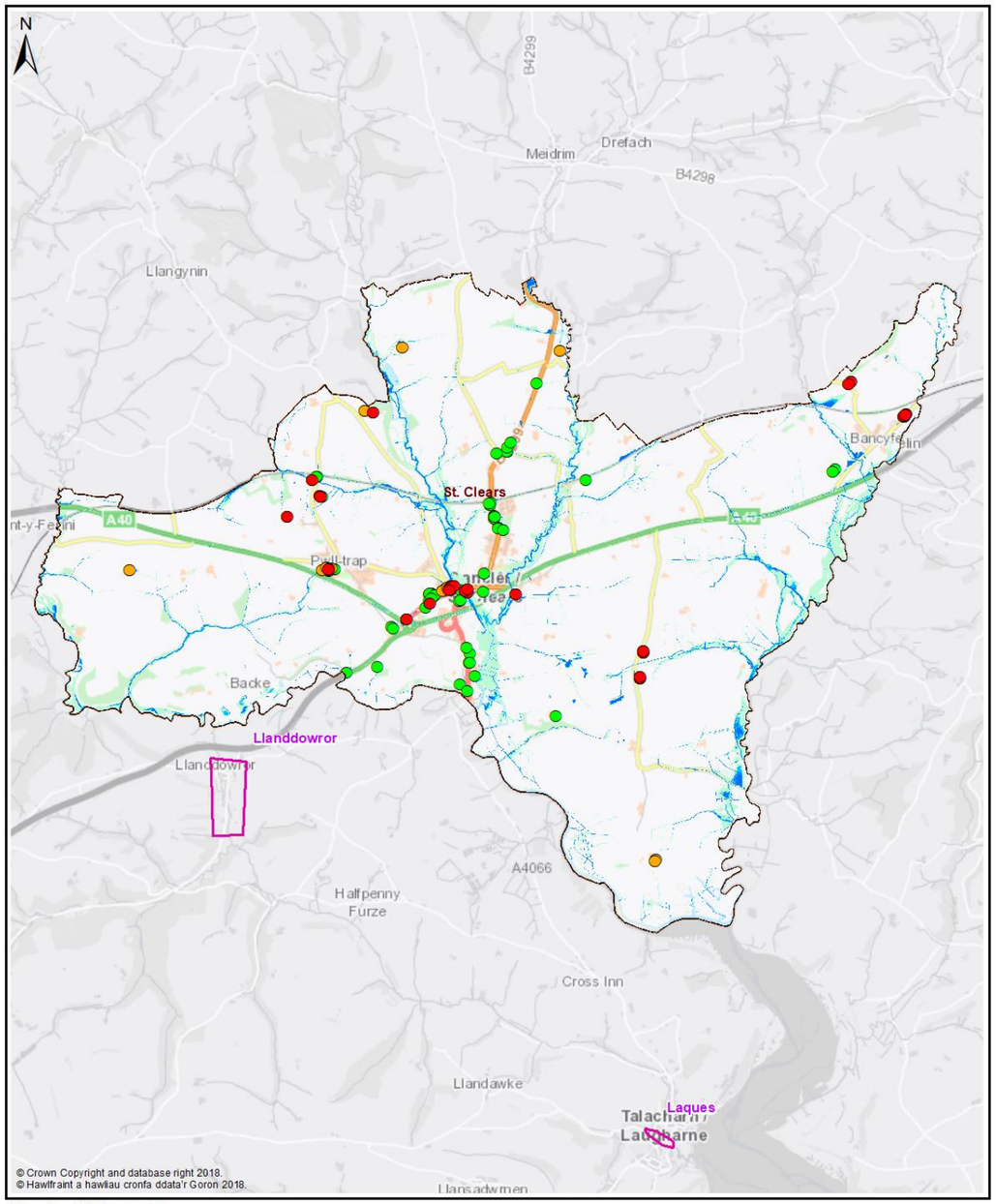
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

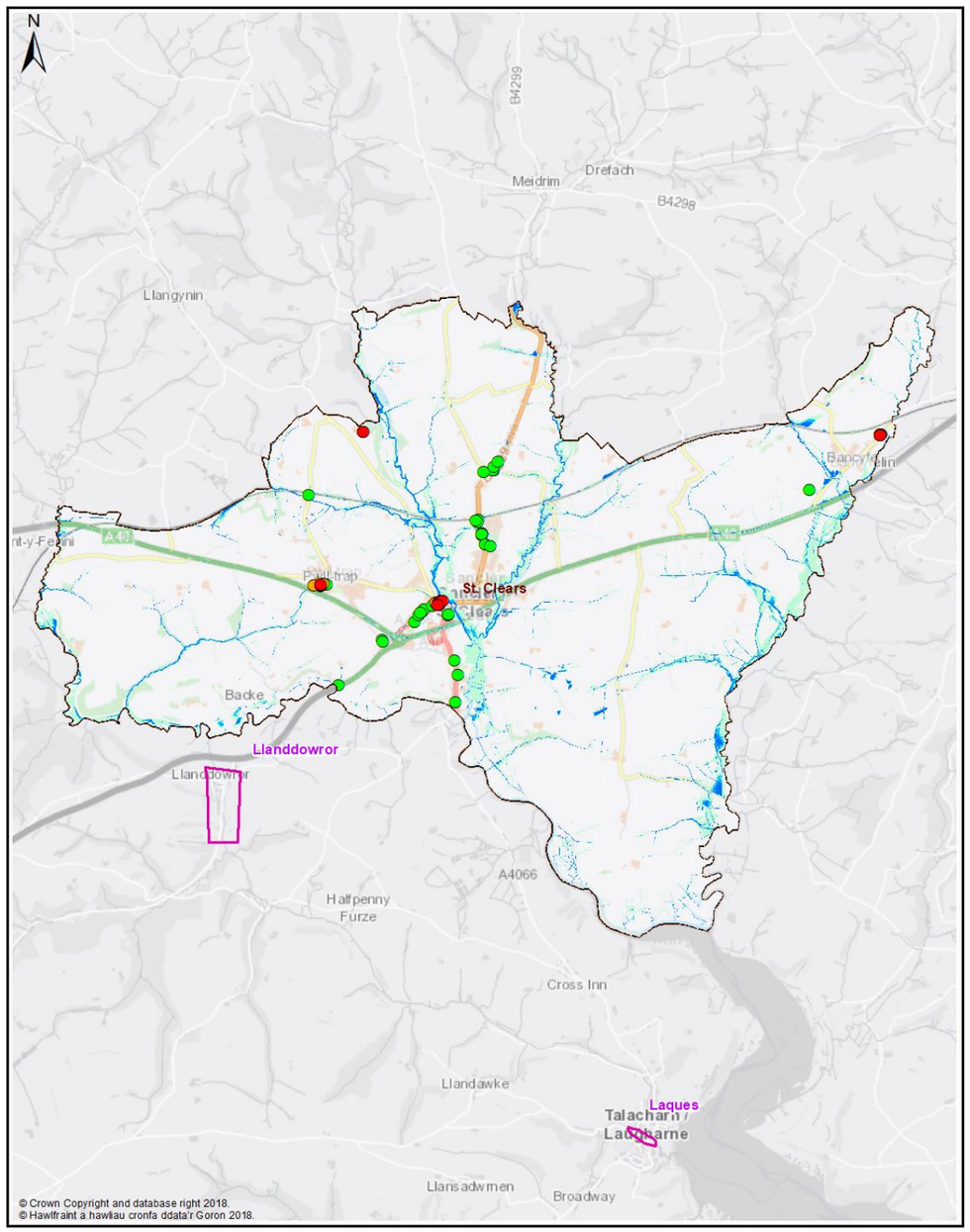
DCWW has identified Flood Risk in the following locations:

- Bridge Street, St Clears
- Cae Glas, St Clears
- Heol Llaindelyn, St Clears
- Lon y Prior, St Clears
- Meidrim Road, St Clears
- Station Road, St Clears
- St Clears

NRW will continue to take the lead and manage the flood risk from the Taf and Cynin.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

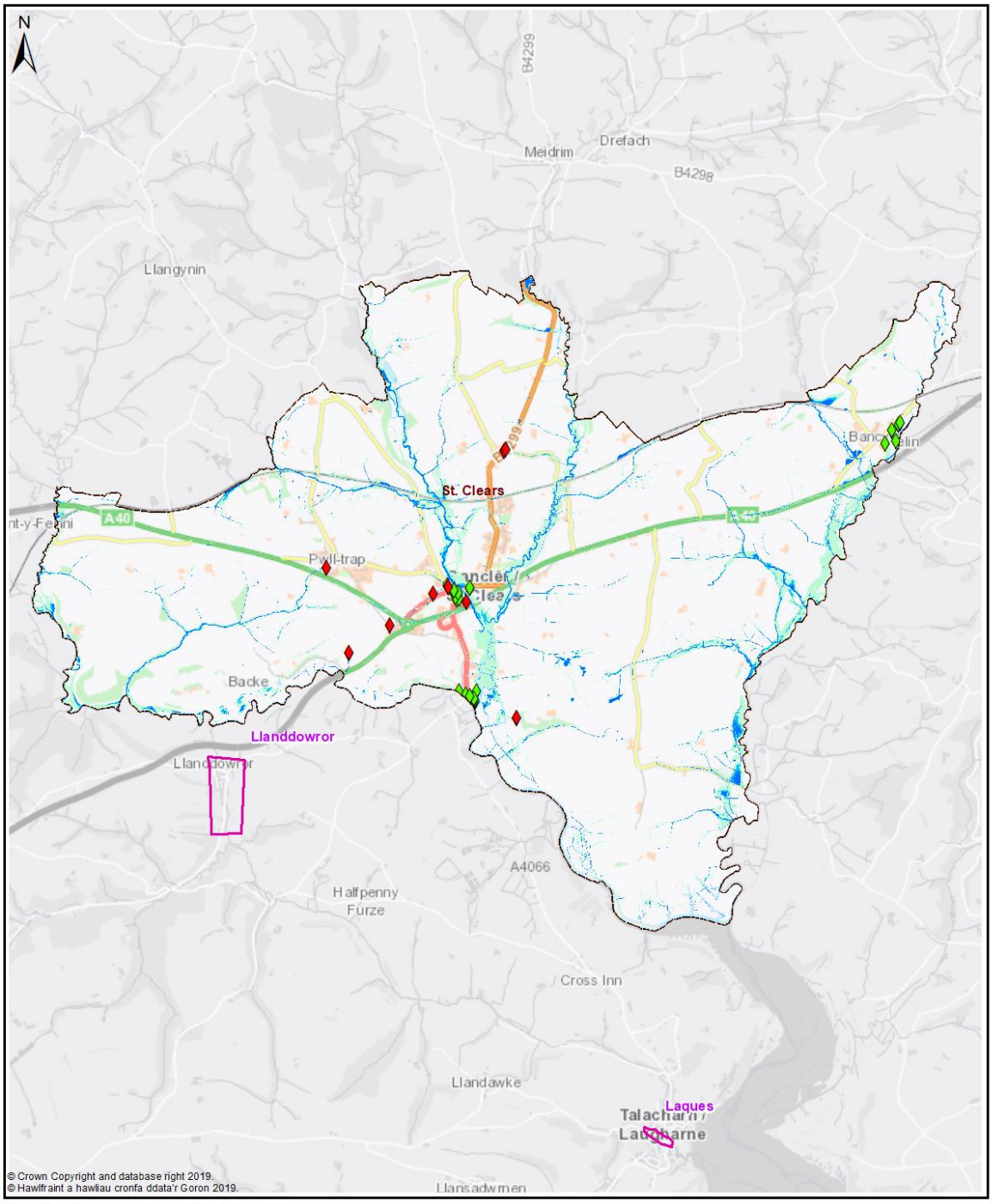
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - St. Clears

0 0.5 1 2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - St. Clears

0 0.5 1 2 Km

St Clears - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Low
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers/Tide	Med	Ongoing	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.52 St Ishmael

Community Council(s)	Llandyfaelog St Ishmaels
Councillor:	Mair Stephens
Population	2,635
Area	57.81 km^2
Population Density	46 p/km^2

Area Description

Rural / coastal area to the south of Carmarthen Town containing the settlements of Ferryside, Llansaint, Llandyfaelog, Idole, Cwmffrwd and Croesyceiliog.

Land use is predominately pastoral agriculture with some woodland.

The main flood risk to this area is from tidal flooding. Ferryside village is protected from the sea by the railway embankment that provides a high degree of protection although there are openings through it for access to the foreshore and drainage.

Ferryside is also at risk from the Cwm Mill stream north of the village and a small stream to the south. Flood risk from this source is outside of the scope of this report as it is manged by NRW.

Flood History

- Ferryside from fluvial sources and tidal.
- Carmarthen Bay Holiday Village– Extensive tidal flooding early 2014. Also, reports of surface water flooding.
- Isolated surface water flooding elsewhere in the ward.

Policy Units in Ward

There are two Policy Unit identified in this Ward:

- Ferryside South
- Ferryside North

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	125	24	1
Medium Risk	202	6	3
Low Risk	421	156	6

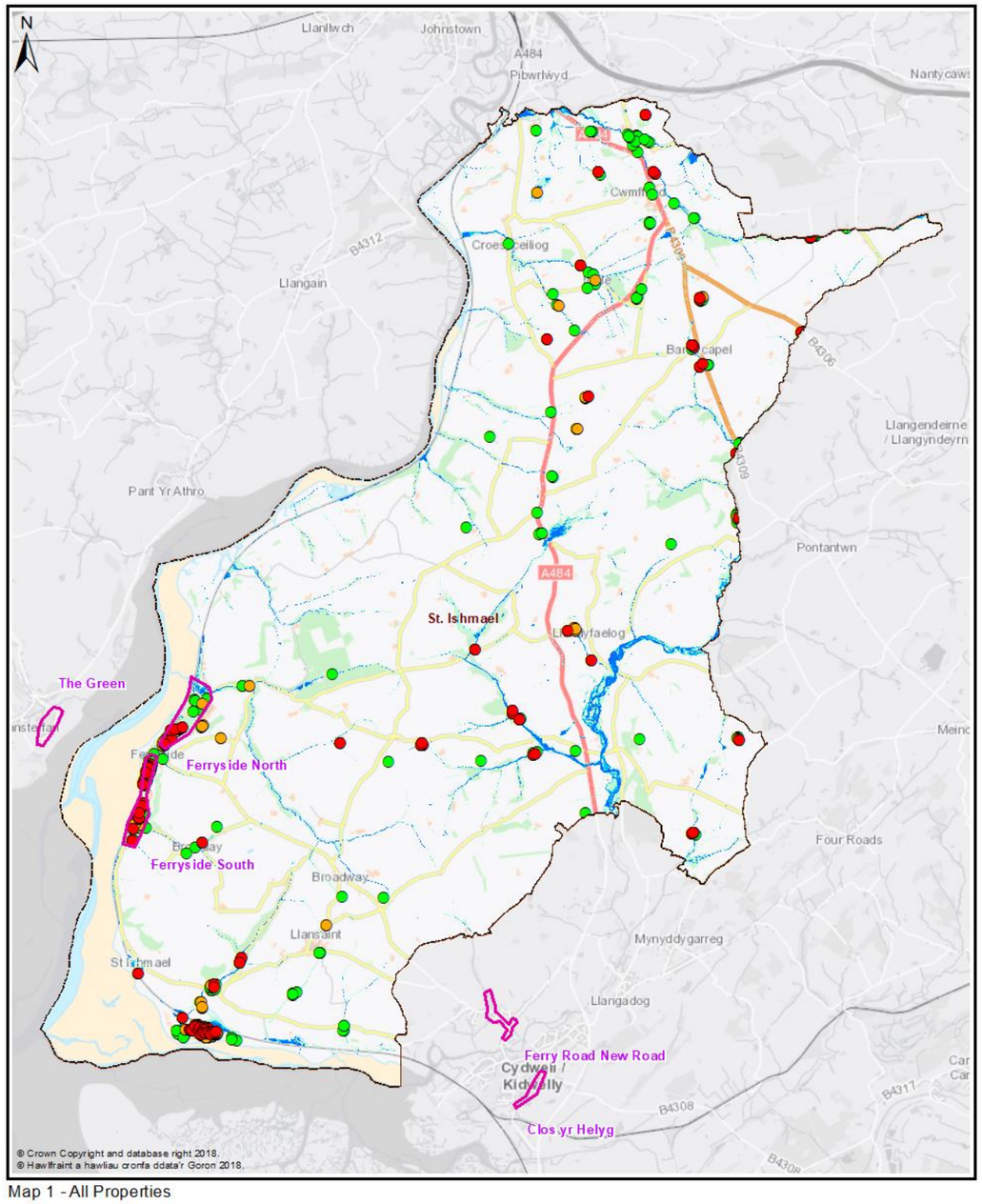
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

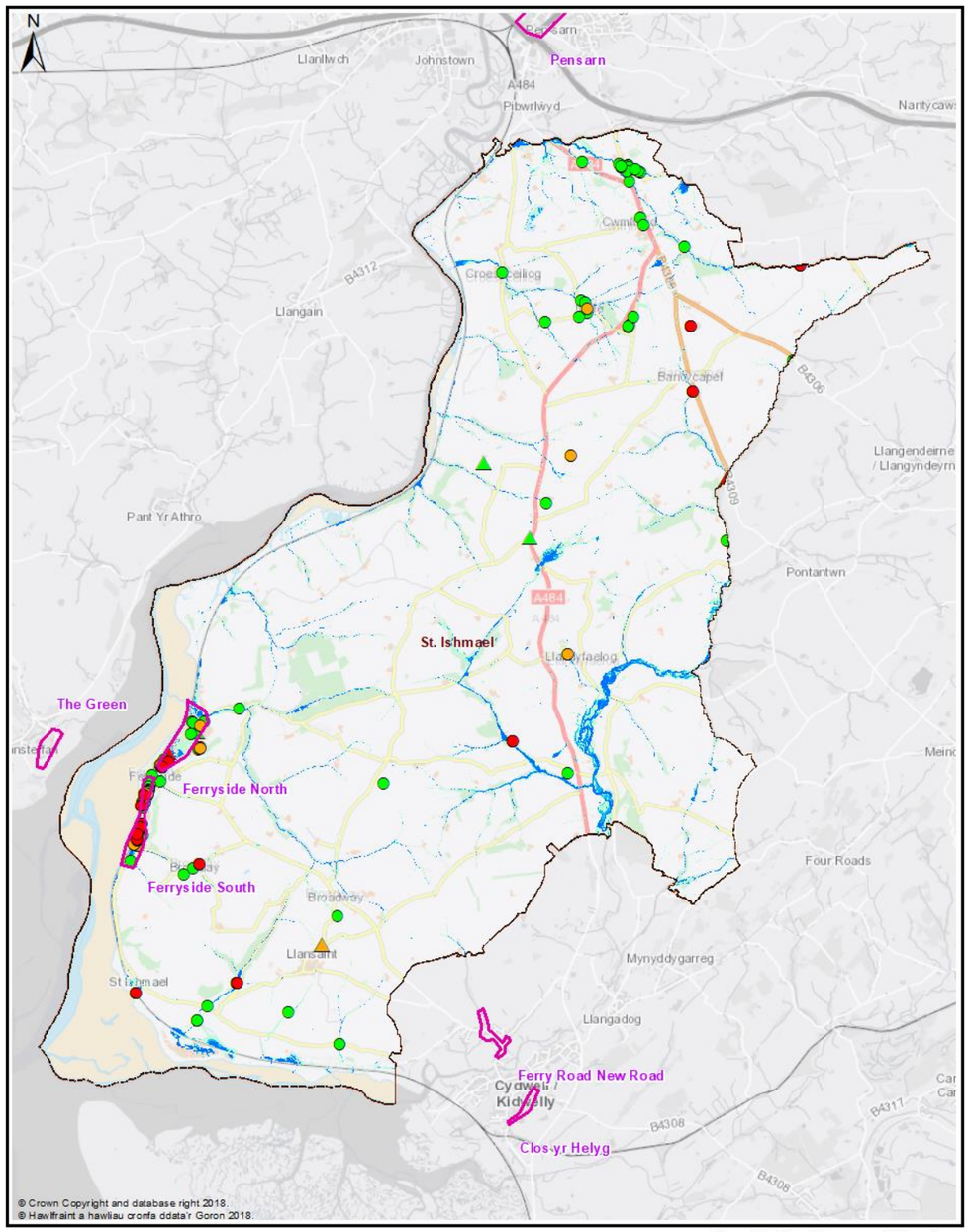
DCWW has identified flood risk at the following locations

- Ferryside
- Glan Morfa, Ferryside
- Maesyffynnon, Ferryside

NRW will continue to take the lead and manage the flood risk from the tidal Flooding and Cwm Mill stream.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

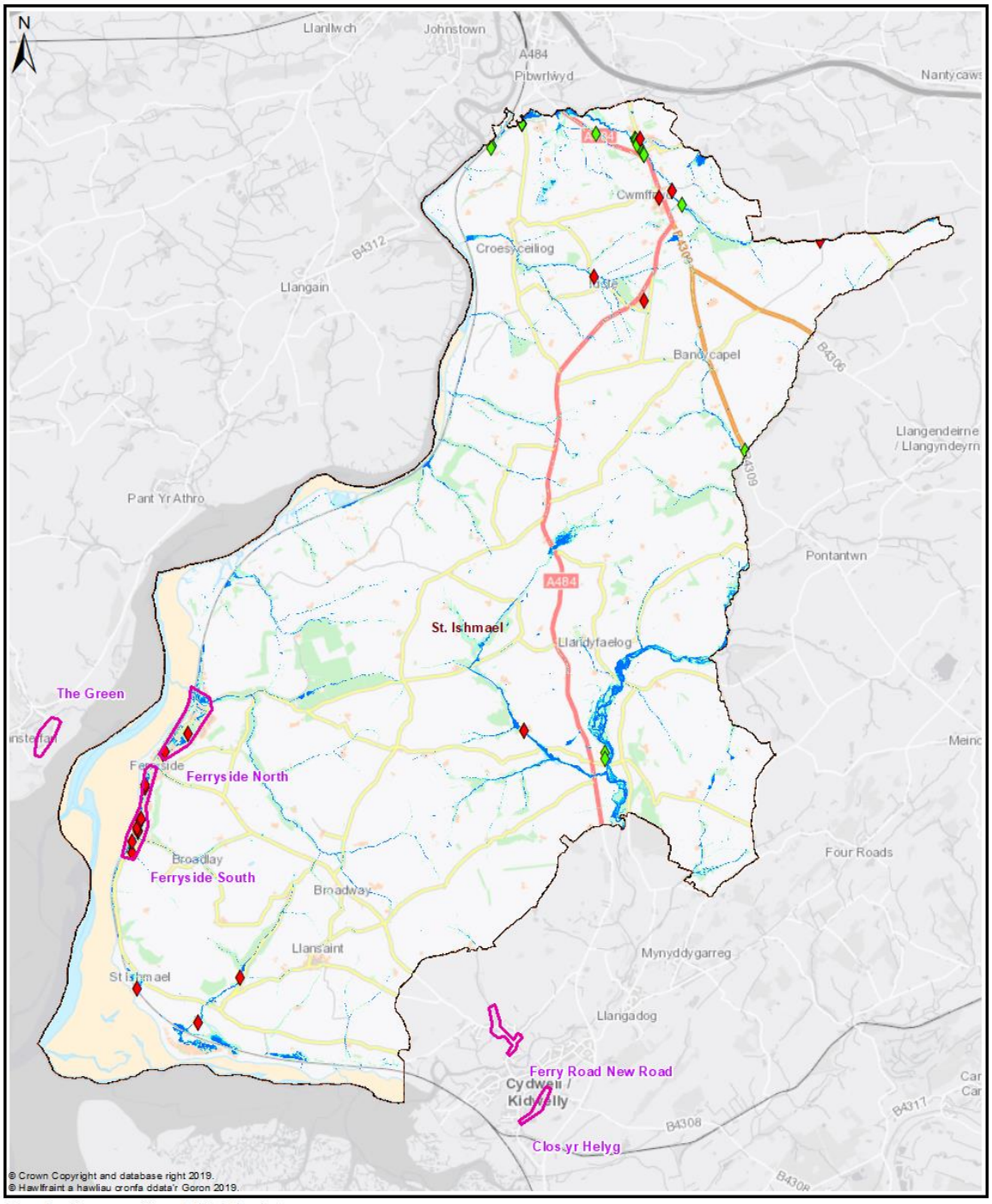
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - St. Ishmael

0 0.75 1.5 3 Km

Legend

- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - St. Ishmael

0 0.75 1.5 3 Km

St. Ishmael - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M22	Investigate options to reduce flood risk to community services.	Med	Med	Med
M33	Two Policy Units identified for further review of potential alleviation action(s)	High	Med	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers/Tide	Med	Med	Low
M44	Liaison with Carmarthen Bay Holiday Village to raise awareness and preparedness. Work with NRW Flood Awareness team	High	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.53 Swiss Valley

Community Council(s)	Llanelli Rural
Councillor:	Giles Morgan
Population:	2,515
Area	10.2 km^2
Population Density	249people/km^2

Area Description

The Swiss Valley Ward is predominantly rural with a single settlement, Swiss Valley. It is located approximately 2km north of Llanelli either side of the A476. Due to its large, deep valley the flood risk area in the ward is confined.

Two Main Rivers in this ward, the Rivers Dafen and the Lliedi. The River Dafen bisects the south-east corner of the ward.

Flood risk from these rivers is managed by NRW. Upstream of Porth Dafen it is classed an ordinary watercourse.

The Lliedi is dominated by two large reservoirs, the Upper Lliedi Reservoir and the Lower Lliedi Reservoir. These are owned and managed by DCWW.

Flood History

Three recorded incidents of flooding, two external and one internal linked to a culverted tributary of the River Dafen in riparian ownership beneath the Swiss Valley residential estate.

Policy Units in Ward

There are no Policy Units in this ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	9	4	0
Medium Risk	16	9	0
Low Risk	63	48	1

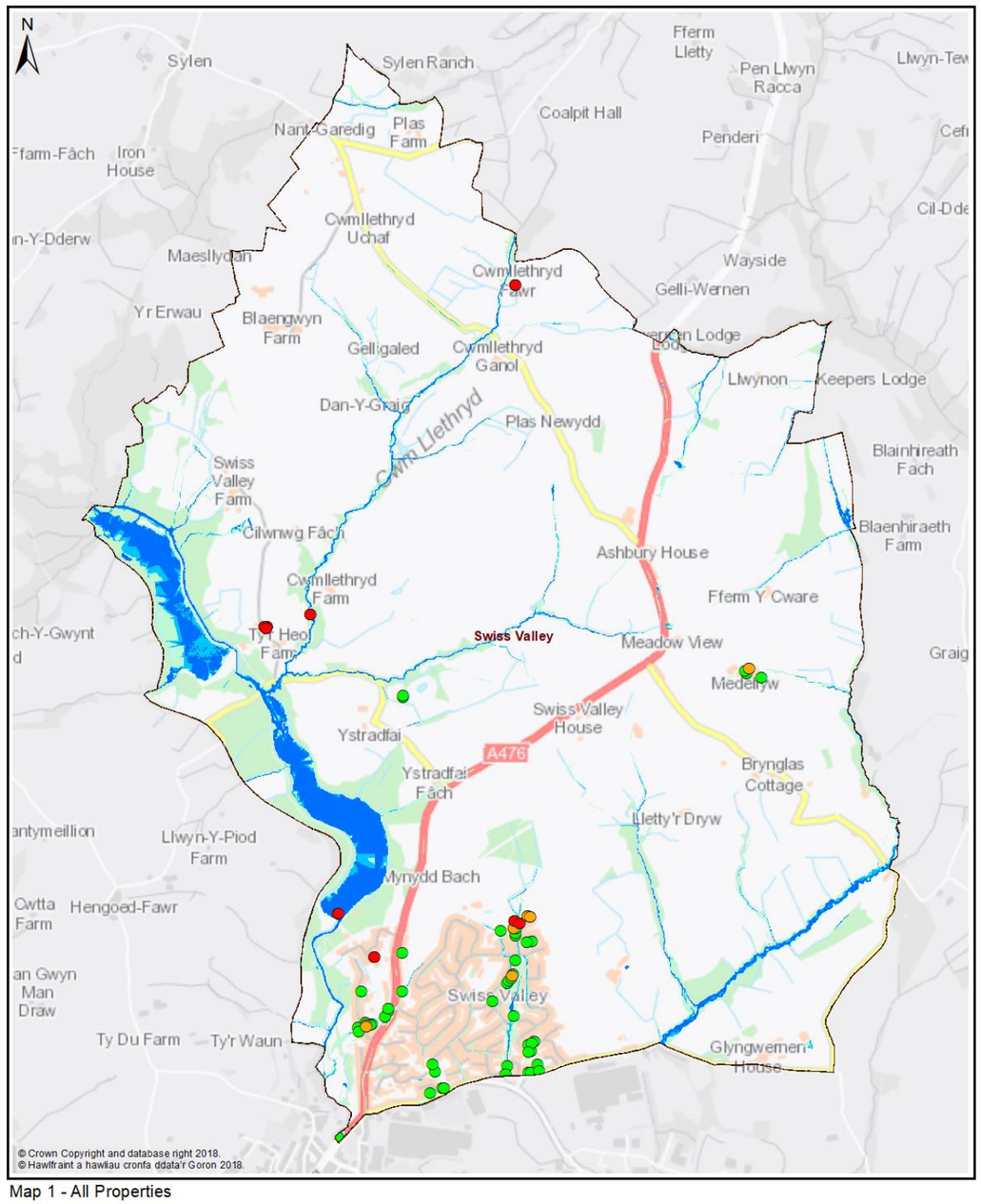
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

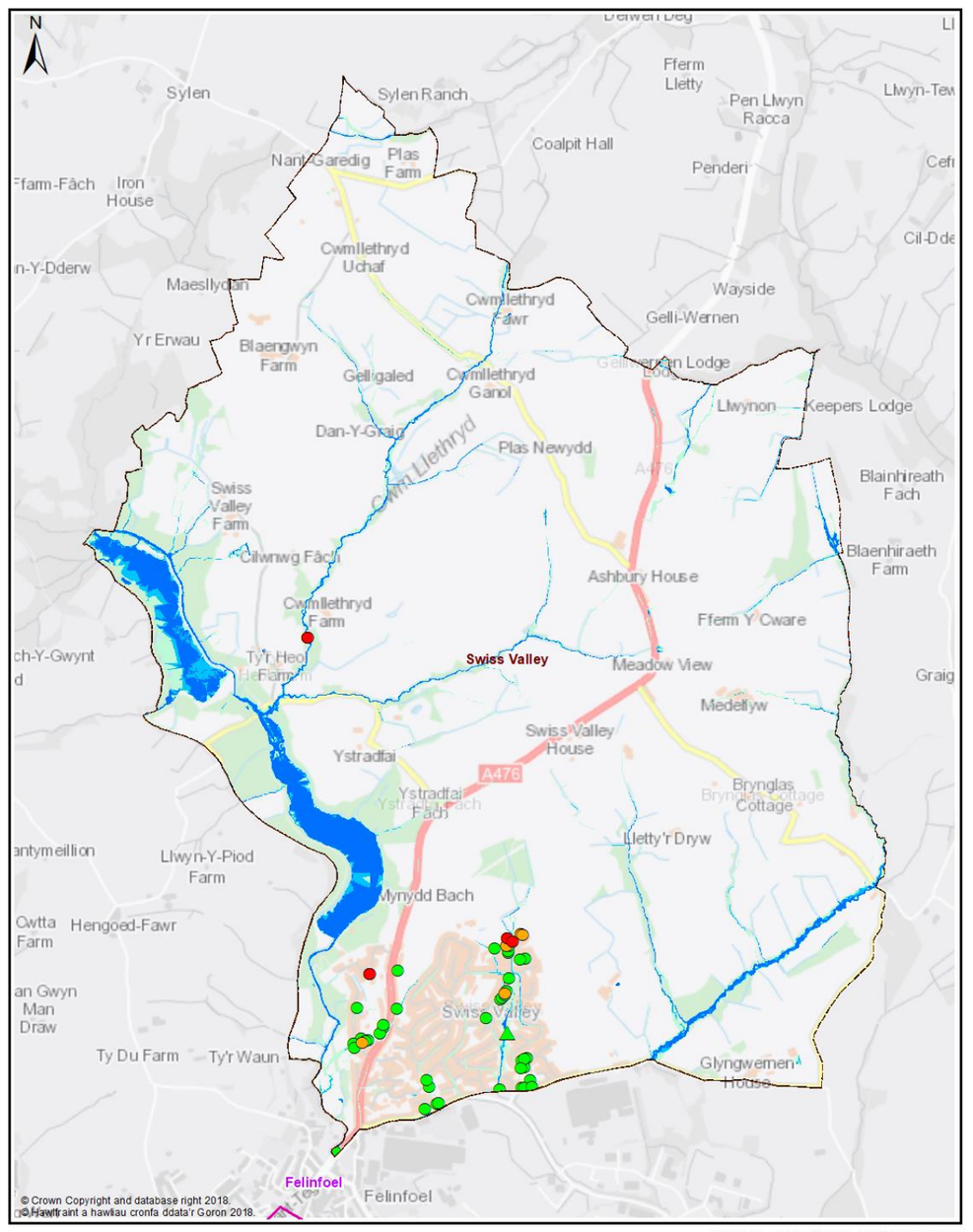
DCWW has no flood risk issues in this area

DCWW own and manage the Upper and Lower Lliedi Reservoirs.

NRW will continue to take the lead and manage the flood risk from the River Lliedi and River Dafen.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

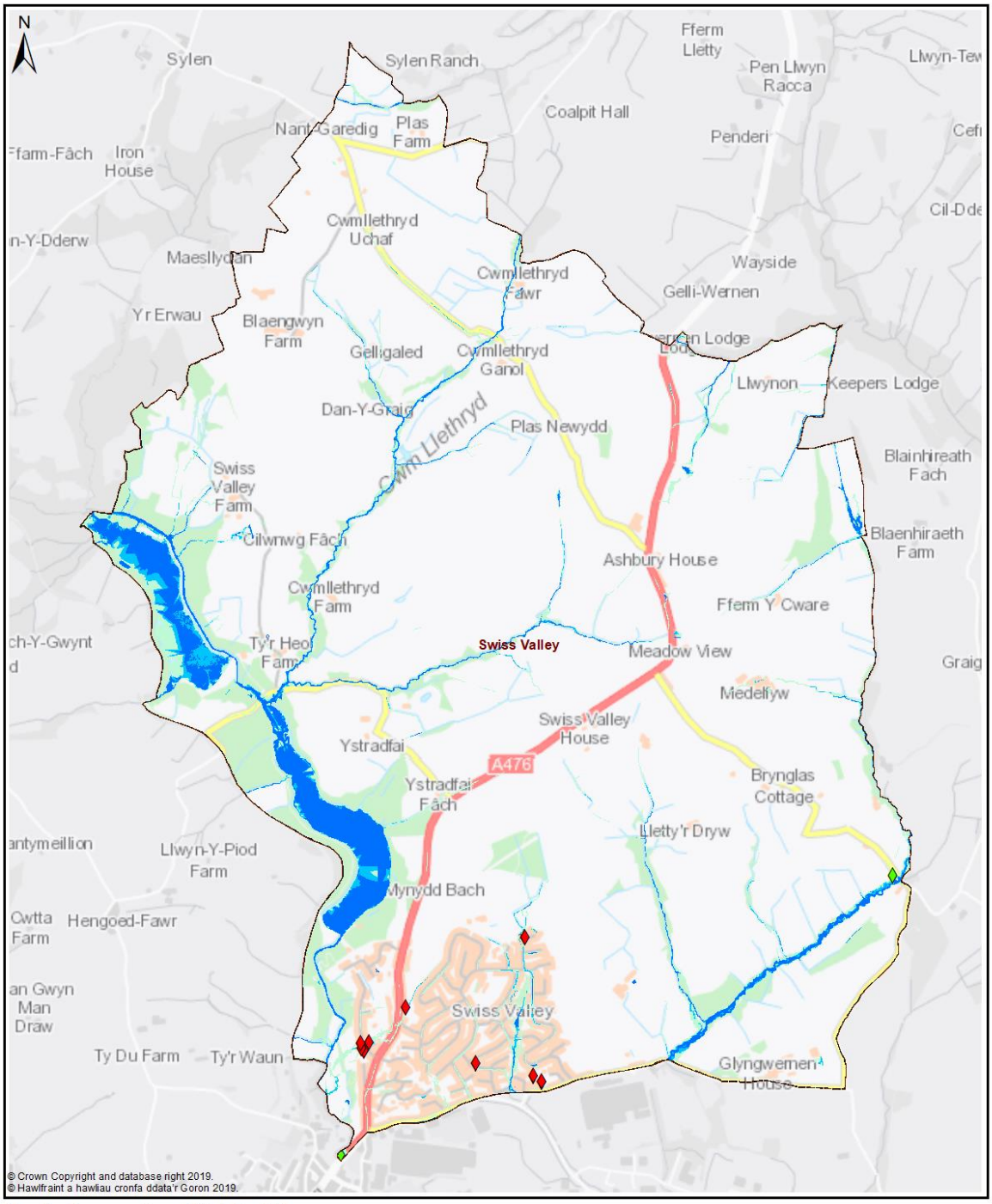
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Swiss Valley

0 0.275 0.55 1.1 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Swiss Valley

0 0.275 0.55 1.1 Km

Swiss Valley - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M24	Culvert inspections of existing assets & update / maintain Asset Register.	Med	Med	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers/Tide	Med	Med	Low
M44	Civil Contingency Planning – DCWW reservoir flood plans	High	Ongoing	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate.	Med	Ongoing	Low

9.3.54 Trelech

Community Council(s)	Abernant Llanwinio Meidrim Trelech
Councillor:	Jean Lewis
Population:	2,061
Area	124.30 km^2
Population Density	17 people/km^2

Area Description

Trelech ward is a rural area on Carmarthenshire's north west border. The largest urban area is the village of Meidrim with several smaller settlements including Abernant, Blaenwaun, Cwmfelin Mynach, Dinas, Gellywen, Llanwinio, Pen-Y-Bont, Talog & Trelech.

The general geography of the area consists of the rolling hills and valleys which are lined by woodland surrounded by pastoral farmland and numerous small watercourses.

The Main Rivers in this ward are Afon Cynin, Afon Cywin and Afon Dewi Fawr.

Flood History

There has been an incident of suspected fluvial flooding in Gellywen - source unconfirmed.

Fluvial flooding incidents in Cwmbach, possibly exacerbated by surface water run-off.

Talog area has been identified as a Policy Unit. It is within the NRW flood alert area and there have been no reported incident to CCC.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	33	7	0
Medium Risk	54	12	
Low Risk	141	33	1

Breakdown by Policy Unit refer to Appendix E.

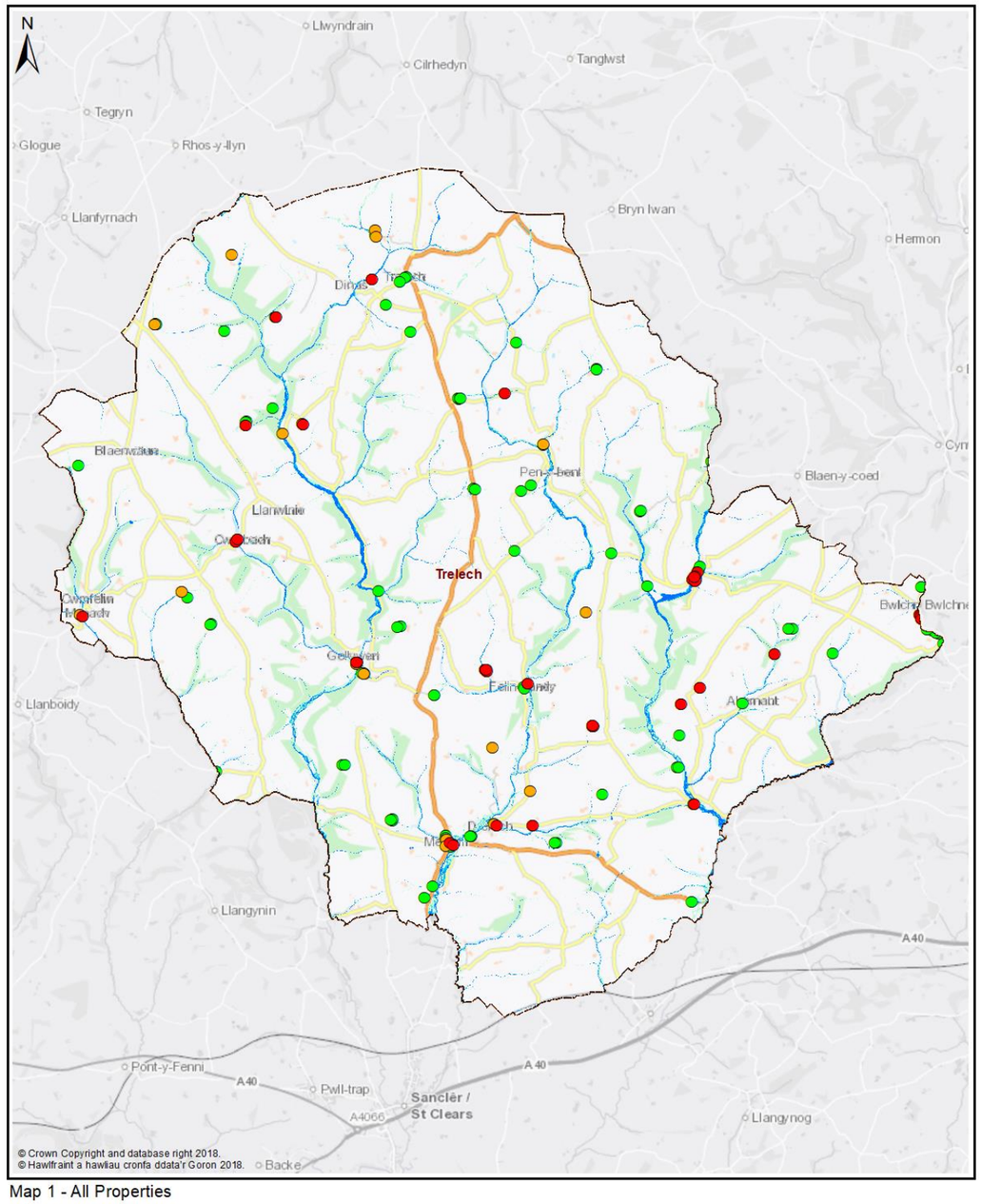
Other risk management authorities

DCWW has identified flood risks at the following locations:

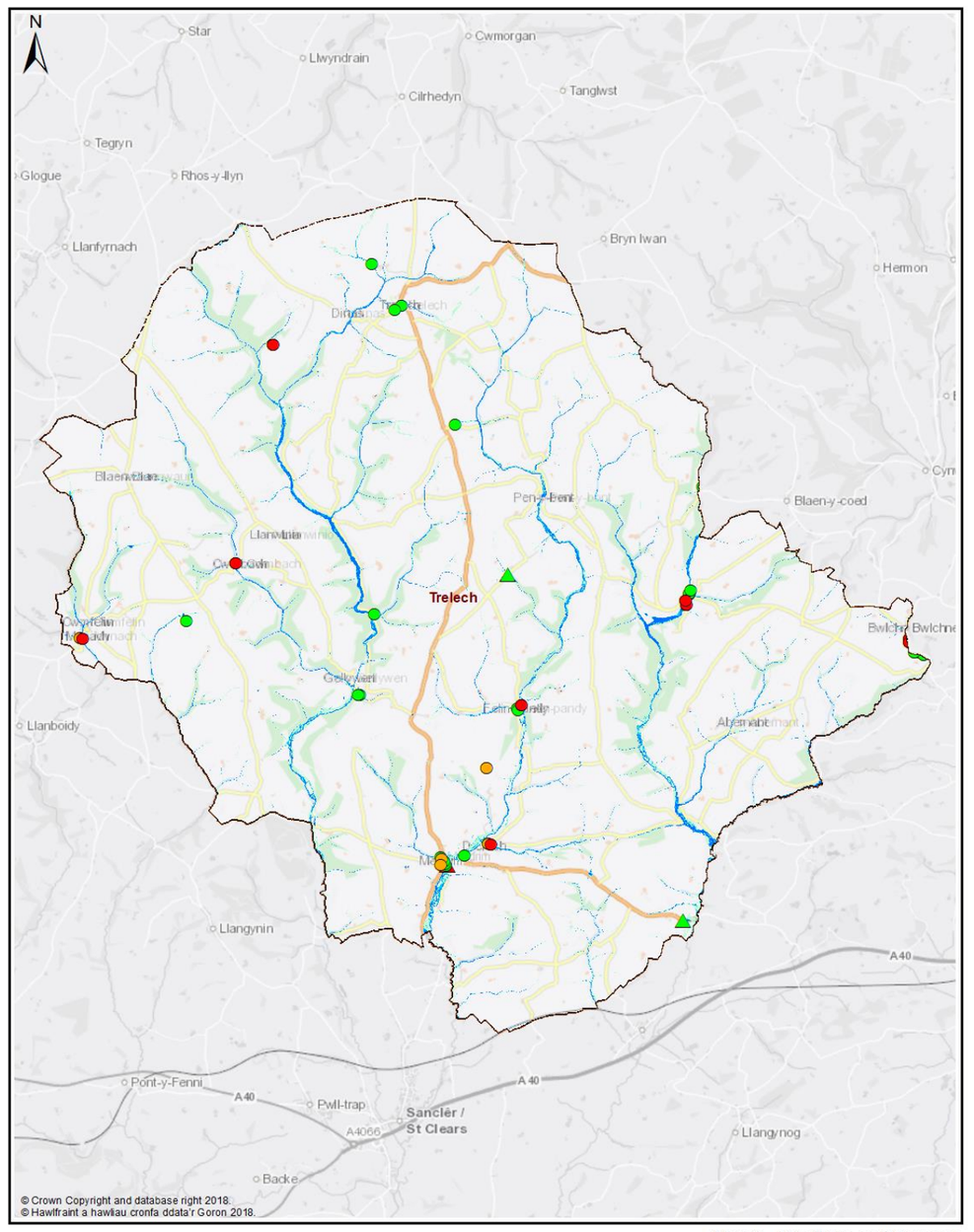
- Meidrim

NRW will continue to take the lead and manage the flood risk from

- Afon Dewi Fawr,
- Cynin
- Cywin.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

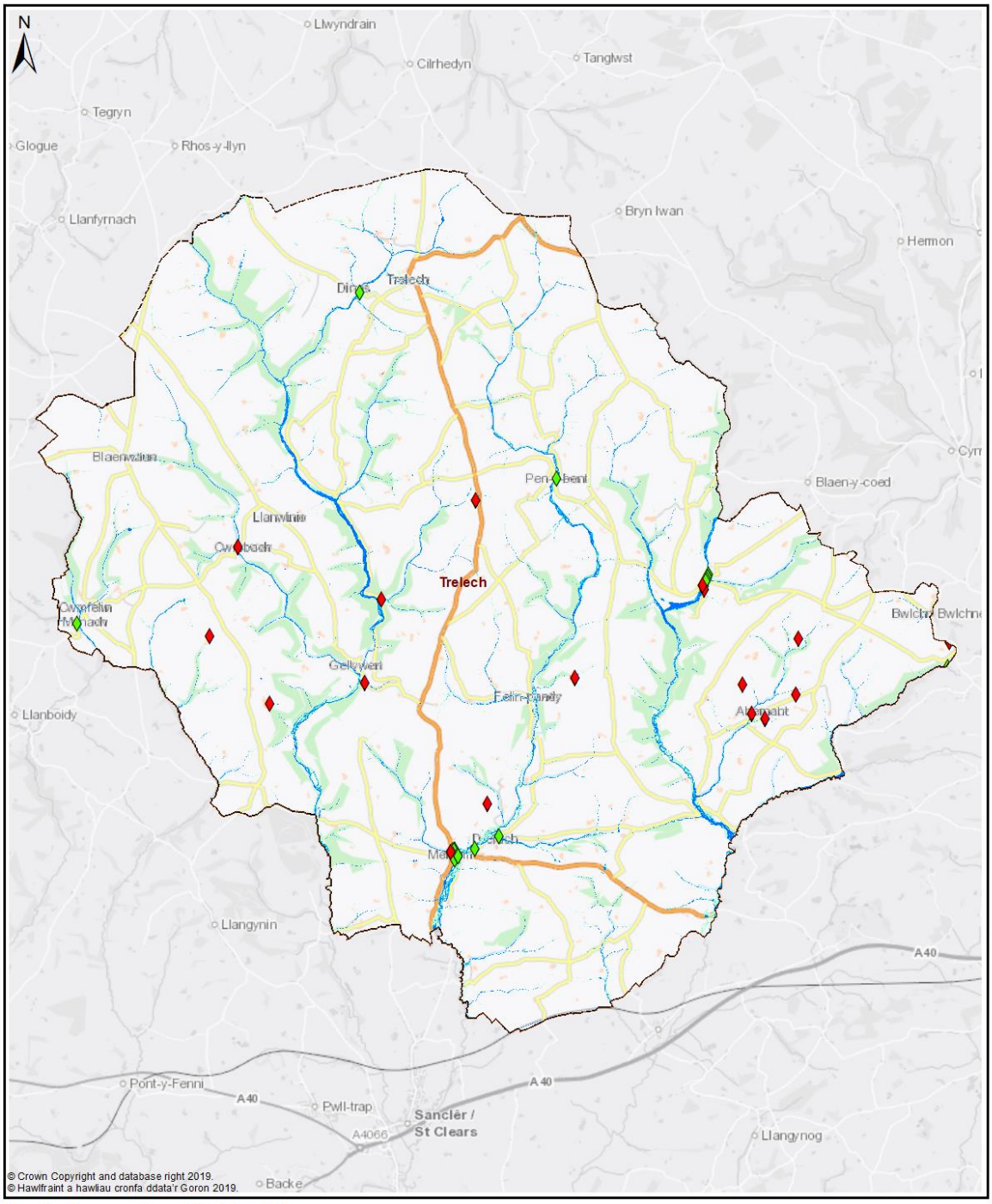
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Trelech

0 1 2 4 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Trelech

0 1 2 4 Km

Trelech - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in Meidrim	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.55 Trimsaran

Community Council(s)	Trimsaran
Councillor:	Meryl Gravell
Population	2,544
Area	19.82km^2
Population Density	128 p/km^2

Area Description

Trimsaran ward is located 5km north west of Llanelli Town. Once dominated by the coal industry, the predominant land use in this ward is now pastoral agriculture. Two major reclamation projects have resulted in Glyn Abbey golf club and Ffos Las Race Course.

The west and north of the ward comprises of relatively flat land drained by a network of ditches and old waterways and the Gwendraeth Fawr. To the south and the east the land is steeper on the slopes of Pembrey Mountain, with flashy watercourses conveying water to Trimsaran village.

The Gwendraeth Fawr and its tributary Afon Morlais are both Main River. The Gwendraeth flood plain dominates a 4km^2 area of low, flat land in the north west of the ward. Afon Morlais flows west through the ward in largely man made channels in a small flood plain.

Flood History

CCC has 3 recorded incidents of internal flooding in this ward all associated with culvert blockages. Water draining from Pembrey Mountain poses the greatest risk in the form of both surface water flooding and ordinary watercourse flooding.

CCC's has undertaken 3 capital schemes in Trimsaran in the last 5-years (two screens and one culvert re-lining scheme).

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	48	30	1
Medium Risk	65	39	2
Low Risk	137	85	2

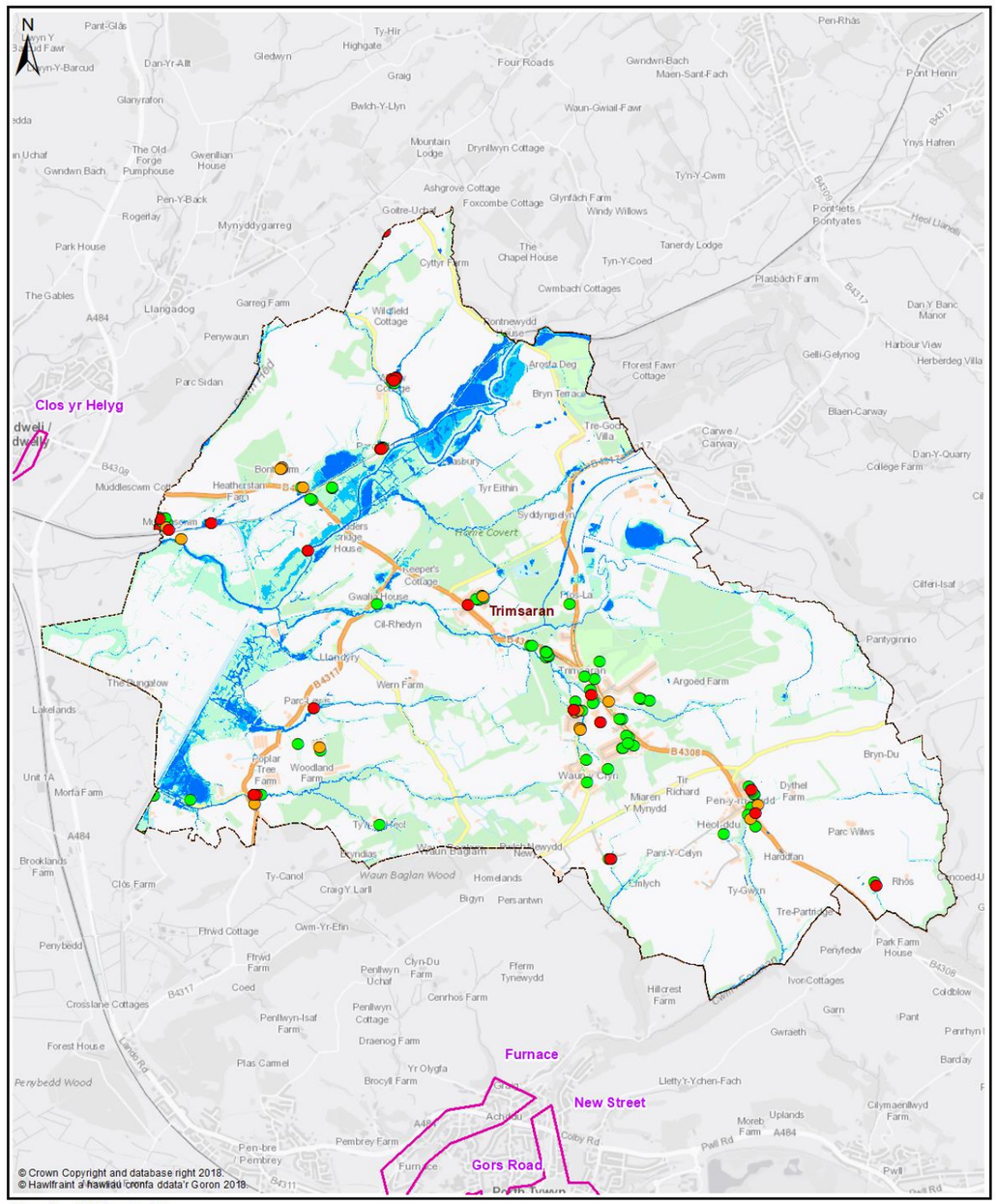
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

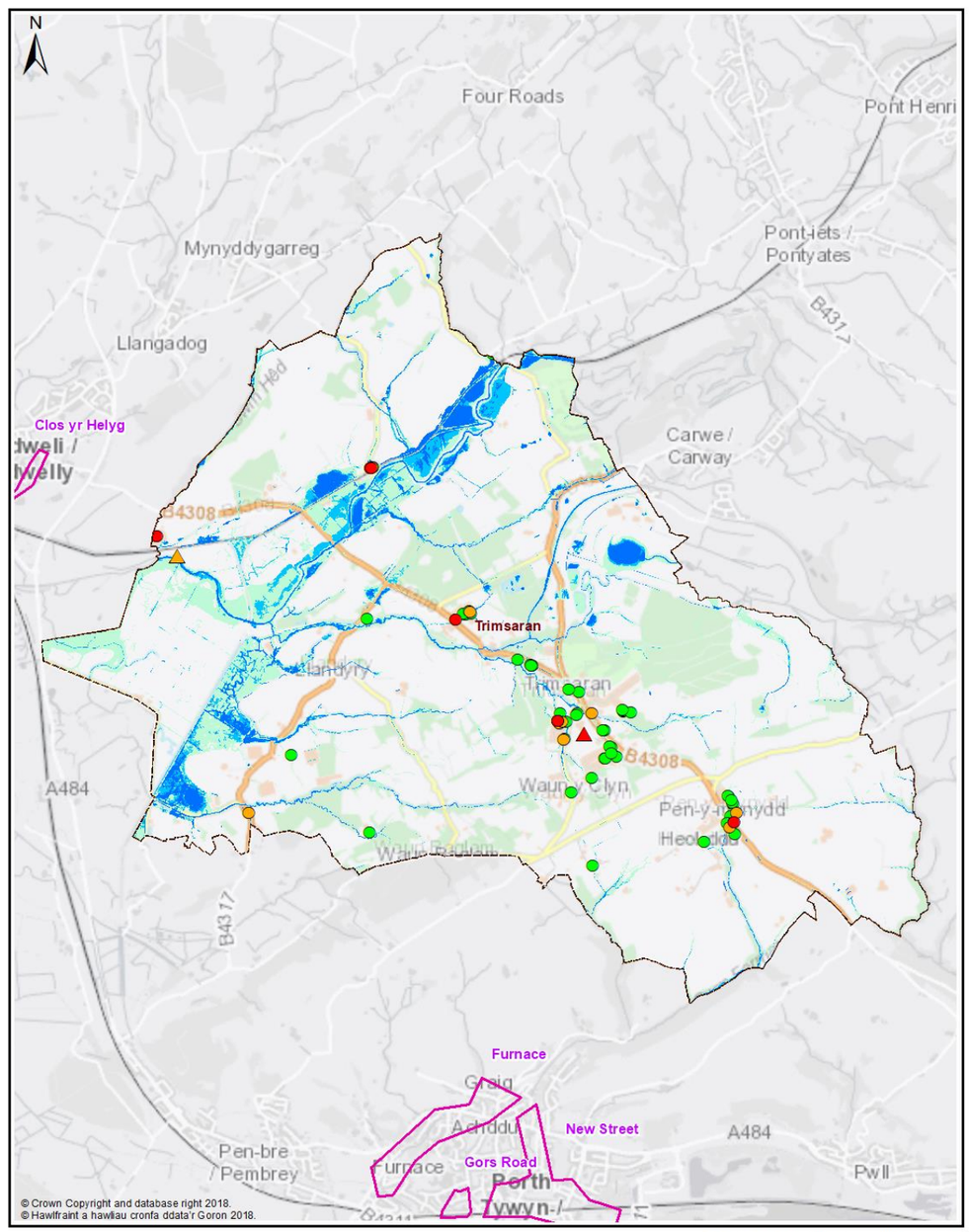
DCWW has identified Flood Risk in the following locations

- Coedyclun, Trimsaran
- Heol Waunyclun, Trimsaran

NRW will continue to take the lead and manage the flood risk from the sea and the fluvial risk from the Gwendraeth and Afon Morlais.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

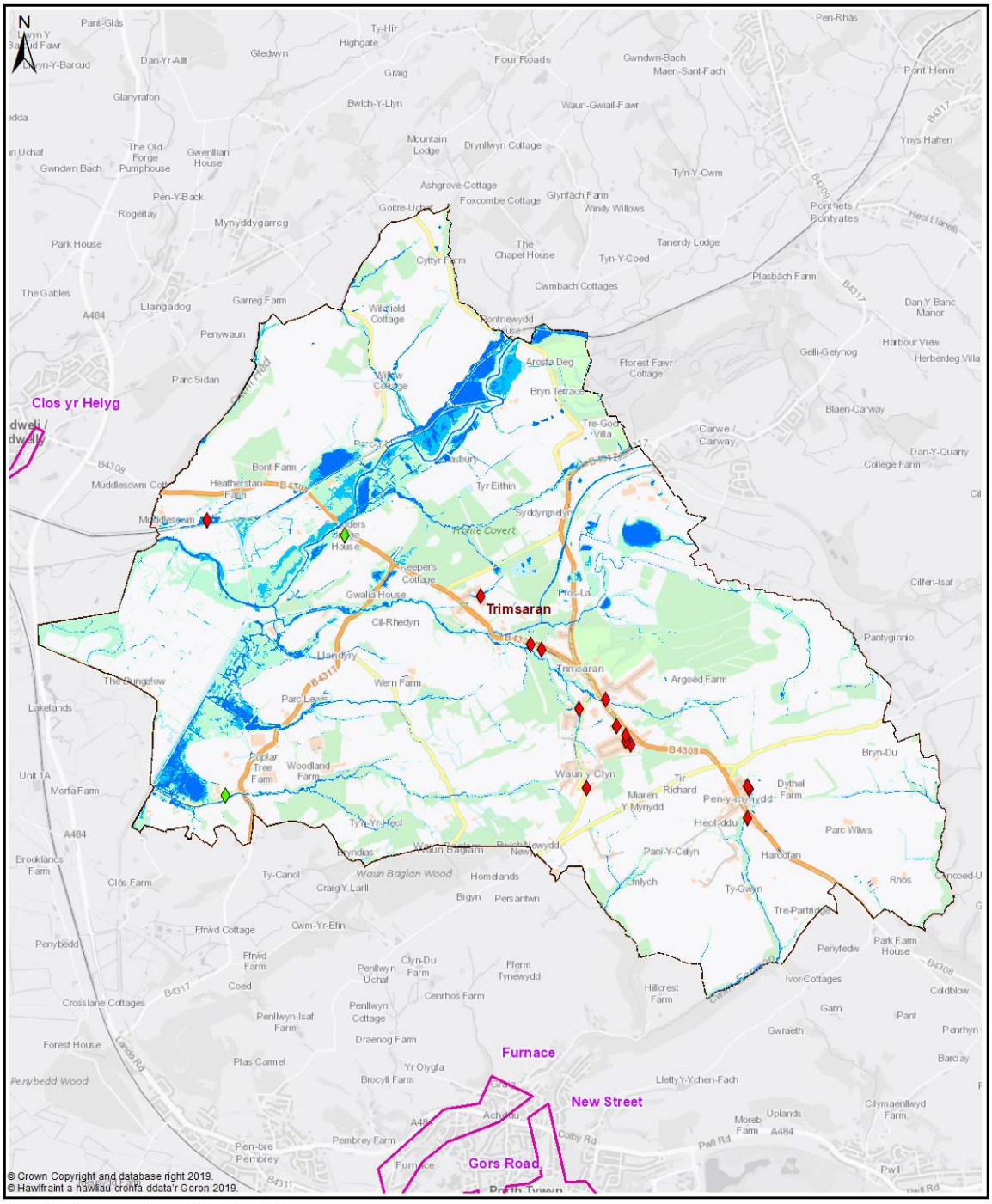
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Trimsaran

0 0.5 1 2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Trimsaran

0 0.5 1 2 Km

Trimsaran - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M22	Investigate options to reduce flood risk to community services	Med	Med	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers/Tide	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.56 Tycroes

Community Council(s)	Llanedi
Councillor:	Calum Higgins
Population	2,466
Area	11.21km^2
Population Density	220 people/km^2

Area Description

Tycroes ward is located 30km east of Carmarthen Town and boarders Ammanford to the north-east. The area is predominately rural. General topography comprises a high central ridge running north to south reaching 120mAOD sloping down to the Rivers Loughor and Gwili. Predominant land use is pastoral agriculture.

River Loughor forms the eastern boundary with the large flat flood plain dominating this area. Afon Gwili in the west has a narrow floodplain confined in a steep valley. Flood risk from both watercourses are not within the scope of this report as they are managed by NRW.

Flood History

CCC has no recorded incidents of flooding in this ward but is aware of significant flooding issues linked to new residential development in the ward. The culverting of watercourses by private land owners and the disruption to natural drainage by new development appears to be the most common cause of flooding.

There are also isolated issues of flooding from unmaintained land drains.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	16	7	0
Medium Risk	39	20	0
Low Risk	140	88	0

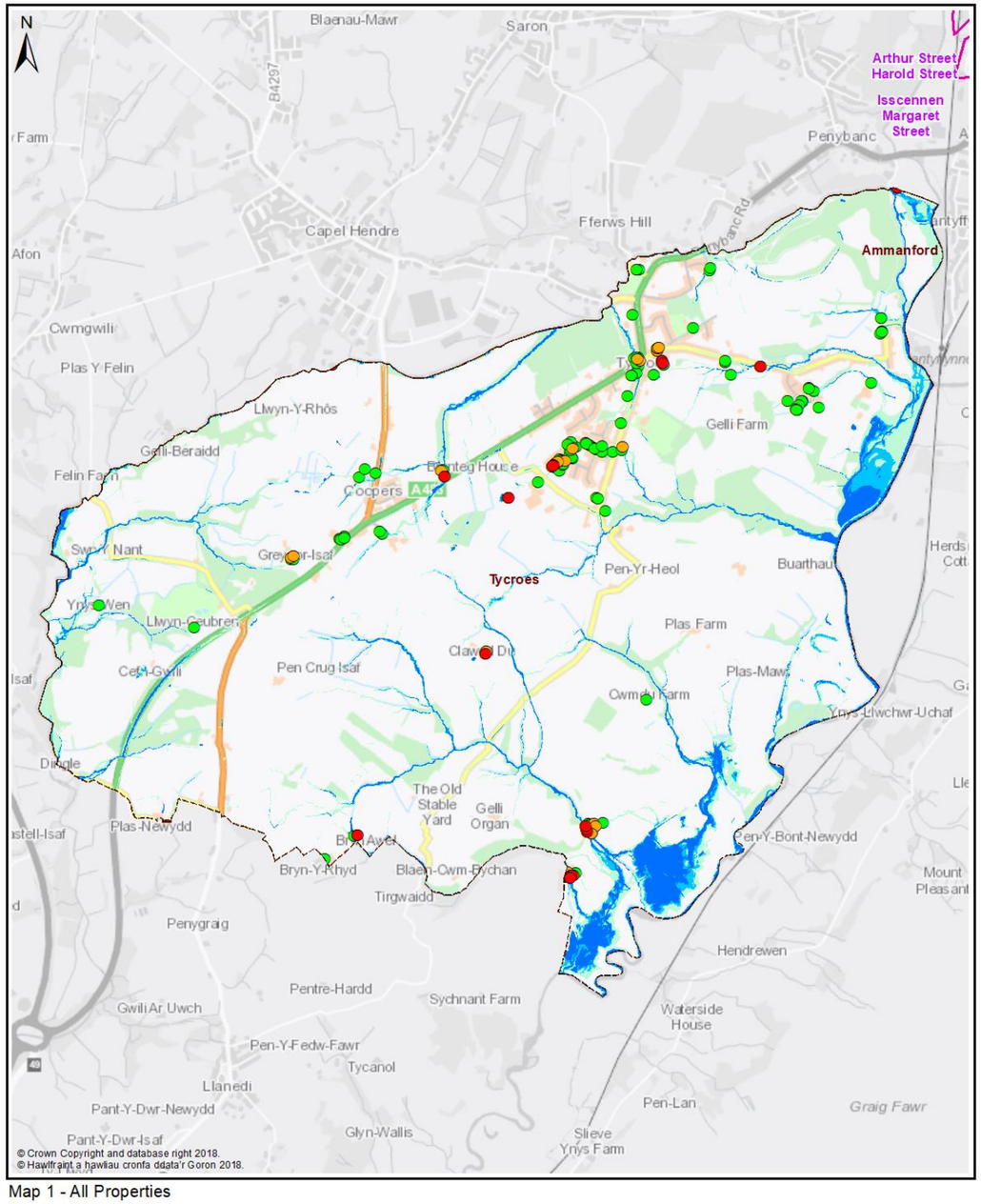
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

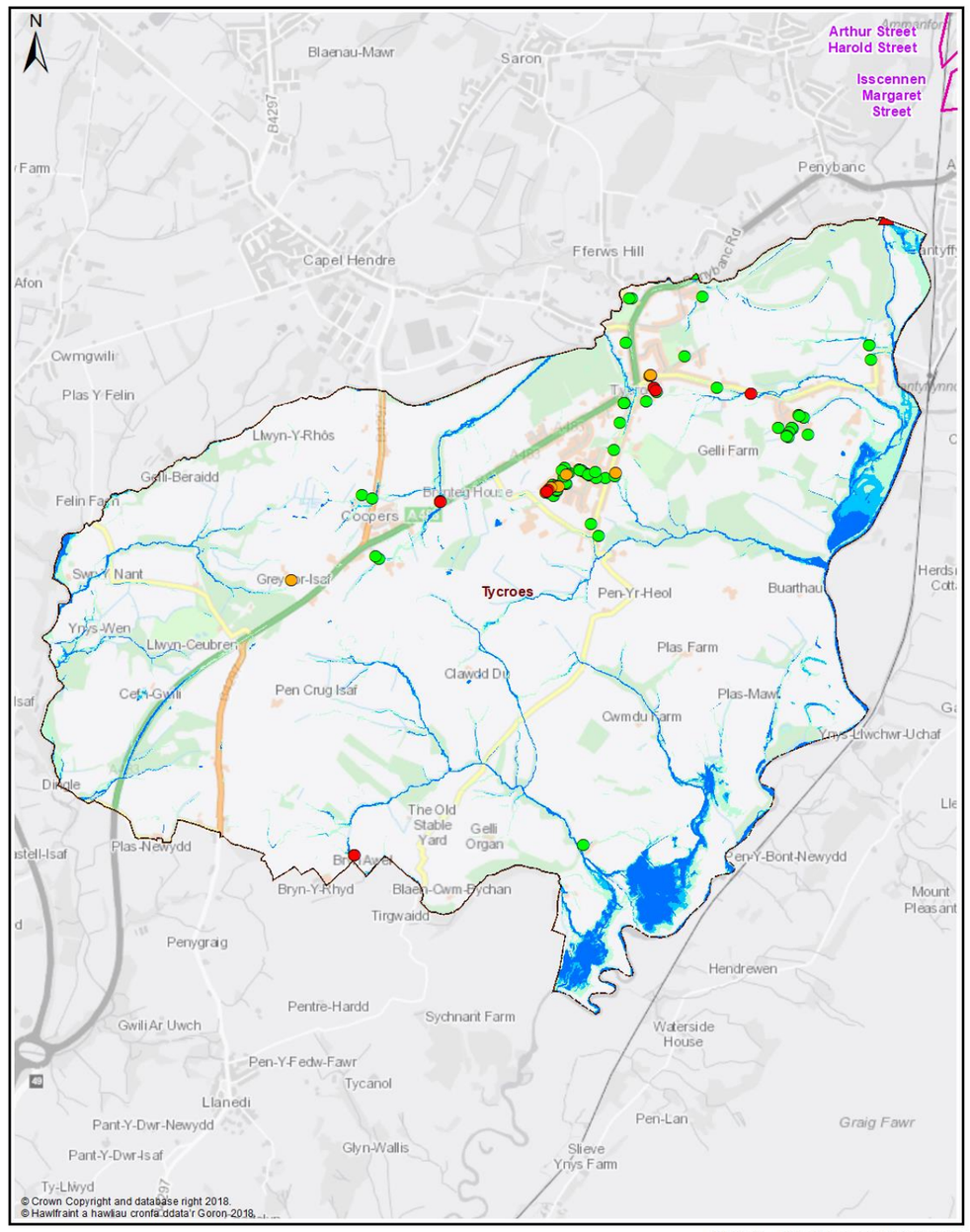
DCWW has identified flood risk in the following locations

- Penygarn Road, Ammanford;
- Tycroes Road, Tycroes
- Mill Terrace, Ammanford

NRW will continue to take the lead and manage the flood risk from Afon Gwili and the Loughor.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

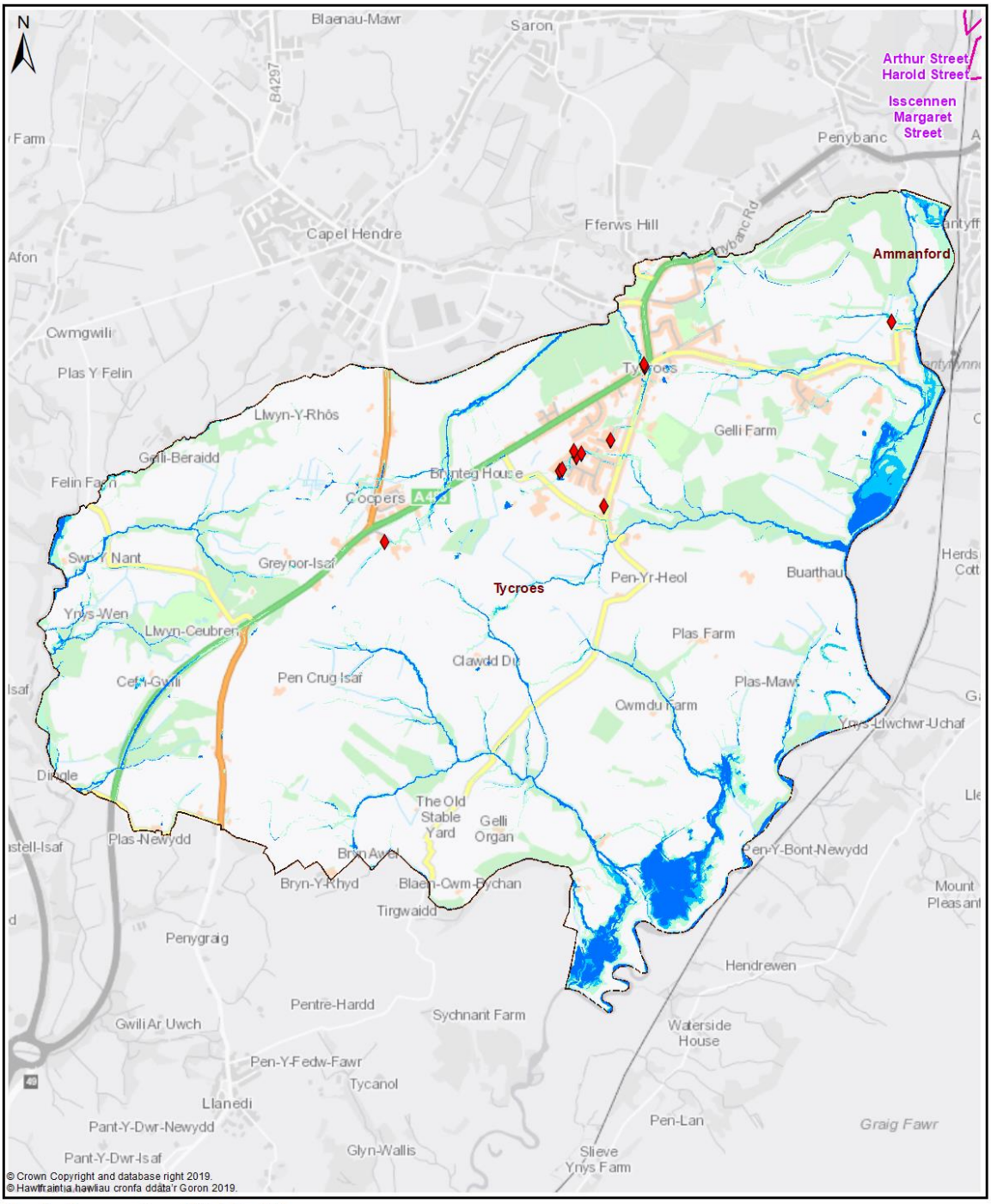
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Tycroes

0 0.325 0.65 1.3 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Tycroes

0 0.325 0.65 1.3 Km

Tycroes - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M24	Culvert inspections of existing assets & update / maintain Asset Register	High	Ongoing	Low
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers/Tide	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate	Med	Ongoing	Low

9.3.57 Tyisha

Community Council(s)	Llanelli Town
Councillor:	Keri Thomas
	Jeff Owen
Population	4,144
Area	0.63 km2
Population Density	6578 People/km2

Area Description

Urbanised Area comprising part of Llanelli Town Centre and the area to the south. Almost completely urbanised with limited open area.

This ward is entirely drained by DCWW sewers and has no natural watercourses or surface water drainage systems.

Although the River Lliedi does not flow through this ward the NRW flood maps indicate that overland flood water from the Lliedi presents a significant flood risk. Flooding from this source is outside of the scope of this report since it is manged by NRW.

Flood History

CCC has not recorded any flooding in this area.

Policy Units in Ward

There is one Policy Unit identified in this Ward.

- Station Road (this extends outside of Tyisha and comprises the greater part of this ward).

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	91	59	0
Medium Risk	369	261	1
Low Risk	783	602	3

Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

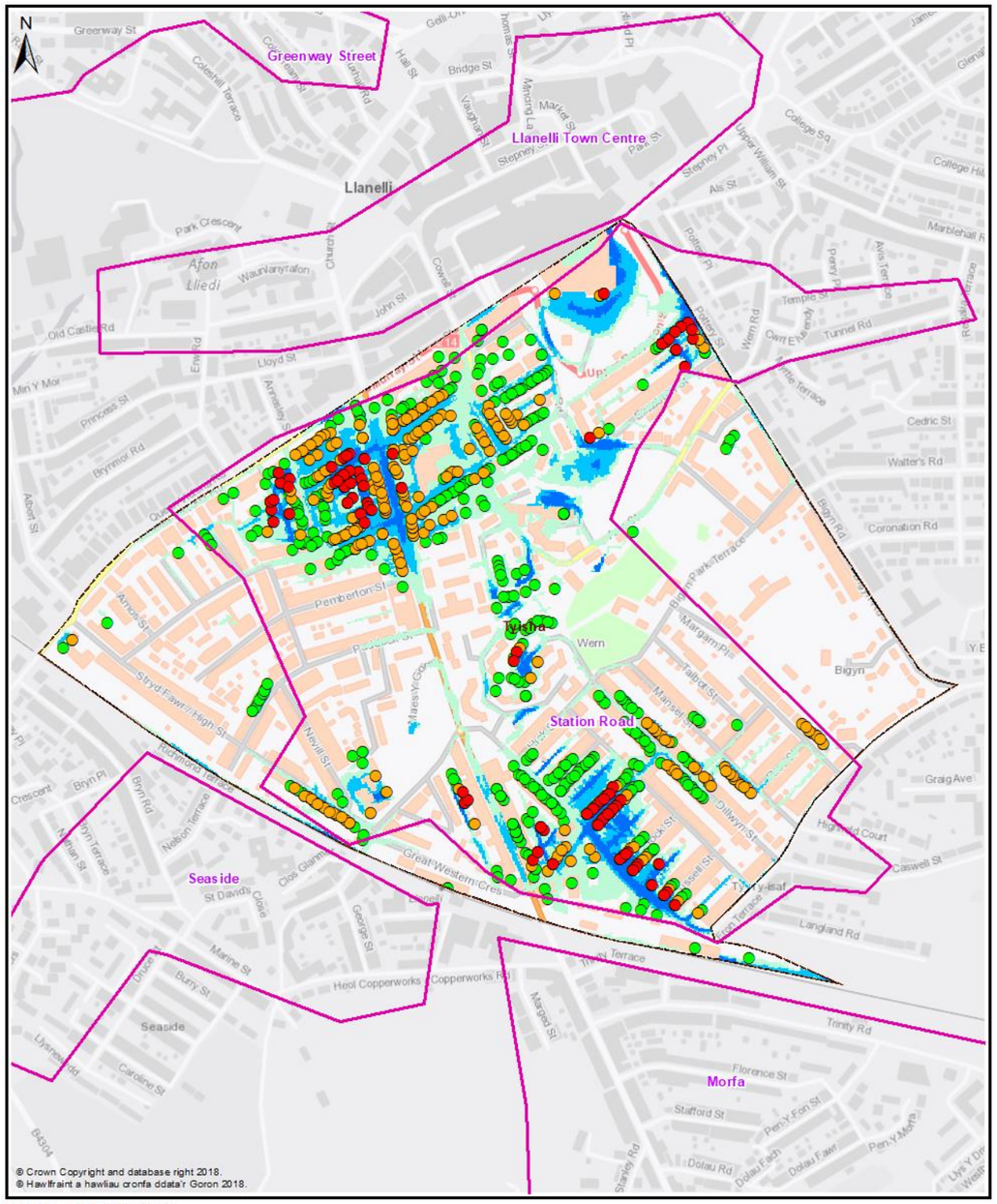
DCWW has identified flood risk at the following locations

- Station Road, Llanelli

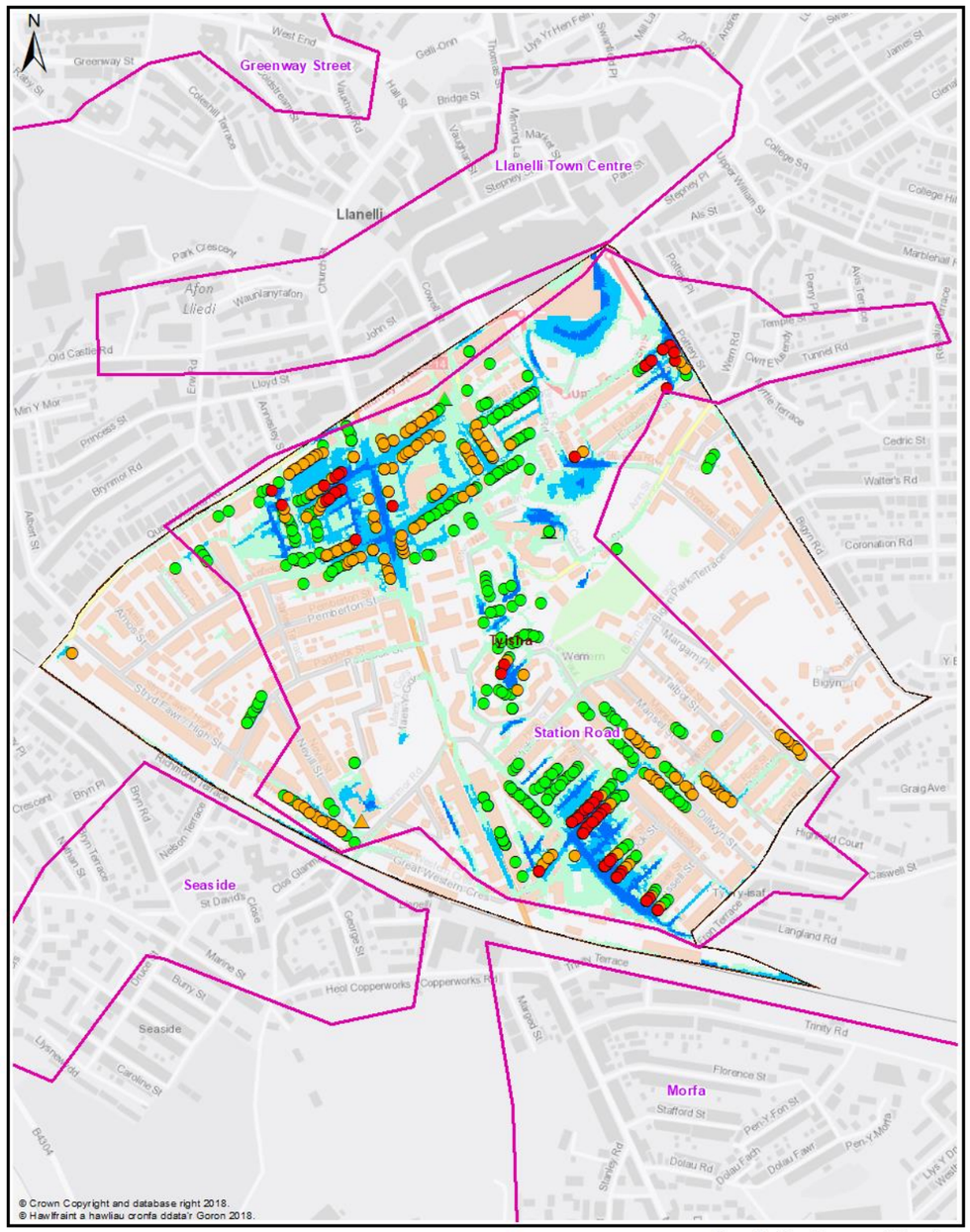
At the present time DCWW are investing large sums of money in Llanelli in their Rainscape Project. CCC will continue to work in partnership with DCWW on this project.

Notably design works have commenced to construct a surface water tunnel to drain roughly along the route of Station Road.

NRW will continue to take the lead and manage the flood risk from the River Lliedi.



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

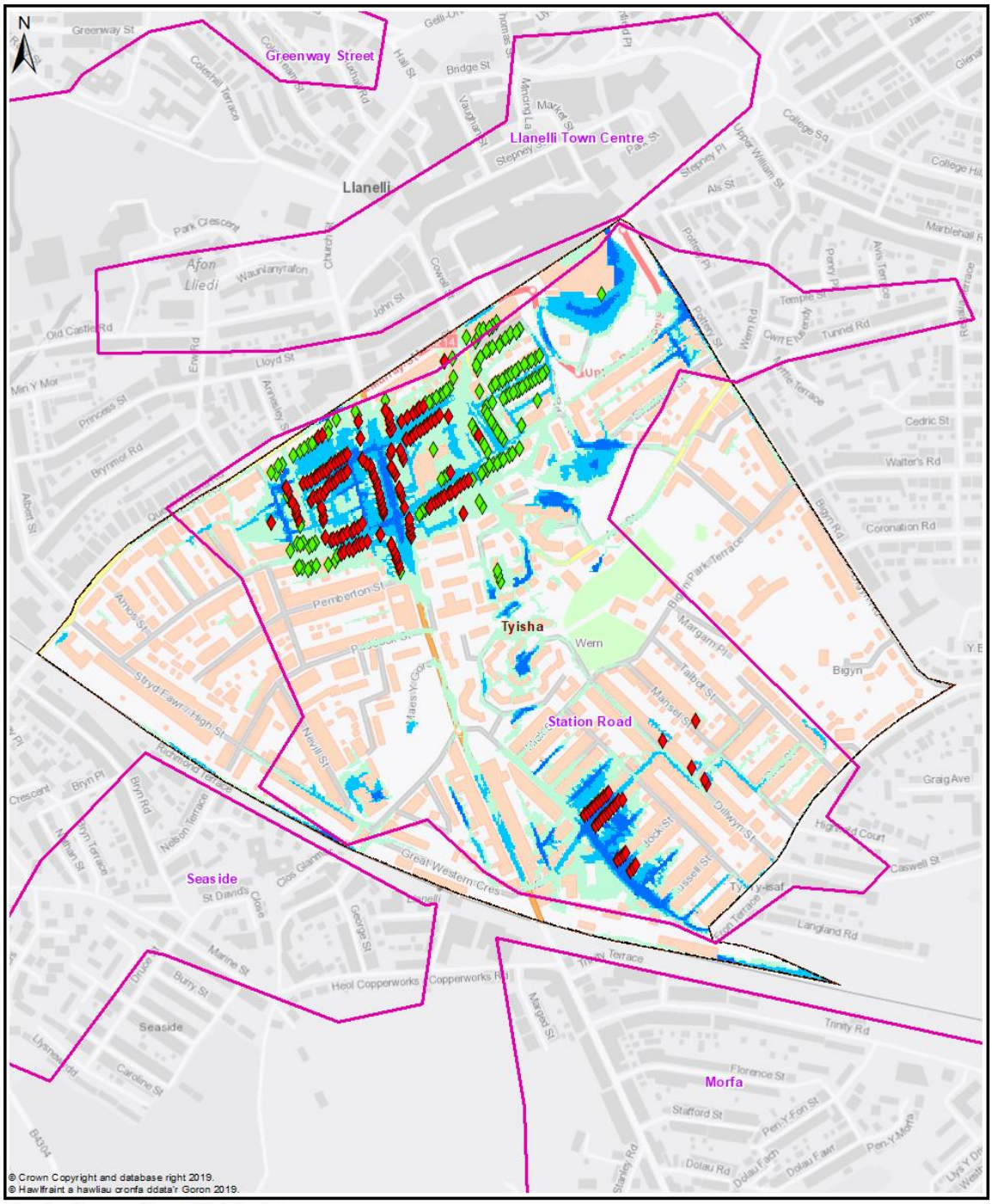
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Tyisha

0 0.075 0.15 0.3 Km

Legend

- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Tyisha

0 0.075 0.15 0.3 Km

Tyisha - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area	High	Ongoing	Med
M22	Investigate options to reduce flood risk to properties within the overall community	Med	Med	Med
M33	Station Road, Llanelli - Policy Unit identified for further review of potential alleviation action(s)	High	Ongoing	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations.	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers.	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate.	Med	Ongoing	Low

9.3.58 Whitland

Community Council(s)	Whitland Town Henllanfalteg
Councillor:	Sue Allen
Population	2,244
Area	22.34 km^2
Population Density	100 people/km^2

Area Description

Predominately rural area containing the market town of Whitland approximately 23 km west of Carmarthen.

Main rivers in the Ward include the Afon Taf, Afon Gronw and Cwm Waun Gron.

Flood History

Severe flooding from the Main Rivers Taf Gronw and Cwm Waun Gron prior to the Environment Agency constructing flood defences (circa 1985).

Surface water flooding at Trevaughan due to water flowing down Velfry Road. Surface water flooding in the North Road / Llangan Road area.

Policy Units in Ward

There are no Policy Units identified in this Ward.

Count Table (see Maps 1 & 2 below)

Criteria	Total at-risk Property Count	Dwellings affected	Community Services
High Risk	18	8	0
Medium Risk	34	15	0
Low Risk	120	56	3

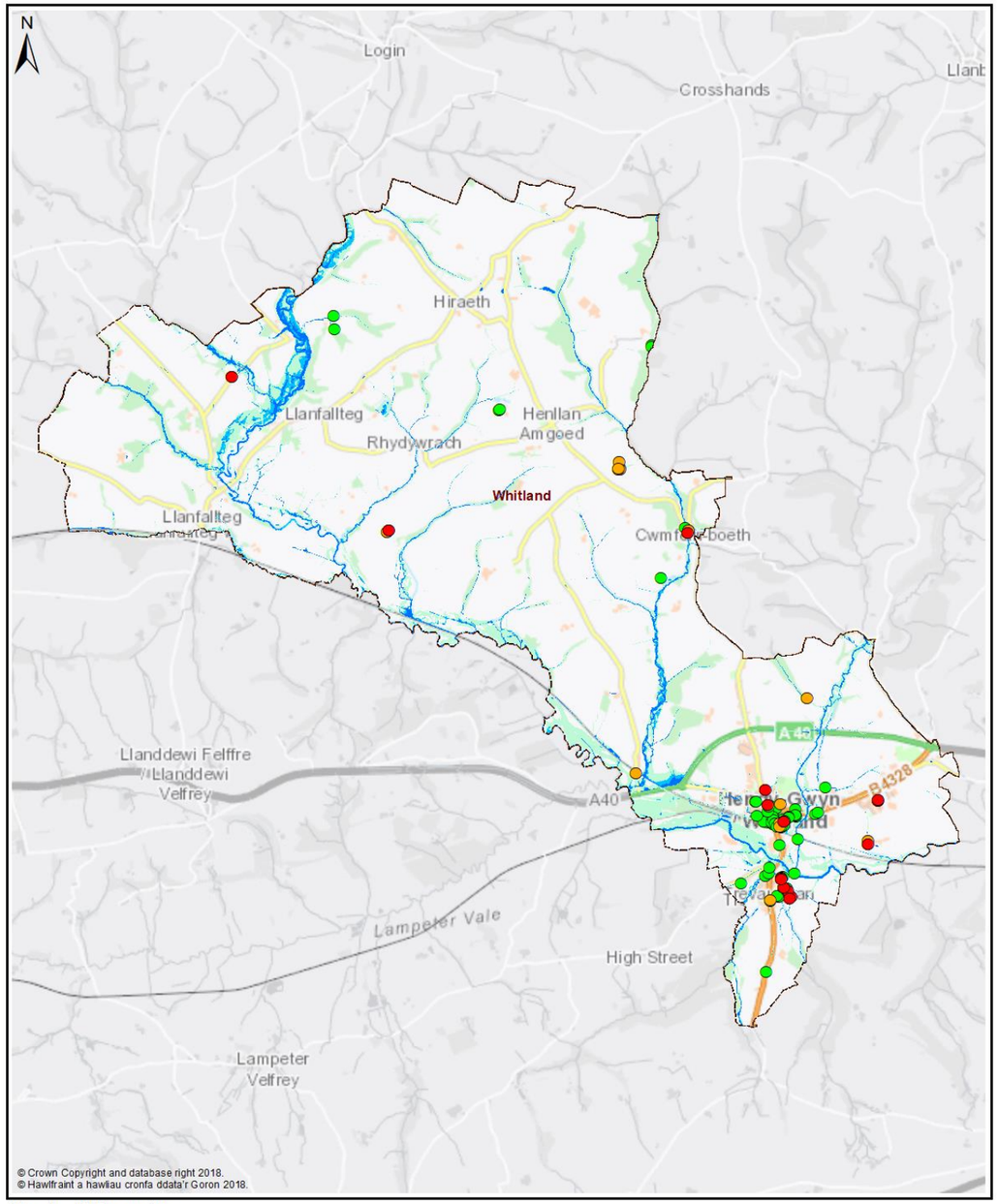
Breakdown by Policy Unit refer to Appendix E.

Other risk management authorities

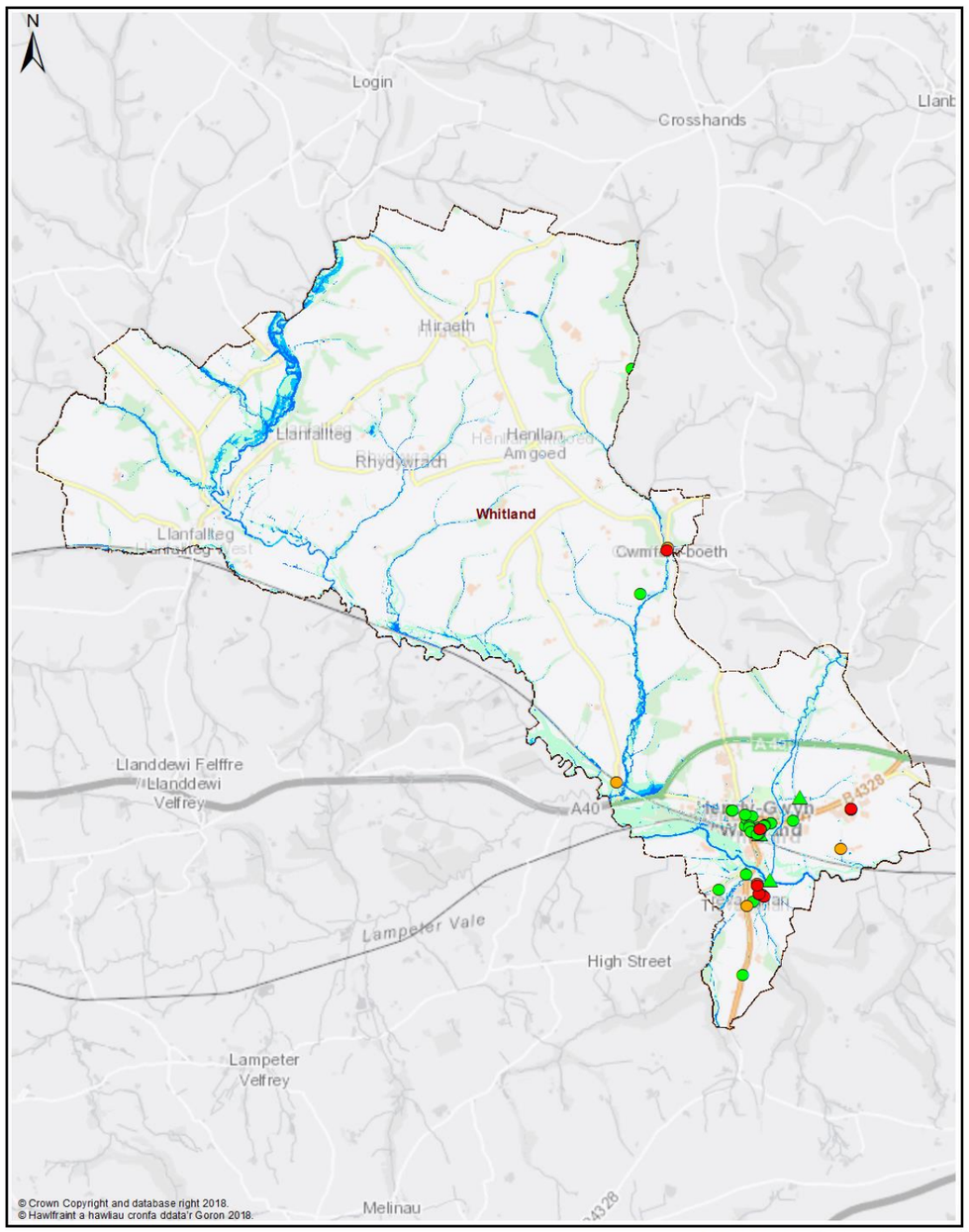
DCWW has identified flood risk in the following locations

- Llangan Road, Whitland
- Market Street, Whitland
- Trevaughan, Whitland
- Velfrey Road, Whitland

NRW will continue to take the lead and manage the flood risk from the Afon Taf, Afon Gronw and Cwm Waun Gron. .



Map 1 - All Properties



Map 2 - Dwellings and Services

Legend

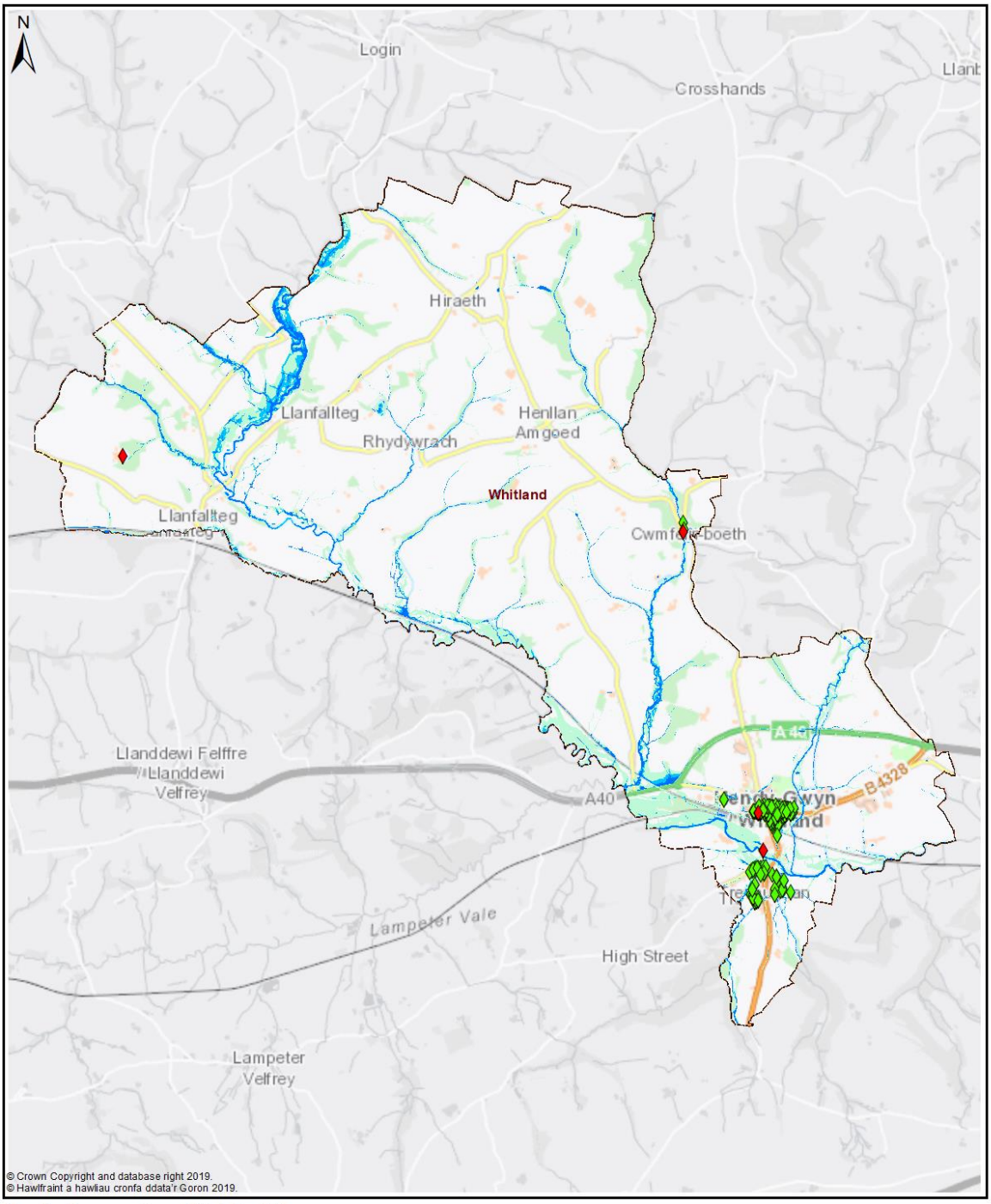
- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30 All Property Classes Flood Depth 150mm or Greater
- Q100 All Property Classes Flood Depth 150mm or Greater
- Q1000 All Property Classes Flood Depth 150mm or Greater

Ward - Whitland

0 0.5 1 2 Km

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- Q30- Dwellings Flood Depth 150mm or Greater
- Q100- Dwellings Flood Depth 150mm or Greater
- Q1000- Dwellings Flood Depth 150mm or Greater
- Q30- Services Flood Depth 150mm or Greater
- Q100- Services Flood Depth 150mm or Greater
- Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

Legend

- Policy Unit
- Ward
- uFMfSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
- uFMfSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
- uFMfSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
- CaRR Pluvial
- CaRR Fluvial

Ward - Whitland

0 0.5 1 2 Km

Whitland - Delivery Plan

The following summarises actions we propose to manage local flood risk to an acceptable level within the community.

Measure	Description	Priority	Timescale	Cost
M21	Undertake further flood risk analysis for the LDP assigned development area	High	Ongoing	Med
M24	Culvert inspections of existing assets & update / maintain Asset Register.	High	Ongoing	Med
M34	Work with DCWW to better understand and manage flood risk from surface water and sewers in highlighted locations.	Med	Ongoing	Low
M42	Raise awareness of flood risk and support preparation of Community Flood Plans if applicable	Med	Med	Low
M43	Working with NRW to raise awareness of flood risk from the Main Rivers.	Med	Med	Low
M51	Countywide recovery plans are in place. These will be triggered when appropriate.	Med	Ongoing	Low

9.4 Carmarthenshire countywide summary

In the section above we provide the detail of proposed measures to be delivered for each Community Ward area in Carmarthenshire.

Across Carmarthenshire we have totalled proposed measures against the four themes, as shown below. This captures all currently planned measures for managing and reducing flood risk from local flood risk sources.

A level of effort will be required in raising awareness of flood risk, so that all residents can help the LLFA **prepare** for flooding events and manage levels of flood risk to acceptable levels. These typically will involve further activities to;

- Raise flood awareness within the community, and
- Work with partners to improve resilience within the community.

We need to improve our understanding of how our drainage systems **protect** our area, especially historic systems of drainage pipes and culverts where records are not available. To achieve this we will carry out assessments to:

- Improve the level of understanding of the capacity of culverts across the area to convey floodwaters and
- review our inspection regime of culvert inlets and debris screens to ensure priority is being provided to those that have the greatest risk

Measures to enable communities to **recover** following a flood event and to be more resilient in the future are also a priority. These typically will involve developing:

- Recovery plans for communities and infrastructure, and
- National level; lessons learnt from flood events, change to insurance policy etc.

Intervention timescale. The plan has considered the following timescales:

- Short-term; (2018 – 2021) Some actions around preparation and prevention are ongoing and will continue for the foreseeable future.
- Medium-term; (2021 onwards) Where investment in new technology or changes to existing infrastructure are envisaged this will need to be planned and included within the Council's budgetary forecasts.
- Long-term; (2021 onwards). Funding for investment in one-off schemes, particularly those identified to protect existing communities, takes time to secure and deliver the required benefits. Identifying these investments will continue in parallel with the medium-term interventions. They may require investment by private parties as well as the council.

Cost estimate

At this stage costs have not been estimated for the various measures that have been identified. There will be economies of scale with some measures being implemented across all Wards, whilst others will be site specific needing further assessment and understanding of the problem prior to solutions being identified and costed.

9.5 What are the limitations of the plan

The analysis is based on the uFMfSW which is a national dataset. The analysis is weighted to evaluate the flood risk based on the numbers of properties affected. Urbanised areas which have a greater building density than rural areas, will tend to score a higher risk based on the property count methodology.

The uFMfSW is based on average rainfall intensities and as such cannot accurately predict more severe storms which might occur on small catchments affecting fewer numbers of properties, but with significant impacts on each.

We have attempted to take account of these limitations by applying the knowledge of our officers and records of known flooding issues in selecting Policy Units. The areas at most risk will be reviewed and updates as more information becomes available.

10 Consultation

10.1 Method of Consultation

A period of consultation on the Flood Risk Management Plan will be carried out over six weeks between April and June 2019.

The following Flood Risk Partners will be contacted:

1. All RMAs, as listed in Section 3.2
2. We will engage with members of the public using the following means:-
   a) Council website
   b) Social media including Facebook and Twitter
   c) Councillor briefings

A series of questions related to this plan are set out below. Consultation responses to these question will be reviewed and considered.

- **Question 1.** Do the numbers of properties and extents of flood risk across the communities in Carmarthenshire reflect your opinion and understanding?
- **Question 2.** Have any known local flood risk issue not been identified?
- **Question 3.** Are there other measures you consider we carry out that are not mentioned above?
- **Question 4.** Are there measures we should be proposing to ensure the opportunity for environmental improvements are provided?
- **Question 5.** Are the different types of measures that are proposed suitable, are there other measures you consider should be included?
- **Question 6.** Are there additional measures we should be proposing to enable flood risk management to be more sustainable in the future?
- **Question 7.** Do you consider that known flood risk issues have been sufficiently addressed by this Plan?
- **Question 8.** Should some types of measures be prioritised differently to others?

10.2 Public Consultation

To be completed following consultation for inclusion within the final version of this plan.

10.3 Consultation with other Statutory Bodies

To be completed following consultation for inclusion within the final version of this plan.

10.4 Changes following consultation

To be completed following consultation for inclusion within the final version of this plan.

11 References

Carmarthenshire Local Flood Risk Management Strategy
(http://www.carmarthenshire.gov.wales/home/residents/your-community/flooding/flood-risk-strategy/)

NRW Western Wales River Management Plan
https://naturalresources.wales/water/quality/river-basin-management-plans-published/?lang=en

NRW Western Wales River Basin District Flood Risk Management Plan
https://naturalresources.wales/media/675146/final_frmp_-western-wales_pk26b82.pdf

National Strategy for Flood and Coastal Erosion Risk Management
http://wales.gov.uk/topics/environmentcountryside/epq/flooding/nationalstrategy/strategy/?lang=en

12 Appendices

Appendix A Main rivers in CCC

Primary Main River	Tributary	Secondary Tributary
Taf	Gronw	
	Fenni	
	Cynin	
	Dewi Fawr	
	Cywyn	
	Coran (Laugharne)	Railsgate Pill
Towy	Cwm Mill Brook	
	Gwili	
	Annell	
	Cothi	Twrch
	Dulais (south	
	Gurri Fach	
	Dulais (north Llandeilo)	
	Sawdde	
	Bran (Llangadog)	
	Dulais (Llanwerda)	
	Mynys	
	Bran (Llandovery)	Gwydderig
Loughor	Gwili	
	Lash	
	Amman	
	Morlais (Ammanford)	
	Llwchwr	
	Morlais (Llangennech)	
	Dafen	
	Lliedi	Cille
	Dulais (Pwll, Llanelli)	
Gwendraeth Fawr	Swanpool Ditch	
	Morlais (Trimsaran)	
Gwendraeth Fach		
Afon Teifi	Cych	
	Bargod	
	Tywelli	Gran
		Talog
	Hor	
	Gou	

Appendix B CCC Flood Defence and Coastal Protection Team Duties

Undertake an Operational role in managing the risk of flooding from surface water and groundwater.

- Undertake incident investigation and drainage surveys to develop knowledge base
- Undertake an evaluation of flood risk and propose management / mitigation schemes
- Undertake cost benefit analysis of proposed schemes
- Manage and undertake the design and build of flood mitigation schemes.
- Seek to develop CCCs capabilities to evaluate rainfall and flood events.

Develop and maintain asset maintenance schemes with priority ranking

- Maintain a register of flood risk management structures that CCC manage and maintain.
- Evaluation of 'likely to have a significant effect' assets.
- Development of a prioritised programme of asset rehabilitation/replacement schemes within the available budget.

Management of OWC Consenting

- Develop, apply, maintain and monitor strategies for local flood risk management in Carmarthenshire
- Development of a flood risk management strategy
- Development of FRMP which will identify flood risk areas and form the basis for the prioritisation of our investigation works.
- Development of policies to ensure consistency and best practice

Development and Flood Risk

- Provide advice and guidance to the CCC Planning department on development and flood risk
- Undertaken analysis of drainage designs
- Promote sustainable drainage systems (SuDS)
- Provide advice and guidance to developers
- Adopt flood risk attenuation basins and ponds to manage flood risk in perpetuity

Appendix C Emergency Planning

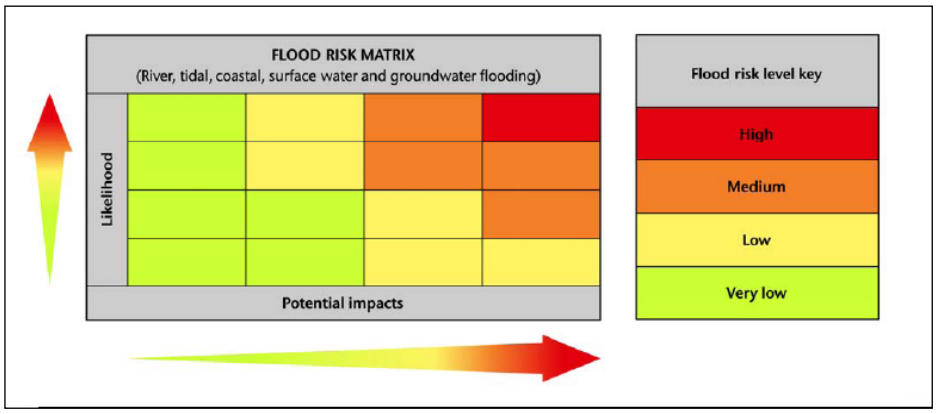
C.1 Flood Warnings

NRW is responsible for managing warnings of potential tidal and fluvial flooding. The warning system is based on geographical Flood Warning Areas. The NRW uses 4 flood codes to indicate the level of predicted risk:

	"Flooding is possible. Be prepared" The NRW issue Flood Alerts for targeted specific locations that are at risk of flooding. It will indicate that flooding is possible and that people should make some low impact preparations (e.g. move small valuable items upstairs, check travel plans) and remain vigilant
	"Flooding is expected. Immediate action required". The NRW mainly target Flood Warnings at specific communities that are at risk from flooding. Some Flood Warnings may apply to stretches of coast and river. It will indicate that flooding is expected and that people should take more direct impact actions e.g. move belongings upstairs.
	"**Severe Flooding. Danger to life**". All customers who receive a Flood Warning will receive a Severe Flood Warning if conditions are met. It will be used in extreme circumstances to tell people that flooding is posing significant risk to life or significant disruption to communities which could also cause risk to life. Depending on the circumstances it would indicate that people should evacuate the area or take shelter within safe buildings.
Warning No Longer In Force	The NRW issues a message to tell people that the flood threat has passed and includes useful advice on what to do next.

The Flood Guidance Statement

The risk of flooding is assessed by use of the following risk matrix to produce a flood risk rating from Very Low (Green) to High (Red)



It's important to understand what the potential impacts may be as Low risk of flooding resulting from a low likelihood of severe impacts may be more important than a Low risk resulting from a high likelihood of minor impacts.

Activation Triggers

Due to the differing circumstances that can be present in each incident of flooding, the triggering of the plan must involve an element of judgement.

Consideration needs to be given to trigger the plan during conditions of flooding that have not yet become severe, if the prevailing conditions are deemed to merit such action. When flooding becomes severe or the council is in receipt of a severe flood warning from the NRW, then the plan would be activated. Factors to be taken in to account when deciding on the appropriate level of response include:

- Consultation with other Council departments and/or senior management
- Advice from external organisations
- Weather warnings indicating a deterioration in conditions
- Local experience and historical data
- Reports of flooding from the public

In a flash flood or surface water flooding, notification is likely to come from the public via the contact centre or via the emergency services. If the response is beyond the capabilities of Carmarthenshire County Council, a multi agency response will be coordinated through the Dyfed Powys incident management procedures (strategic, tactical and operational). If a major incident is declared the Council will implement the Major Incident Procedures.

Appendix D LDP Allocations within Wards

Ward	Policy Unit	LDP Allocations
Ammanford	**Isscennen / Margaret Street r**	X3 Residential
Ammanford	**Carregamman**	X1 Residential
Bigyn	**Trostre Road/Gorse**	X1 Residential X1 Mixed use
Cenarth	**Newcastle Emlyn**	X1 Residential
Garnant	**Arcade Terrace, Garnant**	Residential
Glanymor	**Morfa, Llanelli**	X1 Mixed use X1 Residential
Glanymor	**Seaside**	X1 Residential X1 Mixed use
Hengoed	**Iscoed Sandy Road, Llanelli**	X1 Residential
Kidwelly	**Clos y Helyg**	X1 Residential
Llandovery	**Nant Bawddwr**	X1 Mixed Use
Llangeler	**Pontyweli**	X1 Residential
Llangennech	**Llangennech**	X1 Residential
Lliedi	**Llanelli Town Centre**	X1 Residential X1 Mixed Use
Llwynhendy	**Heol Elfed**	X2 Residential
Pembrey	**Furnace, Burry Port**	X3 Residential
Tyisha	**Station Road, Llanelli**	X2 Residential

Appendix E Ward Counts

Properties within the uFMfSW flood extent.

Ward	Policy Unit	Total all properties	High-risk all properties	High-risk dwellings	High-risk services	Medium-risk all properties	Medium-risk dwellings	Medium-risk services	Low-risk all properties	Low-risk dwellings	Low-risk services
Countywide		**47,307**	**3,252**	**1,523**	**26**	**5,987**	**3,208**	**50**	**15,508**	**9,468**	**108**
Abergwili			**38**	**5**	**0**	**56**	**12**	**1**	**121**	**37**	**3**
	Whitemill		13	1	0	18	4	1	32	10	1
Ammanford			**60**	**33**	**0**	**130**	**79**	**1**	**350**	**231**	**1**
	Isscennen / Mar		30	20	0	71	47	1	156	111	1
	Carregamman		11	2	0	17	8	0	53	39	0
Betws			**15**	**4**	**0**	**37**	**21**	**0**	**242**	**189**	**0**
	no areas identified										
Bigyn			**73**	**62**	**0**	**149**	**119**	**1**	**426**	**330**	**4**
	Trostre Road/Gorse		37	35	0	60	50	0	153	111	0
Burry Port			**102**	**83**	**1**	**153**	**126**	**1**	**439**	**366**	**2**
	New Street		77	60	0	115	90	0	255	206	0
	Gors Road		12	12	0	21	21	0	40	39	0
Bynea			**44**	**35**	**0**	**71**	**55**	**0**	**190**	**139**	**1**
	Cwmfelin Road		21	18	0	33	29	0	71	63	0
	Berwick Road		12	11	0	12	11	0	15	12	0
Carmarthen Town North			**37**	**28**	**0**	**85**	**60**	**0**	**286**	**218**	**2**
	Glangwili Hospital		0	0	0	0	0	0	2	0	1
Carmarthen Town South			**161**	**54**	**1**	**267**	**100**	**2**	**587**	**278**	**3**
	Llansteffan Road		8	5	0	8	5	0	9	5	0
Carmarthen Town West			**31**	**20**	**0**	**81**	**55**	**1**	**311**	**238**	**1**
	no areas identified										
Cenarth			**99**	**37**	**0**	**130**	**47**	**1**	**248**	**108**	**2**
	Newcastle Emlyn		50	25	0	67	31	1	110	56	1
Cilycwm			**31**	**3**	**0**	**62**	**19**	**0**	**198**	**63**	**2**
	no areas identified										
Cynwyl Elfed			**63**	**17**	**2**	**89**	**26**	**2**	**205**	**81**	**2**
	no areas identified										
Cynwyl Gaeo			**36**	**7**	**0**	**69**	**14**	**0**	**197**	**49**	**2**
	no areas identified										
Dafen			**73**	**53**	**2**	**120**	**79**	**7**	**277**	**205**	**7**
	Exchange Row		34	31	0	40	34	1	101	87	1
	Bryngwyn Road		8	7	0	17	16	0	19	16	0
	Prince Philip Hospital		2	0	1	6	0	2	7	0	2
	Glyncoed Terrace		4	0	0	17	10	0	33	19	1

Ward	Policy Unit	Total all properties	High-risk all properties	High-risk dwellings	High-risk services	Medium-risk all properties	Medium-risk dwellings	Medium-risk services	Low-risk all properties	Low-risk dwellings	Low-risk services
Elli			**145**	**42**	**1**	**353**	**180**	**2**	**653**	**415**	**4**
	Greenway Street		47	26	0	121	84	0	311	246	0
Felinfoel			**60**	**26**	**0**	**89**	**44**	**0**	**167**	**100**	**0**
	Felinfoel		17	16	0	32	30	0	65	57	0
Garnant			**13**	**8**	**0**	**29**	**20**	**0**	**118**	**88**	**0**
	Arcade Terrace		2	1	0	6	4	0	31	25	0
Glanamman			**49**	**27**	**1**	**95**	**68**	**2**	**275**	**207**	**2**
	Station Road		7	7	0	7	7	0	11	10	0
Glanymor			**46**	**24**	**0**	**168**	**126**	**0**	**639**	**527**	**2**
	Morfa		34	16	0	124	92	0	424	348	0
	Seaside		10	6	0	41	32	0	164	140	1
Glyn			**18**	**6**	**1**	**30**	**12**	**1**	**91**	**38**	**1**
	no areas identified										
Gorslas			**62**	**37**	**0**	**89**	**56**	**1**	**207**	**136**	**2**
	Gorslas Square		19	14	0	27	19	1	29	21	1
	Drefach		14	14	0	19	19	0	30	30	0
Hendy			**26**	**14**	**0**	**47**	**32**	**0**	**149**	**103**	**0**
	no areas identified										
Hengoed			**135**	**99**	**0**	**229**	**157**	**0**	**448**	**336**	**0**
	Iscoed Sandy Road		46	36	0	106	72	0	230	185	0
	Pwll		70	58	0	87	70	0	114	92	0
Kidwelly			**43**	**31**	**0**	**83**	**52**	**0**	**229**	**151**	**0**
	Clos y Helyg		10	9	0	14	12	0	18	14	0
	Ferry Rd / New Rd		6	4	0	12	9	0	42	37	0
Laugharne			**97**	**50**	**0**	**142**	**76**	**0**	**298**	**154**	**0**
	Laques		10	5	1	26	17	1	49	36	1
	Llanddowror		0	0	0	1	1	0	25	17	1
Llanboidy			**14**	**3**	**0**	**31**	**6**	**1**	**99**	**20**	**3**
	no areas identified										
Llanddarog			**71**	**25**	**1**	**94**	**33**	**1**	**208**	**79**	**3**
	no areas identified										
Llandeilo			**32**	**10**	**1**	**52**	**23**	**1**	**192**	**96**	**3**
	no areas identified										
Llandovery			**57**	**16**	**1**	**108**	**41**	**1**	**419**	**215**	**3**
	Nant Bawddwr		15	7	0	41	22	0	212	140	1
Llandybie			**41**	**25**	**0**	**94**	**66**	**0**	**367**	**272**	**0**
	no areas identified										
Llanegwad			**58**	**16**	**1**	**84**	**29**	**1**	**197**	**76**	**1**

Ward	Policy Unit	Total all properties	High-risk all properties	High-risk dwellings	High-risk services	Medium-risk all properties	Medium-risk dwellings	Medium-risk services	Low-risk all properties	Low-risk dwellings	Low-risk services
	no areas identified										
Llanfihangel Aberbythych			**28**	**9**	**0**	**46**	**16**	**0**	**132**	**28**	**0**
	no areas identified										
Llanfihangel-ar-Arth			**67**	**21**	**1**	**98**	**33**	**2**	**206**	**91**	**4**
	no areas identified										
Llangadog			**67**	**11**	**0**	**111**	**25**	**1**	**248**	**56**	**2**
	no areas identified										
Llangeler			**109**	**45**	**0**	**162**	**72**	**0**	**294**	**134**	**1**
	Pontyweli		44	16	0	60	25	0	70	29	0
Llangennech			**57**	**27**	**2**	**127**	**87**	**2**	**320**	**237**	**4**
	Llangennech		48	21	2	100	68	2	201	140	2
Llangunnor			**42**	**7**	**0**	**71**	**25**	**0**	**221**	**122**	**1**
	Pensarn		10	0	0	15	0	0	42	11	1
Llangyndeyrn			**59**	**23**	**1**	**94**	**41**	**1**	**302**	**163**	**5**
	no areas identified										
Llannon			**53**	**13**	**1**	**106**	**36**	**1**	**294**	**143**	**1**
	no areas identified										
Llansteffan			**30**	**13**	**1**	**74**	**36**	**1**	**192**	**93**	**1**
	The Green		5	2	1	28	18	1	50	33	1
Llanybydder			**58**	**7**	**1**	**100**	**27**	**1**	**268**	**126**	**1**
	Station Road		5	1	0	23	12	0	47	32	0
	Treherbert Street		5	0	0	7	1	0	51	41	0
Lliedi			**124**	**92**	**0**	**189**	**144**	**1**	**397**	**312**	**1**
	Llanelli Town Centre		148	52	1	257	120	2	296	135	2
	Heol Buckley		26	25	0	41	40	0	58	57	0
	Lakeview		8	7	0	10	9	0	16	15	0
Llwynhendy			**45**	**34**	**0**	**124**	**92**	**0**	**324**	**265**	**0**
	Heol Elfed		15	8	0	58	41	0	104	82	0
	Bryn Rhos		11	11	0	15	15	0	28	28	0
	Pemberton Road		9	8	0	24	23	0	55	50	0
Manordeilo and Salem			**55**	**15**	**0**	**88**	**28**	**0**	**203**	**65**	**2**
	no areas identified										
Pembrey			**50**	**38**	**0**	**86**	**67**	**1**	**299**	**243**	**2**
	Furnace		27	26	0	49	45	1	120	110	1
Penygroes			**29**	**16**	**1**	**48**	**33**	**1**	**142**	**99**	**2**
	no areas identified										
Pontamman			**65**	**47**	**0**	**113**	**73**	**0**	**247**	**177**	**0**
	Arthur St		60	45	0	93	66	0	165	119	0

Ward	Policy Unit	Total all properties	High-risk all properties	High-risk dwellings	High-risk services	Medium-risk all properties	Medium-risk dwellings	Medium-risk services	Low-risk all properties	Low-risk dwellings	Low-risk services
Pontyberem			**13**	**2**	**1**	**22**	**4**	**1**	**138**	**79**	**2**
	no areas identified										
Quarter Bach			**35**	**20**	**0**	**67**	**42**	**0**	**212**	**148**	**0**
	Upper Brynamman		8	4	0	17	11	0	85	71	0
	Ystrad Owen		11	11	0	12	12	0	22	20	0
Saron			**61**	**30**	**1**	**118**	**74**	**1**	**319**	**214**	**4**
	no areas identified										
St. Clears			**35**	**14**	**0**	**48**	**18**	**1**	**112**	**60**	**1**
	no areas identified										
St. Ishmael			**125**	**24**	**1**	**202**	**46**	**3**	**421**	**156**	**6**
	Ferryside South		23	14	0	35	24	1	86	67	1
	Ferryside North		9	3	1	17	9	1	44	29	2
Swiss Valley			**9**	**4**	**0**	**16**	**9**	**0**	**63**	**48**	**1**
	no areas identified										
Trelech			**33**	**7**	**1**	**54**	**12**	**1**	**141**	**33**	**3**
	no areas identified										
Trimsaran			**48**	**30**	**1**	**65**	**39**	**2**	**137**	**85**	**2**
	no areas identified										
Tycroes			**16**	**7**	**0**	**39**	**20**	**0**	**140**	**88**	**0**
	no areas identified										
Tyisha			**91**	**59**	**0**	**369**	**261**	**1**	**783**	**602**	**3**
	Station Road		116	82	0	421	310	1	848	670	3
Whitland			**18**	**8**	**0**	**34**	**15**	**0**	**120**	**56**	**3**
	no areas identified										

Note: Some Policy Units span across more than one Ward