

Flood and Coastal Erosion Risk Management

Annual Report
July 2015 – June 2016

8th July 2016



List of Acronyms

CaBA	Catchment Based Approach
CC	Cornwall Council
CCFF	Cornwall Community Flood Forum
CCP	Cornwall Catchment Partnership
CCRN	Cornwall Community Resilience Network
CSO	Combined Sewer Overflow
DCLG	Department for Communities and Local Government
DEFRA	Department for Environment, Food and Rural Affairs
EA	Environment Agency
FCERM	Flood and Coastal Erosion Risk Management
FDGiA	Flood Defence Grant in Aid
FWMA	Flood and Water Management Act
LLFA	Lead Local Flood Authority
MTP	Medium Term Plan
PCC	Plymouth City Council
PCO	Plymouth Coastal Observatory
PRF	Pollution Risk Forecast
RFCC	Regional Flood and Coastal Committee
RMA	Risk Management Authority
SWCG	South West Coast Group
SWRFCC	South West Regional Flood and Coastal Committee
SWW	South West Water

Table of Contents

List of Acronyms	2
1 Context	4
2 FCERM responsibilities	5
3 Flood events during this period	7
4 Flood and Coastal Erosion Risk Management Schemes	11
4.1 Progress on projects	11
4.2 Developing schemes	12
5. Flood and Coastal Erosion Risk Management related activity	14
5.1 SW Regional Flood and Coastal Committee	14
5.2 SW Coast Group	15
5.3 Partnership working	16
5.3.1 Cornwall Community Flood Forum	16
5.3.2 Cornwall Community Resilience Network	16
5.3.3 Cornwall Catchment Partnership	17
6. Bathing water quality issues	18
7. Devolution	20
8 Recommendations	21
Table 1 FCERM statutory responsibilities	5
Table 2 List of properties affected by internal flooding since 2011	9
Table 3 FCERM projects progressed during 2015/16	11
Table 4 FCERM projects under development during 2015/16	12
Table 5 Numbers of elected members representing LLFAs on the SWRFCC	14
Figure 1 Damage to the coastal defence wall at Long Rock in the aftermath of Storm Frank	8

1 Context

Cornwall Council is designated as Lead Local Flood Authority (LLFA) for Cornwall under the Flood and Water Management Act 2010 (FWMA).

As such it is incumbent upon Cornwall Council to formulate and publish a Local Flood Risk Management Strategy (LFRMS). The LFRMS was produced and went out to public consultation in 2014. It was adopted by Cabinet on 5 November 2014. As part of that Strategy it was stated that an annual report on Flood and Coastal Erosion Risk Management (FCERM) in Cornwall would be issued.

Also, in June 2015 Cornwall Council held a Select Committee examination of FCERM in Cornwall. The report of the Select Committee was accepted and approved by Cabinet in February 2016. An outcome of that report was to suggest the return of an annual report to Scrutiny Committee.

This report addresses the requirements of both the Strategy and the Select Committee.

2 FCERM responsibilities

Table 1 lists the general areas of FCERM statutory responsibilities for each of the Risk Management Authorities with regard to managing flood risk from different sources of flooding, as set out in the FWMA. Whilst the named authority is responsible for taking the lead in investigating flood incidents, developing solutions and implementing interventions, in practice the Lead Local Flood Authority (LLFA), Environment Agency (EA) and South West water (SWW) work closely in partnership on all flooding issues.

Table 1 FCERM statutory responsibilities

Responsibility	Risk Management Authority
FCERM strategic overview	The Environment Agency
Management of flood risk from Main Rivers	The Environment Agency
Management of flood risk from Ordinary Watercourses	Cornwall Council as LLFA
Management of flood risk from the sea	The Environment Agency
Management of coastal erosion	Cornwall Council as Coastal Protection Authority
Management of flood risk from surface water runoff	Cornwall Council as LLFA
Management of flood risk from highway drainage (except for the A30 and A38 trunk roads)	Cornwall Council as Highway Authority
Management of flood risk from highway drainage for the A30 and A38 trunk roads	Highways England
Management of flood risk from public sewers	South West Water
Management of flood risk from statutory reservoirs	The Environment Agency
Flood incident management	All relevant authorities, emergency services and other utilities under the Civil Contingencies Act
Flood recovery	Cornwall Council
National Environment Programme	The Environment Agency
Management of pollution from public sewers	South West Water
Management of watercourses on, or adjacent to, private land	Landowners

In addition the FWMA requires Cornwall Council to:

- Investigate and record details of significant¹ flood events within Cornwall.
- Maintain a register of structures or features which are considered to have a significant FCERM function.
- Undertake works to manage flood risk from surface runoff and groundwater.
- Designate structures and features that affect flooding or coastal erosion in order to safeguard assets.
- Consent works on Ordinary Watercourses.
- Develop, maintain, apply and monitor a local strategy for flood risk management in Cornwall.
- Be statutory consultee on surface water drainage for planning applications of over 0.5 ha in area or containing 10 or more properties.

Cornwall Council bids for flood defence scheme funding through DEFRA's Capital Investment Programme, also referred to as the Medium Term Plan (MTP). The MTP is a six year programme of consented schemes. Each scheme is led by the relevant Risk Management Authority (RMA), as set out in Table 1. Schemes that are proposed but not consented sit outside of the 6 year horizon until a case for funding based on need, effectiveness, cost-benefit ratio and sources of additional partnership funding, if required, are established.

Funding provided by Central Government through the MTP process is known as Flood Defence Grant in Aid (FDGiA). Not all projects meet the necessary cost-benefit ratio and set criteria to enable full funding through FDGiA. Additional partnership funding is often required for a scheme or project to be approved. Sources of match funding include Local Levy, as administered through the Regional Flood and Coastal Committees (See Section 5), capital investment funding provided by the LLFA and match funding from other private or public organisations.

¹ A significant flood incident is defined as one whereby 5 or more properties flooded internally from the same source of flooding.

3 Flood events during this period

In comparison with the previous few years, 2015/16 was a relatively quiet period for flooding in Cornwall, with the exception of Storm Frank that occurred on 29-30 December 2015 and Storm Imogen in February 2016.

Table 2, below, lists the numbers of properties in Cornwall that flooded internally over the last 5 years. This list includes only those that Cornwall Council is aware of; undoubtedly there will be others of which we are not aware. The list does not include properties whose gardens only flooded, access only flooded or were flooded by incidents that are not part of FCERM such as burst water pipes or leaking roofs.

Under these circumstances, no properties were recorded as flooded during the 2015 calendar year. However, flood incidents not resulting in internal property flooding did occur.

On 13 August 2015 exceptionally heavy rain swept across Cornwall and was sustained throughout the day. Surface water affected roads but none were impassable. The A39 near the Norway Inn at Perranwell, near Falmouth, was reported to have standing water on it but traffic flow was not significantly affected. Fire crews attended a property at Stithians and pumped out water that was surrounding the property.

On 27 October 2015 the Liskeard to Looe branch railway line was closed due to flooding. This followed two days of persistent, but not particularly heavy, rainfall. The Meteorological Office had issued a yellow flood alert for East Cornwall and Devon and also warned of potential sea flooding due to exceptionally high tides.

Cornwall escaped much of the flooding caused by a series of Atlantic storms that severely affected the north of England during the winter of 2015/16. However, Storms Desmond (5-6 December 2015) and Eva (23-24 December 2015) caused considerable damage to the harbour wall in Looe and in the wake of Storm Frank (29-30 December 2015) coastal protection assets were damaged at Long Rock resulting in closure of the SW Coast Path and a seawall failure also occurred at Castle Beach in Falmouth.

On 6 February 2016, in the wake of Storm Imogen, flooding affected multiple roads across Cornwall during heavy rainfall. The A30 suffered significant traffic problems due to flooding. There was flooding on the A39 near Falmouth as well as the A39 in North Cornwall. Flooding occurred in and around Lelant, St Erth, Canon's Town, Hayle, Illogan, Chacewater, Helston, Chiverton Cross, Goonhavern, Newquay, Liskeard, Delabole, Camelford and Wadebridge. Fire crews were involved in situations in Perranporth, Truro, Penzance and Tolvaddon and five people had to be rescued from cars trapped in floodwaters.

Major flood incidents, with the possibility of endangering human life, occurred in Portreath, Hayle and at Blackwater near Chiverton Cross. The playground at Mousehole Community Primary School flooded.

The Par – Newquay branch railway line was closed due to flooding on 6 February and the Liskeard – Looe branch line from 6 to 9 February 2016.

On 10 April 2016 strong winds whipped up waves in Penzance, overtopping the Promenade and the railway line at Eastern Green. St Mawes was also badly affected by wave overtopping and flooding from the sea.



Figure 1 Damage to the seawall at Long Rock in the aftermath of Storm Frank, January 2016

Table 2 List of properties affected by internal flooding since 2011

Year	Event (Location)	Properties flooded
2011	17 January (Praze)	1
	17 January (St Buryan)	2
	17 January (various other)	5
	26 August (Truro)	5
	24 October (Mevagissey)	10
	24 October (Par)	1
	Total	
2012	17&18 October (Fowey)	5
	17&18 October (Looe)	20
	17&18 October (Mevagissy)	5
	24 November (Cawsand)	5
	24 November (Hessenford)	5
	24 November (Kingsand)	10
	24 November (Ladock)	13
	24 November (Millbrook)	23
	24 November (Newlyn)	15
	24 November (Perranporth)	5
	24 November (Polperro)	6
	24 November (Portmellon)	Not known
	24 November (St Just in Roseland)	Not known
	24 November (Trenear)	5
	14-16 December (Fowey)	4
	14-16 December (Looe)	50
	14-16 December (Mevagissey)	12
	22 December (Helston)	5
	22 December (Ladock)	10
	22 December (Lostwithiel)	13
	22 December (Mevagissey)	13
	22 December (Mousehole)	7
22 December (Porthallow)	9	
22 December (Porthleven)	3	
Total		243
2013	18 January (Heamoor)	25
	18 January (Port Issac)	5
	21 March (Heamoor)	Not known
	21 March (Pendeen)	5
	21 March (Relubbus)	6
	5 August (Crantock)	5
	5 August (Helston and Breage)	8
	5 August (Perranporth)	5
	5 August (Scorrier)	1

Year	Event (Location)	Properties flooded
	6 September (Falmouth)	3
	23 December (Bugle)	3
	23 December (Ponsanooth)	1
	23 December (Calenick)	5
	24 December (Luxulyan)	2
	24 December (Trenear)	2
	24 December (Perranwell)	7
	Total	83
2014	1 January (Perranporth)	1
	3 January (Fowey)	8
	3 January (Looe)	60
	3 January (Porthleven)	5
	9 January (Polperro)	60
	1-5 February (Mevagissey)	20
	3 February (Penryn)	5
	3 February (Penzance)	11
	3 February (St Ives)	15
	3-5 February (Fowey)	26
	3-5 February (Looe)	60
	3-5 February (Portmellon)	6
	4-5 February (Kingsand)	8
	5 February (Millendreath)	28
	14 February (Frogpool)	1
	14 February (Newlyn)	7
	8 October (Fowey)	5
	8 October (Looe)	3
	Total	329
2015	Total	0
2016	6 February (Blackwater)	2
	6 February (Portreath)	4
	6 February (Hayle)	12
	6 February (St Agnes)	2
	8 February (Mawgan Porth)	1
	8 February (Port Issac)	1
	12 February (Penryn)	1
	10 April (St Mawes)	3
	Total	26

4 Flood and Coastal Erosion Risk Management Schemes

4.1 Progress on projects

Table 2, below, lists FCERM schemes that have been concluded or progressed by Cornwall Council during the 2015/16 reporting period. This list contains only projects that are led by Cornwall Council; projects led by the Environment Agency and South West Water are excluded but in general contain some Cornwall Council involvement.

Table 3 FCERM projects progressed during 2015/16

Project	Description	Funding
Studies		
Mount's Bay Shoreline Strategy	An in depth review including wave modelling and geomorphological assessment to recommend a strategy for managing the "adaptive frontages" at Mount's Bay over the long term. The work commenced in 2014 and reported in October 2015.	£100k FDGiA
Hayle Estuary Strategy	The scoping study has commenced and an initial walkover survey and stakeholder meetings took place in February and March 2016. It is intended that this stage of the work will be completed by end of July 2016.	£25k FDGiA
Cornwall Dune Management Plans	Development of dune management plans for Constantine Bay, Porthtowan, Summerleaze, Par, Widemouth Bay, Praa Sands and Portcothan and re-visiting 2009 pilot plans for Harvey Towans and Fistril. Due for completion in August 2016 with Portcothan (a late addition) following in September 2016.	£80k FDGiA £10k CC ²
Par drainage network modelling	Joint project between CC, EA and SWW to assess the surface water drainage in Par and St Blazey. The results have fed into the proposed StARR Project, see Table 4.	£50k FDGiA £50k Local Levy £50k SWW
Shoreline Management Plan Review	Identify implications of policy changes within SMP2 coming into effect in 2025.	£15k CC
Schemes		
Lansdowne Park, Scorrier	Improvements to enlarge a culverted Ordinary Watercourse to protect vulnerable homes. Contractors have programmed for a start date of	£100k FDGiA

² Cornwall Council

Project	Description	Funding
	September/October 2016. CC acting as Accountable Body.	
Repairs		
Mylor coastal defence wall 2014 storm recovery repairs	Bid submitted by CC on behalf of private landowner. Work carried out in March - August 2014 and retrospective funding approved in 2016. CC acting as Grant Facilitator.	£75k FDGiA
Polruan cliff stabilisation works 2014 storm recovery repairs	Bid submitted by CC on behalf of private landowner and approved in 2016. CC acting as Grant Facilitator.	£164k FDGiA
Long Rock 2016 storm recovery repairs	Bid approved in June 2016. Work to progress in July 2016 to allow opening of coast path during the Summer. Further protection works to be progressed in the Autumn 2016. CC acting as Accountable Body.	£450k FDGiA
Castle Beach, Falmouth, 2016 storm recovery repairs	Work carried out in March 2016 and retrospective funding approved in June 2016. CC acting as Accountable Body.	£35k FDGiA
Sardine Factory wall, Looe, 2016 storm recovery repairs	Bid submitted by CC on behalf of Looe Harbour Commissioners and approved in June 2016. Work to progress in July 2016. CC acting as Grant Facilitator.	£200k FDGiA

4.2 Developing schemes

Table 4, below, lists FCERM schemes that have been developed or initiated during the 2015/16 reporting period but are yet to come forward to full funding approval.

Table 4 FCERM projects under development during 2015/16

Project	Description	Funding
Studies		
Coverack coastal defence	A borehole investigation has shown that a "hold the line" approach is unlikely to be achievable without an artificial defence, which is in conflict with the SSSI geology.	£300k FDGiA potentially
Looe Economic Resilience Project	First phase is installation of a tidal barrier and extension to Banjo Pier. A future phase would be construction of an outer breakwater to create a new working harbour.	£4,000k FDGiA potentially £12,000k to be sought
Schemes		
Newquay Harbour	A condition report has been completed and has identified the need for urgent	c. £450k CC

Project	Description	Funding
	attention to refurbish the "banjo" end to North Pier.	
Portreath Harbour	Failing asset due to voids.	c. £100k CC
Millpool Head (Millbrook) Phase 2	Culvert improvements to avoid surface water flooding. Design works are being progressed to enable the business case and grant application to be made.	£95k FDGiA £30k CC
Long Rock Coastal Improvements Project	Upgrading of coastal defences at Long Rock and environmental and water holding capacity improvements to Marazion Marsh. Bid for EU ERDF funding submitted to DCLG on 30 June 2016.	£2,700k FDGiA £1,000k ERDF
St Austell Resilient Regeneration (StARR) Project	A multi-faceted project in the Sandy River and Par River catchments of St Austell Bay including upper catchment land and water management and retrofitting of sustainable drainage in Par and St Blazey. Bid for EU ERDF funding submitted to DCLG on 30 June 2016.	£20,000k FDGiA £10,000k ERDF
Repairs		
Cremyl Quay	Repairs outstanding from 2014 storm damage. A bid for FDGiA funding is in preparation and expected to be submitted in the Autumn 2016	£300k FDGiA £150k CC £150k PCC ³
Towan Promenade Sea Wall	Repairs to fill voids and washed out mortar joints following Spring 2016 heavy swell.	£10k CC

In addition, Cornwall Council is working closely with the Environment Agency on the development and appraisal of potential future FCERM schemes at:

- Bude
- Camel Valley
- Fowey
- Looe
- Mousehole
- Newlyn
- Penzance
- Portreath
- Wadebridge

³ Plymouth City Council

5. Flood and Coastal Erosion Risk Management related activity

5.1 SW Regional Flood and Coastal Committee

Governance of FDGiA delivered by Central Government resources in England is provided by twelve Regional Flood and Coastal Committees (RFCC), as set out in the FWMA.

The Environment Agency must consult with RFCCs about flood and coastal risk management work and expenditure in their region and take their comments into consideration. RFCCs are also responsible for allocating Local Levy funds that can be used for commissioning specific projects or studies or as match funding for projects as required in order to release FDGiA, through an annual “local choices” meeting.

RFCCs are made up of independent members with relevant experience on specific aspects of FCERM, such as inland flooding, coastal flooding, ecology and environment, land management and utilities, Environment Agency officers and also elected members of each of the LLFAs within the region.

Cornwall Council is part of the South West Regional Flood and Coastal Committee (SWRFCC). The LLFA membership for the SWRFCC is provided in Table 5 below. The three SWRFCC members representing Cornwall Council during this reporting period are: Cllr Joyce Duffin, Cllr Steve Chamberlain and Cllr Benedicte Jenkinson.

Table 5 Numbers of elected members representing LLFAs on the SWRFCC

LLFA	No of elected members
Cornwall Council	3
Devon County Council	3
Plymouth City Council	1
Torbay Council	1
Council of the Isles of Scilly	1

The Local Levy is a fund that is paid into by each of the LLFAs on a RFCC. As Local Levy is often used to match FDGiA, a highly beneficial rate of return is received. The total Local Levy raised by the SWRFCC during 2015/16 was £957,000 of which £273,700 was invested by Cornwall Council. The planned Local Levy contribution from Cornwall Council for 2016/17 is around £296,700.

The SWRFCC meets quarterly. In 2015/16 the following meetings were held:

- July 2015 Penzance
- October 2015 Exeter
- January 2016 Torquay
- April 2016 Bodmin

Four additional meetings of the SWRFCC Finance Sub-group were also held, with officer representation from Cornwall Council.

The Environment Sub-group of the SWRFCC convened a one day conference on 4 May 2016 on natural flood risk management and the catchment approach to managing flood risks.

5.2 SW Coast Group

The South West Coast Group (SWCG) is aligned with, and reports to, the SWRFCC. It is made up of the Environment Agency and the Coastal Authorities, which are not necessarily LLFAs. SWCG representation is through officer membership, rather than by elected Members of the Council.

The SWCG oversees the development and implementation of Shoreline Management Plans: the Cornwall and Isles of Scilly SMP2 as well as the South Devon and Dorset SMP2 and the North Devon and Somerset SMP2.

The SWCG also administers the Regional Coastal Monitoring Programme delivered by the Plymouth Coastal Observatory (PCO), which is funded by Central Government, through FDGiA, to collect and distribute coastal survey data such as beach surveys, foreshore ecology, topographic and bathymetric surveys around the coast of SW England and provide an annual report. The PCO has been collecting consistent data since 2006.

Importantly, the PCO also conduct post-storm surveys of selected beaches in order to monitor beach erosion and sea defence vulnerability. After the winter storms of 2015/16 the PCO conducted additional surveys at Mount's Bay and Marazion, Seaton, Pentewan Sands, Porthleven, Portreath, Porthcothan and Widemouth Bay.

PCO, with the support of the SWCG, are currently bidding for FDGiA to fund an asset condition survey of all coastal defences around Devon, Cornwall and the Isles of Scilly. Another application has been submitted to Central Government by PCO to develop beach management plans for all of the main beaches in Devon, Cornwall and the Isles of Scilly.

5.3 Partnership working

5.3.1 Cornwall Community Flood Forum

Cornwall Council recognises and supports the important work of the Cornwall Community Flood Forum (CCFF).

The CCFF was set up to consolidate and continue the work of various flood groups that arose from the severe flooding that occurred in the St Austell Bay area in 2010.

The CCFF is a community-led initiative committed to supporting communities, households and businesses at risk of flooding. It began as an association of Town and Parish Councils, community groups, businesses and individuals with an active involvement in flood risk management. Its aims are to promote partnership working within flood risk management and support communities before, during and after flooding.

Membership of the CCFF is open to all Town and Parish Councils, community flood groups, individuals and businesses within Cornwall. It is also open to all organisations with an interest in flood risk management.

The CCFF is in the process of moving from being an Association to a Charitable Incorporated Organisation and is keen to hear from potential trustees to contribute as much as possible to the governance of the organisation and wherever possible become actively involved in the work done by the organisation to meet its charitable objectives.

During 2015 the CCFF worked closely with Groundwork South, Cornwall College and the Environment Agency to secure a £500,000 National Lottery 'Reaching Communities' grant. This project, led by Groundwork South, will further develop the community volunteer training resources on a regional level, with a view to this becoming a nationally available resource.

5.3.2 Cornwall Community Resilience Network

The Cornwall Community Resilience Network (CCRN) is an initiative driven by the CCFF together with Cornwall Council. The aim is to help create a network of communities working together to share experiences and knowledge and to raise the level of community preparedness throughout Cornwall.

The CCRN helps communities to be prepared to respond to an emergency, like flooding, heavy snowfall or a major fire. It encourages communities to create their own emergency plan or community flood plan and provides a toolkit to guide communities through the process and training for volunteers and flood wardens.

It is a partnership between the CCFF, the EA, SWW, Devon and Cornwall Police, Cornwall Fire Service, and Cornwall Council's Emergency Planning, Localism and Strategic Environment Teams.

Nine Community Emergency Plans are currently shared on the CCRN website, with a further twenty under development. Recent additions for Community Emergency Planning currently include Portreath, St Ives, Hayle and Truro.

5.3.3 Cornwall Catchment Partnership

The Cornwall Catchment Partnership (CCP) champions the Catchment Based Approach (CaBA), which is a DEFRA policy that embeds collaborative working at a river catchment scale to deliver cross cutting improvements to water environments through community partnerships, making use of local knowledge and expertise.

CaBA projects within the catchment management areas of West Cornwall and the Fal and of North Cornwall, Seaton, Looe and Fowey are managed by the Cornwall Wildlife Trust and the River Tamar catchment management area by the Westcountry Rivers Trust.

Participants in the CCP include the Local Nature Partnership, Environment Agency, South West Water, Natural England, The National Farmers Union, Country Land and Business Association, the Association of Inshore Fisheries and Conservation Authorities and Cornwall Council.

6. Bathing water quality issues

Whilst not strictly a FCERM issue, the Select Committee that met in June 2015 was keen to be kept abreast of developments relating to bathing water quality and combined sewer overflows (CSO).

Cornwall has presently 81 beaches designated as bathing waters under the Bathing Waters Regulations. One beach, at Rock, was de-designated as a bathing water in 2016 on the grounds of safety. Cornwall Council is in the process of consulting on the potential designation of a number of new bathing waters ready for the 2017 season.

Bathing water quality is assessed through a fairly complex process involving regular monitoring and signage to report alerts.

CSO alerts are provided by SWW. A Pollution Risk Forecast (PRF) is also provided by the Environment Agency for certain beaches. These are available where the Environment Agency has sufficient data to imply a link between rainfall across a catchment and reduced river water quality. PRF is a tool that could be utilised on any beach with a river flowing onto it but the system is typically only used on sites struggling to meet the 'sufficient' classification. This means the picture is not as comprehensive as it could be. Reduced water quality can be due to agricultural runoff, for instance, not just CSOs. If a PRF is issued it does not necessarily mean that water quality is poor, just that it is statistically likely to be.

Of the 82 bathing water beaches monitored in 2015, pollution alerts were available on some 44 of them: 26 with CSO alerts and 29 with PRFs. During the 2015 bathing water season (15 May – 30 September), 137 CSO spill alerts were issued for 14 locations and 337 PRFs issued for 27 locations in Cornwall.

Of the remaining 56 bathing water beaches not included in CSO alerts SWW have CSO assets associated with 22 of them where no notifications are presently issued.

Live pollution alerts can be accessed from SWW's Beach-live site (<http://www.beachlive.co.uk/>), on the Environment Agency website or through Surfers Against Sewage's Safer Seas app.

Overall bathing water quality results are based on the data from four consecutive years. In 2015 in Cornwall only one beach, East Looe, recorded a "poor" rating. This issue is being addressed through the Looe Economic Resilience Project, Table 4, above. Though there is always room for improvement, overall the picture in Cornwall is a positive one when compared to the national average. In Cornwall 79% of sites received an excellent classification (where the national average is 60%) and 1% received a poor classification (where the national average is 4%).

On 21 October 2015 the Leader of the Council, Cllr John Pollard, and Environment Portfolio Holder, Cllr Joyce Duffin, accompanied by CC officers met with representatives of the Environment Agency and South West Water to explore the issues around bathing water standards and regulation and the impacts of overflows from combined sewers and sewerage infrastructure on Cornwall's bathing waters. It was agreed to continue to work for improvements in the present system.

The CSO notifications are useful but are limited in value as they do not measure the volume discharged, just that a CSO has discharged. This means we do not know whether an event is significant or not when a notification is issued. We would like to see flow rate meters provided so we are aware of what volumes are being discharged, though this is not a mandatory requirement.

CSO notifications are useful in indicating a problem, but only identify a part of the problem. Often CSOs discharge during heavy rainfall events. If no CSO alert is available the public can be led to believe that when a PRF alert is notified that SWW are responsible, when in reality it is often more likely to be as a result of rainfall and urban or agricultural runoff.

Some catchments/beaches have more than one CSO. We are not informed which CSO has discharged, only that a CSO has discharged. From Cornwall Council's perspective it is then difficult to understand where the problem may be and this makes it difficult to understand the extent of and solution to the problem. We would like greater clarification as to which CSOs are discharging.

CSO notifications are only provided on 'Coastal Assets'. This means assets further inland could discharge and bathers may not be made aware of this. Cornwall Council would like to receive CSO notifications for a greater range of CSO assets within a catchment, not just those close to the coastline.

In summary, Cornwall Council would like to see:

- All year round reporting of sewage spill alerts, rather than just during the bathing water season.
- All sewage spills to be reported and identified, rather than just those impacting on bathing waters or in close vicinity to coastal assets.
- Monitoring of spill flow rates or volumes, rather than just reporting whether a spill has occurred or not, so that the significance can be assessed.
- An increase in the number of sites that benefit from notifications (both CSO and PRF) to help give the public an informed choice about when and where they bathe.

Devolution and the Cornwall Deal may provide an opportunity to strive for better than the minimum mandatory requirements.

7. Devolution

The inaugural meeting of the Strategic Resilience Board is due to take place on 25 July 2016. This board will guide and oversee the development of FCERM projects as part of the Cornwall devolution process.

The aims of the board are to:

1. To govern the delivery of the Resilience Work Programme of the Cornwall Devolution Deal (CDD).
2. To provide strategic leadership for a long term approach to resilience in Cornwall.
3. To optimise partnership working across Cornwall to manage flood risk and coastal change.

The board is made up of:

- Officers of Cornwall Council,
- The Environment Agency,
- South West Water,
- The South West Regional Flood and Coastal Committee,
- The Cornwall Catchment Partnership,
- Cornwall Community Flood Forum,
- The Local Nature Partnership,
- The Local Enterprise Partnership,
- Westcountry Rivers Trust and
- Emergency Services.

8 Recommendations

It is recommended that Cornwall Council continues to issue annual reports on Flood and Coastal Erosion Risk Management.

Cornwall Council to continue to liaise with the Environment Agency and South West Water to collaboratively tackle issues of flooding and coastal erosion in Cornwall.

Cornwall Council to seek to maximise the amount of funding it can receive from Central Government for FCERM activities and also pursue alternative sources of funding.

Natural approaches, such as improved land management practices and catchment storage, are taken where appropriate as an alternative to hard engineering solutions.

Cornwall Council to work collaboratively with other public and private organisations and partnerships to deliver effective flood risk management.

Cornwall Council to strive to participate at national and international levels in strategic initiatives and academic research on Flood and Coastal Erosion Risk Management, especially in respect of the challenges presented by climate change and sea level rise.

Cornwall Council to lobby both the Environment Agency and South West Water to take actions to sustain and improve bathing water quality in Cornwall in real terms.

Cornwall Council to continue to develop resilience to flooding and the effects of coastal erosion through opportunities brought about by devolution.